Technical Memorandum

No.2

Preliminary Project Traffic Report

SR 90/SW 7th Street/SW 8th Street
from SR 5/US 1/Brickell Avenue
to SR 9/SW 27th Avenue

Miami-Dade County, Florida

FM No. 432639-5-22-01

Prepared For:
Florida Department of Transportation, District Six

April 2015

EXECUTIVE SUMMARY

Gannett Fleming, Inc., in association with Jacobs Engineering Group Inc., has been retained by the Florida Department of Transportation District Six to provide traffic engineering services associated with the Planning Study for Eastbound SR 90/SW 8th Street and Westbound SR 90/SW 7th Street. The proposed project is located within the City of Miami in Miami-Dade County, Florida. The project is bound by SR 9/SW 27th Avenue to the west and SR 5/Brickell Avenue to the east.

This Technical Memorandum documents the forecasted traffic volumes and expected traffic operations for No-Build and Build scenarios. Traffic volumes were forecasted for the Opening (2020) Year and Design (2040) Year by utilizing growth rates. Growth rates for the No-Build and Build scenarios were determined from analyzing available historical traffic volume data, socioeconomic data, and traffic volumes obtained from the Southeast Florida Regional Planning Model (SERPM).

Turning Movement Volumes (TMVs) for the AM and PM peak hours were developed by utilizing FDOT's TMTOOL spreadsheet. The TMVs for the Opening (2020) Year and Design (2040) Year for the No-Build and Build scenarios were determined based on the field K and D factors, existing TMVs, committed trips, and recommended growth rates.

Intersection Level of Service (LOS) analyses for the Opening (2020) Year and Design (2040) Year AM and PM peak periods were conducted by using Synchro 8.0. The Corridor Segment LOS analyses were conducted by using FDOT's ARTPLAN 2012 software. Based on Miami-Dade County Traffic Circulation Level of Service Standards, the adopted Level of Service (LOS) is LOS D. Please refer to Section 4.2 of this document for detailed information regarding the Level of Service analyses.

The operational analyses for the No-Build scenario indicate that the intersections of SR 90/SW 8th Street with SR 933/SW 12th Avenue, SW 5th Avenue, SW 4th Avenue, SW 2nd Avenue, SW 1st Avenue, S. Miami Avenue, and SR 5/Brickell Avenue will operate at unacceptable automobile LOS E or F during the AM and PM peak hours for both, Opening (2020) Year and Design (2040) Year. Additionally, the intersections of SR 90/SW 8th Street with SR 9/SW 27th Avenue and SW 3rd Avenue will operate at unacceptable automobile LOS during AM and PM peak only on Design (2040) Year. Similarly, the intersections of SR 90/SW 7th Street with SR 933/SW 12th Avenue, SW 4th Avenue, and SW 3rd Avenue will operate at unacceptable automobile LOS E or F during the AM and PM peak hours for both, Opening (2020) Year and Design (2040) Year. Additionally, the intersection of SR 90/SW 7th Street with S.Miami Avenue will operate at unacceptable automobile LOS during AM and PM peak on Opening (2020) Year and only during PM peak of Design (2040) Year.

Operational analyses for build scenarios indicate that most intersections along SR 90/SW 8th Street between SW 5th Avenue and SR 5/Brickell Avenue will operate at unacceptable automobile levels of service, i.e. LOS E or F, during Opening (2020) Year and Design (2040) Year. Similarly, the intersection of SR 90/SW 7th Street and SR 933/SW 12th Avenue and most intersections east of SW 4th Avenue will operate at automobile LOS E or F.

The operational analyses for the No-Build scenario show that segments along SR 90/SW 8th Street between SW 19th Avenue and SR 933/SW 12th Avenue and between SW 5th Avenue and SR 5/Brickell Avenue will operate at unacceptable automobile levels of service (i.e. LOS E or F) during the Opening (2020) Year and

Design (2040) Year. Also, segments from SW 24th Avenue to SW 22nd Avenue and from SR 933/SW 12th Avenue to SW 5th Avenue will fail during the design (2040) Year. Similarly for SR 90/SW 7th Street, the segments from S. Miami Avenue to SW 4th Avenue, from SR 7/SW 8th Avenue to SR 933/SW 12th Avenue, from SW 16th Avenue to SW 17th Avenue, from SW 19th Avenue to SW 22nd, and from Beacom Boulevard to SR 9/SW 27th Avenue will operate at unacceptable levels of service during both, Opening (2020) Year and Design (2040) Year. Additionally, the segment along SR90/SW 7th Street between SW 4th Avenue and SR 7/SW 8th Avenue will fail during the design (2040) Year only.

The operational analyses for the Build Scenarios show that all segments along SR 90/SW 8th Street, east of SW 5th Avenue, except SW 4th Street to SW 3rd Street for Build Scenario 1 (2 Lanes and Transit, Alternative 3) and Build Scenario 3 (3 Lanes Reversed, Alternative 3) will operate at unacceptable automobile level of service (i.e. LOS E of F) during Opening (2020) Year and Design (2040) Year. Most segments along SR 90/SW 7th Street will operate at unacceptable automobile level of service LOS E or F during Opening (2020) Year and Design (2040) Year, regardless of the scenario.

Link analyses along SR 90/SW 8th Street indicate that:

Under automobile mode,

- Build Scenario 1 (2 Lanes and Transit, Alternative 3) and Build Scenario 3 (3 Lanes Reversed, Alternative 3) will have the least amount of failing segments (i.e. LOS E or F).
- Most segments will fail between SW 5th Avenue and SR 5/Brickell Avenue for all scenarios during both, Opening (2020) Year and Design (2040) Year.
- Overall, Build Scenario 3 (3 Lanes Reversed, Alternative 3) is expected to have better LOS operation.

Under pedestrian mode,

- No-Build Scenario will have segments operating at unacceptable LOS between SW 4th Avenue and S. Miami Avenue during Design Year (2040)
- Build Scenario 1 (2 Lanes and Transit, Alternative 3) will have segments operating at unacceptable LOS between SW 3rd Avenue and SR 5/Brickell Avenue during Design Year (2040) with the exception of segment between SW 1st and S. Miami Avenue (LOS D)
- Build Scenario 2 (2-Way, Alternative 3) will have segments operating at unacceptable LOS between SW 4th Avenue and SW 2nd Avenue during Design Year (2040)
- Build Scenario 3 (3 Lanes Reversed, Alternative 3) will have segments operating at unacceptable LOS between SW 3rd Avenue and SW 1st Avenue during Design Year (2040)
- Build Scenario 4 (3 Lanes, Alternative 4) will have segments operating at unacceptable LOS between SW 3rd Avenue and S. Miami Avenue during Design Year (2040)
- Overall, Build Scenario 3 (3 Lanes Reversed, Alternative 3) is expected to have the better operation

Under bicycle mode,

- The corridor will have better operation under Build Scenario 2 (2-Way, Alternative 3) and Build Scenario 3 (3 Lanes Reversed, Alternative 3) (i.e. LOS A and C, respectively).
- Overall, Build Scenario 2 (2-Way, Alternative 3) is expected to operate at LOS A on all its segments during both, Opening (2020) Year and Design (2040) Year.

Under transit mode,

- All scenarios are expected to operate at LOS A, except Build Scenario 3 (3 Lanes Reversed, Alternative 3) which is expected to operate at LOS B

Link analyses along SR 90/SW 7th Street indicate that:

Under automobile mode,

- The corridor is expected to operate at LOS F under all scenarios.
- Build Scenario 4 (3 Lanes, Alternative 4), shows more segments operating at acceptable LOS when compared to the other scenarios.
- Overall Build Scenario 4 (3 Lanes, Alternative 4) is expected have the better operation than the other scenarios.

Under pedestrian mode,

- Build Scenario 4 (3 Lanes, Alternative 4) will produce a Facility LOS of C and D during Opening (2020) Year and Design (2040) Year, respectively.
- No-Build and Build Scenario 2 (2-Way, Alternative 3) are expected to produce Facility LOS of D on both, Opening (2020) Year and Design (2040) Year.
- Build Scenario 4 (3 Lanes, Alternative 4) is expected have the better operation than the other scenarios

Under bicycle mode,

- The corridor will have better operation under Build Scenario 1 (2 Lanes and Transit, Alternative 3) during both Opening (2020) Year and Design (2040) Year. Although Facility operation is LOS F for Build Scenario 1 (2 Lanes and Transit, Alternative 3) during Design (2040) Year, all segments, except one, operate at LOS C or better.
- Overall Build Scenario 1 (2 Lanes and Transit, Alternative 3) is expected to have more segments operating at acceptable LOS during both Opening (2020) Year and Design (2040) Year than all other scenarios

Under transit mode,

- No-Build and all Build Scenarios are expected to operate at acceptable LOS (i.e. LOS A or B)

A VISSIM Microsimulation analysis that included intersections along SR 90/SW 8th Street and SW 7th Street between SW 5th Avenue and SR 5/Brickell Avenue was carried out and results showed the following:

- SW 8th Street at SW 5th Avenue, SW 4th Avenue, S. Miami Avenue, and SR 5/Brickell Avenue; and SW 7th Street at S. Miami Avenue, SW 1st Avenue, SW 4th Avenue operate at LOS E or F during the AM peak of Opening (2020) Year for the No-Build scenario. Only SW 7th Street with SW 2nd Avenue and SW 3rd Avenue operate at acceptable LOS during the PM peak of Opening (2020) Year for the No-Build scenario.
- Only SW 8th Street with SW 3rd Avenue and SW 7th Street with SW 3rd Avenue will operate at acceptable LOS during the AM peak of Design (2040) Year for the No-Build scenario. Similarly, only SW 8th Street with SW 1st Avenue will operate at acceptable LOS during the PM peak of Design (2040) Year for the No-Build scenario
- SW 8th Street at SR 5/Brickell Avenue; and SW 7th Street at SR 5/Brickell Avenue, SW 1st Avenue, and SW 4th Avenue operate at LOS E or F during the AM peak of Opening (2020) Year for Build Scenario 1 (2 Lanes and Transit, Alternative 3). All intersections during Opening (2020) Year's PM peak of Build Scenario 1 (2 Lanes and Transit, Alternative 3), except SW 8th Street at SW 5th Avenue and SW 4th Avenue operate at unacceptable LOS E or F.
- SW 8th Street at SW 5th Avenue, SW 4th Avenue, and 1st Avenue; and SW 7th Street at S. Miami Avenue, SW 2nd Avenue, and SW 3rd Avenue operate acceptable LOS during the AM peak of Design (2040) Year for Build Scenario 1 (2 Lanes and Transit, Alternative 3). All intersections during Design (2040) Year's PM peak of Build Scenario 1 (2 Lanes and Transit, Alternative 3), except SW 8th Street at SW 5th Avenue and SW 4th Avenue operate at unacceptable LOS E or F.

- SW 8th Street at SW 1st Avenue; and SW 7th Street at SR 5/Brickell Avenue, S. Miami Avenue, SW 2nd Avenue, and SW 3rd Avenue operate acceptable LOS during the AM peak of Opening (2020) Year for Build Scenario 2 (2-Way, Alternative 3). All intersections during Opening (2020) Year's PM peak of Build Scenario 2 (2-Way, Alternative 3), except SW 7th Street at S. Miami Avenue operate at unacceptable LOS E or F.
- Only SW 7th Street at S. Miami Avenue, SW 2nd Avenue, and SW 3rd Avenue operate acceptable LOS during the AM peak of Design (2040) Year for Build Scenario 2 (2-Way, Alternative 3). All intersections during Design (2040) Year's PM peak of Build Scenario 2 (2-Way, Alternative 3), except SW 7th Street at S. Miami Avenue operate at unacceptable LOS E or F.
- Only SW 8th Street at SW 5th Avenue and SW 4th Avenue operate acceptable LOS during the AM and PM peak of Opening (2020) Year for Build Scenario 3 (3 Lanes Reversed, Alternative 3).
- Only SW 8th Street at SW 5th Avenue and SW 4th Avenue; and SW 7th Street and 3rd Avenue operate acceptable LOS during the AM peak of Design (2040) Year for Build Scenario 3 (3 Lanes Reversed, Alternative 3). Similarly, only SW 8th Street at SW 5th Avenue and SW 4th Avenue operate acceptable LOS during the PM peak of Design (2040) Year for Build Scenario 3 (3 Lanes Reversed, Alternative 3).
- SW 8th Street and SW 3rd Avenue, SW 1st Avenue, S. Miami Avenue, and SR 5/Brickell Avenue; and SW 7th Street with S. Miami Avenue, and SW 1st Avenue operate at unacceptable LOS E or F during the AM peak of Opening (2020) Year for Build Scenario 4 (3 Lanes, Alternative 4). Similarly, SW 8th Street with S. Miami Avenue and SR 5/Brickell Avenue; and SW 7th Street with SR 5/Brickell Avenue, S. Miami Avenue, SW 1st Avenue, and SW 2nd Avenue operate at unacceptable LOS E or F during the PM peak of Opening (2020) Year for Build Scenario 4 (3 Lanes, Alternative 4).
- Only SW 7th Street and SW 2nd Avenue operate at acceptable LOS during the AM peak of Design (2040) Year for Build Scenario 4 (3 Lanes, Alternative 4). Similarly, SW 8th Street with SW 5th Avenue and SW 4th Avenue; and SW 7th Street with SW 3rd Avenue and SW 4th Avenue operate at acceptable LOS during the PM peak of Design (2040) Year for Build Scenario 4 (3 Lanes, Alternative 4).

Build Scenario 1 (2 Lanes and Transit Alternative 3) averaged the best results during the AM peak period of Opening (2020) Year and Design (2040) Year. Build Scenario 4 (3 Lanes and Alternative 4) averaged the best results during the PM peak period of Opening (2020) Year and Design (2040) Year. In general, Build Scenario 4 (3 Lanes and Alternative 4) evaluations processed more vehicles (less amount of vehicles denied entry) and had lower average delay per vehicle when compared to the other build scenarios. Still, many intersections have failing traffic operations (LOS E or F) for every evaluation scenario due to extremely high traffic volumes. The high traffic volumes cause excessive delays and vehicle queuing throughout the network.

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1. Introduction

1.1 Objective

The purpose of this technical memorandum is to document the forecasted traffic volumes and expected traffic operations for the scenarios considered.

1.2 Project Description

The study focuses on the segment of SR 90/SW 7th Street and SW 8th Street, sections 87120001 and 87120000 respectively, from SR 9/SW 27th Avenue to SR 5/Brickell Avenue. This segment of SR 90 is an east-west urban principal arterial consisting of a one-way pair, with SW 7th Street currently operating as SR 90 westbound and SW 8th Street operating as SR 90 eastbound.

This dense urban corridor, from SR 9/SW 27th Avenue to SR 5/Brickell Avenue, includes over 30 signalized intersections. Located near SW 3rd Avenue and SW 4th Avenue, is an interchange with I-95, which has a significant impact on traffic volumes and operations along the corridor as it acts as the main access to the SR 5/Brickell area for commuters via the regional transportation system. Moreover, the SR 5/Brickell area serviced by SR 90/SW 7th Street and SW 8th Street has seen significant growth in the last decade with high-density high-rise developments, which have contributed to changes in the operations of the study corridor. Additionally, several new major development projects are currently proposed within the SR 5/Brickell area, all of which can further impact operations and increase traffic volumes along this already congested corridor.

1.2.1 Purpose

The project efforts consist of developing and evaluating corridor alternatives and providing recommendations to improve existing and future physical, operational, and safety deficiencies of the corridor. The project will focus on preserving future expansion needs for multimodal transportation facilities, enhancing mobility of the corridor including movement of freight and goods, and conducting intergovernmental coordination with emphasis on communication with key decision makers and stakeholders.

1.3 Study Area

The study area consists of SR 90/SW 7th Street and SW 8th Street from SR 9/SW 27th Avenue to SR 5/Brickell Avenue. This area includes the existing interchange with I-95, located near SW 3rd Avenue and SW 4th Avenue as well as two major north-south corridors, SR 933/SW 12th Avenue and SR 7/SW 8th Avenue. Figure 1-1 shows the limits of the SR 90 study segment.

Figure 1-1: SR 90 Study Area

2. Evaluation of Scenarios

2.1 Considered Scenarios

The scenarios that were evaluated include No-Build and Build scenarios, which are described below.

2.1.1 No-Build Scenario

The No-Build scenario considers that the existing geometry of SR 90 will remain and that there are no programmed roadway improvements in the area based on a preliminary evaluation of the FDOT's Five-Year Work Program and the cost feasible projects included in the Long Range Transportation Plan (LRTP), or Transportation Improvement Program (TIP).

2.1.2 Build Scenarios

The build scenarios considered for this study are:

- Build Scenario 1 (2 Lanes and Transit, Alternative 3): Two (2) general purpose lanes and an exclusive transit lane on both SW 8th Street and SW 7th Street with reverse flow where westbound traffic will use SW 8th Street and eastbound traffic will utilize SW 7th Street. Also, an eastbound ramp on SW 7th Street to northbound I-95 and a westbound SW 8th Street ramp to northbound I-95 will be provided. This scenario considers a bicycle lane for operational purposes only.
- Build Scenario 2 (2-Way, Alternative 3): Two-lane undivided roadway (i.e., one lane in each direction) with exclusive left-turn lanes at signalized intersections on both SW 8th Street and SW 7th Street. In addition, an eastbound ramp on SW 7th Street to northbound I-95 and a westbound SW 8th Street ramp to northbound I-95 will be provided.
- Build Scenario 3 (3 Lanes Reversed, Alternative 3): Three (3) lanes in each direction reverse flow where westbound traffic will use SW 8th Street and eastbound traffic will utilize SW 7th Street. Also, an eastbound ramp on SW 7th Street to northbound I-95 and a westbound SW 8th Street ramp to northbound I-95 will be provided.
- Build Scenario 4 (3 Lanes, Alternative 4): Three (3) lanes in each direction where eastbound traffic will use SW 8th Street and westbound traffic will utilize SW 7th Street. This alternative considers a westbound ramp on SW 7th Street to northbound I-95 located west of SW 2nd Avenue and a southbound I-95 off-ramp to eastbound SW 8th Street that lands at SW 3rd Avenue, south of SW 8th Street.

Figures 2-1 and 2-2 show Interchange Alternatives 3 and 4, respectively.

2.2 Analysis Years

The analyses years considered for this planning study are year 2020 as the opening year and year 2040 as the design year. It is important to highlight that the analysis years considered in this planning study may differ from those of a future Project Development and Environment (PD&E) Study; however, the analysis years utilized in this study provide a reasonable timeframe to evaluate the potential impacts in terms of traffic operations.

Figure 2-1: Build Scenario 3 (3 Lanes Reversed, Alternative 3)

Figure 2-2: Build Scenario 4 (3 Lanes, Alternative 4)

3. Future Travel Demand Forecast Model

Future year traffic volumes were estimated using current and historical traffic volumes along SR 90. The current and historical volumes along these facilities were analyzed to develop estimates of growth rates. These growth rates were applied to current volumes to estimate the future year volumes. In order to determine the reasonableness of the forecasted volume and have a secondary estimate of future Average Annual Daily Traffic for the No-Build and Build scenarios, the Southeast Regional Planning Model version 6.5.4 (SERPM 6.5.4) was used. This is the travel demand model adopted at the time this planning study started. Reasonableness checks were performed on the model estimated volumes for the base and future years. These included the following comparisons:

1. Model estimated volumes against counts for the base year
2. The growth in model estimated volume against the growth in the socioeconomic data in the study corridor.

Additionally, compound annual growth rates were derived from the base year (2005) and horizon year (2035) scenario results.

3.1 Volume Comparison with Counts

Tables 3-1 and 3-2 shows the model estimated volume and historical AADT data for the base year for SW 7th and SW 8th Streets respectively. The historical AADT data were obtained from FDOT's Florida Traffic Online (2013).

Table 3-1: Base Year (2005) Volume and Counts on SW 7th Street

Segment	Volume	Historical AADT	Volume/Historical AADT
SR 5/Brickell Ave./US 1 – S. Miami Ave.	20,280	11,500	1.76
SW 6th Ave. - SR 7/ SW 8th Ave.	20,130	17,000	1.18
SW 12th Ave. - SW 17th Ave.	20,225	17,500	1.16
SW 22nd Ave. - Beacom Blvd.	11,766	16,000	0.74
Total	**72,401**	**62,000**	**1.17**

Table 3-1 shows that the volume-to-historical-AADT ratio for SW 7th Street in the study area ranges from 0.74 to 1.76 implying that the model accuracy varies from 26 percent underestimation to 76 percent overestimation. The aggregate volume to capacity ratio is 1.17 implying that the model overestimates the traffic on SW 7th Street in the study area by 17 percent at aggregate level.

Table 3-2: Base Year (2005) Volume and Counts on SW 8th Street

Segment	Volume	Historical AADT	Volume/Historical AADT
Beacom Blvd. - SW 22nd Ave.	21,247	20,500	1.04
SW 17th Ave. - SW 12th Ave.	29,835	23,000	1.30
SR 7 - SW 4th Ave.	27,267	19,000	1.44
SW 4th Ave. - First I-95 Ramp	39,520	24,500	1.61
S. Miami Ave. - SR 5/Brickell Ave./US 1	17,230	11,500	1.50
Total	**135,099**	**98,500**	**1.37**

Table 3-2 shows that the volume-to-historical-AADT ratio for SW 8th Street in the study area ranges from 1.04 to 1.61 implying that the model accuracy varies from 4 percent overestimation to 61 percent overestimation. The aggregate volume to capacity ratio is 1.37 implying that the model overestimates the traffic on SW 8th Street in the study area by 37 percent at aggregate level.

3.2 Model Validation

As mentioned before, reasonableness testing was performed on the model to ensure that the model performs appropriately in a future year scenario. Preliminary model runs showed consistent reduction of traffic volumes along both SW 7th Street and SW 8th Street, and traffic volumes on SW 7th Street were greater than those of SW 8th Street. Selected link analyses for both SW 7th Street and SW 8th Street were performed for both the 2005 and 2035 No-Build scenario to evaluate potential reasons for the overall reduction in traffic volumes and the unexpected growth on SW 7th Street.

The selected analyses revealed that the toll policy on SR 836/Dolphin Expressway in the 2005 and 2035 model networks is different. The 2005 model network charges $1.00 for eastbound traffic on SR 836 between NW 22nd Avenue and NW 17th Avenue; whereas the 2035 model network includes tolls near NW 12th Avenue with lower fees that range between $0.25 and $0.50 (see Exhibit 3-1). This change in the toll policy results in lower traffic volumes traveling eastbound on SW 8th Street towards Downtown because the reduced tolls would attract more motorists on SR 836/Dolphin Expressway and I-95. The 2035 model network was modified to include revised toll policies (i.e., $1.00 toll on eastbound SR 836) to verify the impact of the toll policy on traffic volumes. The modification of the toll policy in the 2035 model network resulted in greater traffic volumes on both SW 7th Street and SW 8th Street, and greater traffic volumes on SW 8th Street than those of SW 7th Street. This modification resulted in a similar pattern to what the 2005 model network shows and similar to the observed travel patterns of the Base Year (2013).

Exhibit 3-1: 2005 and 2035 Toll Policy

Table 3-3 presents a summary of the Vehicle Miles Traveled (VMT) for both SW 7th Street and SW 8th Street for the existing toll policy and the modified toll policy. The summary shows that the traffic volumes obtained from the 2035 model with the modified toll policy are more reasonable (i.e., there is growth on SW 8th Street during a 30-year period). Hence, the toll policy in the models for the No-Build and Build scenarios was modified to forecast traffic volumes.

Table 3-3: Comparison of Daily VMT by Toll Policy

Toll Policy	Facility	2005 Model Daily VMT	2035 Model Daily VMT	Growth from 2005 to 2035)	Compound Growth Rate
Existing 2035 Policy	SW 7th Street	59,192	86,664	46%	1.3%
	SW 8th Street	75,493	76,201	1%	0.0%
	Total	**134,685**	**162,866**	**21%**	**-**
Modified 2035 Policy	SW 7th Street	59,192	82,176	39%	1.1%
	SW 8th Street	75,493	92,784	23%	0.7%
	Total	**134,685**	**174,960**	**30%**	**-**

3.3 Socioeconomic Data

The socioeconomic growth between the base and future year is a strong indicator of the traffic growth in the model. Socioeconomic data (e.g. households, population, employment, etc.) within 1-mile of the study corridor for the years 2005 and 2035 was compiled and is summarized in Table 3-4. Table 3-4 indicates that the average compound annual growth rate when considering the number of households, population and total employment is approximately 1.40 percent. Also, the average compound annual growth rate of 1.40 percent is reasonable when compared against the expected growth rate obtained from 2035 model values with the modified toll policy.

Table 3-4: Growth Rates based on Socioeconomic Indicators within One-Mile of the Study Corridor

Socioeconomic Indicator	2005 Value	2035 Value	Growth from 2005 to 2035	Compound Annual Growth Rate
Households	48,597	78,843	62%	1.6%
Population	117,087	197,361	69%	1.8%
Industrial Employment	3,390	3,528	4%	0.1%
Commercial Employment	9,409	11,335	20%	0.6%
Service Employment	119,157	155,981	31%	0.9%
Total Employment	131,956	170,844	29%	0.9%

3.4 SERPM Highway Assignment Evaluation

The 2035 Adopted Cost Feasible network was the No-Build network for this study. The future year No-Build volumes were compared against the base year to determine if the model was performing reasonably. Tables 3-5 and 3-6 show the volumes on SW 7th and SW 8th Streets by segment, respectively.

Table 3-5: Base Year (2005) and Future Year (2035) Volumes on SW 7th Street

Segment	2005	2035	Growth
SR 5/Brickell Ave./US 1 - S Miami Ave.	20,280	26,620	31%
S Miami Ave. - SW 2nd Ave.	21,180	28,500	35%
SW 2nd Ave. - SW 3rd Ave.	20,840	28,920	39%
SW 3rd Ave. - SW 4th Ave.	23,100	31,100	35%
SW 3rd Ave. - I-95 Ramp	NA	NA	NA
I-95 Ramp - SW 4th Ave.	NA	NA	NA
SW 4th Ave. - SR 7	22,625	33,190	47%
SR 7 - SW 12th Ave.	18,755	28,260	51%
SW 12th Ave. - SW 17th Ave.	20,225	30,670	52%
SW 17th Ave. - SW 22nd Ave.	19,260	29,695	54%
SW 22nd Ave. - Beacom Blvd.	11,766	20,460	74%
Beacom Blvd. - SW 27th Ave.	28,860	31,780	10%
Total	**206,891**	**289,195**	**40%**

Table 3-5 shows the future year volumes on SW 7th Street by segment increase between 10 percent and 74 percent. The aggregate volume increases by 40 percent.

Table 3-6: Base Year (2005) and Future Year (2035) Volumes on SW 8th Street

Segment	2005	2035	Growth
S. Miami Ave. - SR 5/Brickell Ave./ US 1	17,230	18,530	8%
SW 2nd Ave. - S. Miami Ave.	14,680	19,485	33%
SW 3rd Ave. - SW 2nd Ave.	22,735	30,235	33%
Second I-95 Ramp - SW 3rd Ave.	20,230	27,480	36%
First I-95 Ramp - Second I-95 Ramp	29,780	38,210	28%
SW 4th Ave. - First I-95 Ramp	39,520	48,590	23%
SR 7 - SW 4th Ave.	27,267	27,843	2%
SW 12th Ave. - SR 7	24,390	24,805	2%
SW 17th Ave. - SW 12th Ave.	29,835	29,520	-1%
SW 22nd Ave. - SW 17th Ave.	28,725	26,285	-8%
Beacom Blvd. - SW 22nd Ave.	21,247	17,640	-17%
SW 27th Ave. - Beacom Blvd.	31,530	36,710	16%
Total	**307,169**	**345,333**	**12%**

Table 3-6 shows the change in future year volumes on SW 8th Street by segment range from -17 percent to 36 percent. The aggregate volume increases by 12 percent.

SW 7th Street shows an increase in volume between 2005 and 2035 for every segment with the aggregate growth being 40 percent. This growth in volume is consistent with the socioeconomic growth in the corridor. However, SW 8th Street shows a decrease in volume between 2005 and 2035 for certain segments with the aggregate growth being 12 percent. The reduction in traffic on certain segments along SW 8th Street is inconsistent given the socioeconomic growth in the corridor.

The project team looked at competing routes for SW 7th Street and SW 8th Street to investigate if there were any changes along those routes between base and future that would explain the reduction in the future year traffic on SW 8th Street segments. One such competing route is SR-836. The project team observed that the toll structure for SR-836 was different for the base and future years. In the base year between NW 27th Avenue and I-95, the mainline was tolled at $1.00 in the eastbound direction. The westbound mainline had no tolls in the base year. In the future year between NW 27th Avenue and I-95, the mainline was tolled in both the eastbound and westbound directions at $0.50. Compared to base year, the eastbound mainline toll is $0.50 lower making it more competitive. The project team concluded that since eastbound SR-836 is more competitive in the future than in the base year, it may possibly be diverting some traffic from future SW 8th Street; an eastbound one-way roadway. This, in turn, leads to a lower than expected growth on SR 90 / SW 8th Street.

The project team tested the future year No-Build network with the base tolling policy. The results from the model are summarized in Table 3-7 and 3-8 for SW 7th Street and SW 8th Street respectively.

Table 3-7: Base Year (2005) and Future Year (2035) Volumes on SW 7th Street with Base Toll Policy in Future Year

Segment	2005	2035	Growth
SR 5/Brickell Ave./US 1 - S Miami Ave.	20,280	26,670	32%
S Miami Ave. - SW 2nd Ave.	21,180	28,110	33%
SW 2nd Ave. - SW 3rd Ave.	20,840	27,580	32%
SW 3rd Ave. - SW 4th Ave.	23,100	30,470	32%
SW 3rd Ave. - I-95 Ramp	NA	NA	NA
I-95 Ramp - SW 4th Ave.	NA	NA	NA
SW 4th Ave. - SR 7	22,625	32,435	43%
SR 7 - SW 12th Ave.	18,755	27,435	46%
SW 12th Ave. - SW 17th Ave.	20,225	28,775	42%
SW 17th Ave. - SW 22nd Ave.	19,260	28,300	47%
SW 22nd Ave. - Beacom Blvd.	11,766	19,305	64%
Beacom Blvd. - SW 27th Ave.	28,860	36,870	28%
Total	**206,891**	**285,950**	**38%**

Table 3-8: Base Year (2005) and Future Year (2035) Volumes on SW 8th Street with Base Toll Policy in Future Year

Segment	2005	2035	Growth
S. Miami Ave. – SR 5/Brickell Ave./US 1	17,230	18,980	10%
SW 2nd Ave. - S. Miami Ave.	14,680	20,065	37%
SW 3rd Ave. - SW 2nd Ave.	22,735	29,700	31%
Second I-95 Ramp - SW 3rd Ave.	20,230	32,400	60%
First I-95 Ramp - Second I-95 Ramp	29,780	43,270	45%
SW 4th Ave. - First I-95 Ramp	39,520	48,130	22%
SR 7 - SW 4th Ave.	27,267	30,213	11%
SW 12th Ave. - SR 7	24,390	27,415	12%
SW 17th Ave. - SW 12th Ave.	29,835	33,435	12%
SW 22nd Ave. - SW 17th Ave.	28,725	33,660	17%
Beacom Blvd. - SW 22nd Ave.	21,247	25,940	22%
SW 27th Ave. - Beacom Blvd.	31,530	37,750	20%
Total	**307,169**	**380,958**	**24%**

Table 3-7 shows the future year volumes on SW 7th Street by segment increase between 28 percent and 64 percent. The aggregate volume increases by 38 percent. Compared to the future year volumes with future year toll policy as shown in Table 3-5, there is a slight reduction in volume on SW 7th Street when base toll policy is used in the future network. In base year toll policy, SR-836 has no toll in the westbound direction making it more competitive against SW 7th Street. This leads to some traffic diversion from SW 7th Street to SR-836 westbound under base year toll conditions.

Table 3-8 shows that the future year volumes on SW 8th Street by segment increase between 10 percent and 60 percent. The aggregate volume increases by 24 percent. Compared to the future year volumes with future year toll policy as shown in Table 3-6, there is an increase in volume on SW 8th Street when base toll policy is used in the future network. The base year toll policy has a $1.00 toll on eastbound SR-836 making it less competitive against SW 8th Street. This leads to some traffic diversion from SR-836 eastbound to SW 8th Street under base year toll conditions.

The project team used the base year toll policy in all the future year scenarios since implementing that showed reasonable growth in traffic in the project corridor.

3.4.1 Model Traffic Volume Data

Tables 3-10 through 3-14 present compound annual growth rates estimated based on the 2005 and 2035 SERPM output values. Since the SERPM model provides AADT volumes, the Model Output Conversion Factor was not utilized. SERPM volume plots for No-Build and Build scenarios are included in Appendix B.

3.5 Historical Traffic Growth

Historical growth rates were calculated with the Trend Analysis Tool developed by FDOT. This tool has three types of historical trend analyses: (1) linear, (2) exponential, and (3) decaying exponential. The growth rate from the best fitted curve (i.e., curve with the highest R^2 value) was selected for the growth rate calculation. Growth rates resulting in a negative or zero values were disregarded. The Trend Analysis Tool output reports are included in Appendix A. Table 3-9 summarizes the R^2 and growth rate values for the regression analyses of the traffic count stations located in the vicinity of the project.

Table 3-9: Summary of Growth Rate Calculations

PTMS	Description	Decaying Exponential		Exponential		Linear		Growth Rate Based Upon Highest R^2
		R^2	GR	R^2	GR	R^2	GR	
872545	SR 90/US-41/SW 8th St./One-Way EB, 150' west of I-95	10.79	1.27	18.19	1.36	18.61	1.64	1.64
875090	SR 90/US-41/SW 8th St./One-Way EB, 200' west of US-1	0.62	0.26	0.19	0.16	0.52	0.16	0.26
875091	SR 90/US-1/SW 7th St./One-Way WB, 200' west of US-1	80.02	3.25	88.99	2.82	88.66	3.41	2.82
875095	SR 90/US-41/SW 8th St./One-Way EB, 200' west of SW 7th Ave.	38.89	1.59	31.40	1.22	31.77	1.33	1.59
875098	SR 90/US-41/SW 8th St./One-Way EB, 200' west of SW 12th Ave.	6.71	0.59	0.80	0.17	0.67	0.17	0.59
875103	SR 90/US-41/SW 8th St./One-Way EB, 200' east of Beacom Blvd.	23.05	0.91	14.77	0.65	13.48	0.64	0.91
875096	SR 90/US-41/SW 7th St./One-Way WB, 200' east of SW 7th Ave.	1.33	0.50	0.10	-0.13	0.00	0.00	0.50
875097	SR 90/US-41/SW 7th St./One-Way WB, 200' west of SW 12th Ave.	19.22	0.92	14.51	0.67	14.57	0.71	0.92
875105	SR 90/US-41/SW 7th St./One-Way WB, 200' east of Beacom Blvd.	38.84	1.73	34.69	1.35	34.07	1.48	1.73
875389	SR 90/US-41/SW 7th St. (Two Way), 150' west of SW 25th Ave.	100.00	-8.82	100.00	-8.82	100.00	-8.82	-8.82
876301	Ramp 87270168 from SB SW 4th Ave. to SB I-95, 200' south of SW 4th	0.02	0.00	2.00	-0.42	1.14	-0.41	-0.42
876302	Ramp 87270169 from NB SW 3rd Ave., 200' north of I-95	83.28	2.25	87.34	2.20	87.40	2.40	2.40
876303	Ramp 87270170 from EB SW 8th St. to NB I-95, 100' east of SW 8th St.	43.31	2.10	41.47	1.77	41.28	1.90	2.10
876356	Ramp 87270501 from EB SW 8th St. to NB I-95, 300' south of SW 8th St.	11.97	1.21	2.55	0.59	2.98	0.61	1.21
875126	SR 9/SW/NW 27th Ave., 100' north of SW 8th St./SR 90	4.97	-0.94	23.07	-1.78	19.79	-1.53	-1.78
875011	SR 933/SW/NW 12th Ave., 200' north of SW 7th St.	0.47	0.09	0.01	0.00	0.00	-0.04	0.09
875000	SR 7/US-441/SW/NW 8th Ave., 200' north of SW 7th St.	15.40	0.80	16.11	0.68	15.93	0.72	0.68
877061	SW 2nd Ave., 100' north of SW 11th St.	32.91	-2.03	52.01	-2.79	51.58	-2.72	-2.79
870550	US-1, 200' South of Miami River Bridge	0.15	0.10	0.00	0.00	0.10	-0.06	0.10
875042	US-1, 200' south of SE 8th St./SR 90/Tamiami Trail	1.14	0.21	2.08	-0.26	1.78	-0.23	-0.26

Notes:
(1) Source: FDOT's Florida Traffic Online (2012)
(2) GR=Growth Rate
(3) Negative growth rates were not considered for estimating the average growth rate.
(4) FDOT count stations 875389 and 878611 were not considered for growth rate calculations because they had two (2) years of historical data.

3.6 Recommended Growth Rates

Tables 3-15 through 3-19 summarize the recommended growth rates for the No-Build and Build scenarios. Overall, the recommended growth rates (i.e., between 0.89% and 1.90% on both SW 7th Street and SW 8th Street) are consistent with the growth rates obtained from socioeconomic data.

Table 3-10: Compound Annual Growth Rate from SERPM Output Values for No-Build Scenario

	Segment	Model AADT		CGR[1] from Model	Average CGR[1]
		2005	2035		
SW 7th Street	Brickell Ave./US 1 - S Miami Ave.	20,280	26,760	0.93%	0.92%
	S Miami Ave. - SW 2nd Ave.	21,180	28,515	1.00%	
	SW 2nd Ave. - SW 3rd Ave.	20,840	27,430	0.92%	
	SW 3rd Ave. - SW 4th Ave.	23,100	29,570	0.83%	
	SW 4th Ave. - SW 6th Ave.	25,120	35,670	1.18%	1.04%
	SW 6th Ave. - SR 7	20,130	26,290	0.89%	
	SR 7 - SW 12th Ave.	18,755	25,785	1.07%	1.07%
	SW 12th Ave. - SW 17th Ave.	20,225	27,865	1.07%	
	SW 17th Ave. - SW 22nd Ave.	19,260	27,470	1.19%	1.31%
	SW 22nd Ave. - Beacom Blvd.	11,765	19,390	1.68%	
	Beacom Blvd. - SW 27th Ave.	28,860	39,700	1.07%	
SW 8th Street	SW 27th Ave. - Beacom Blvd.	31,530	38,510	0.67%	0.89%
	Beacom Blvd. - SW 22nd Ave.	21,250	29,500	1.10%	
	SW 22nd Ave. - SW 17th Ave.	28,725	35,510	0.71%	
	SW 17th Ave. - SW 12th Ave.	29,835	34,765	0.51%	0.58%
	SW 12th Ave. - SR 7	24,390	28,485	0.52%	
	SR 7 - SW 4th Ave.	27,267	31,420	0.47%	0.61%
	SW 4th Ave. - I-95 Ramp	39,520	49,520	0.75%	
	WB On-Ramp to I-95 - SW 3rd Ave.	20,230	27,870	1.07%	0.83%
	SW 3rd Ave. - SW 2nd Ave.	22,735	29,185	0.84%	
	SW 2nd Ave. - S. Miami Ave.	14,680	19,875	1.02%	
	S. Miami Ave. - Brickell Ave./US 1	17,230	19,430	0.40%	
Side Streets	SW 27th Ave.	47,600	61,070	0.83%	1.08%
	Beacom Blvd.	16,000	22,170	1.09%	
	SW 22nd Ave.	32,960	45,300	1.07%	
	SW 17th Ave.	7,870	18,980	2.98%	
	SW 12th Ave.	8,340	11,810	1.17%	
	SR 7	2,310	2,130	-0.27%	
	SW 4th Ave.	13,510	19,390	1.21%	
	SB I-95	57,440	74,500	0.87%	
	NB I-95	82,930	100,220	0.63%	
	SW 3rd Ave.	2,170	2,030	-0.22%	
	SW 2nd Ave.	15,240	20,180	0.94%	
	S. Miami Ave.	9,630	16,840	1.88%	
	Brickell Ave./US 1	37,970	65,930	1.86%	

Note: CGR = Compound Growth Rate

Table 3-11: Compound Annual Growth Rate from SERPM Output Values for Build Scenario 1 (2 Lanes and Transit, Alternative 3)

	Segment	Model AADT		CGR[1] from Model	Average CGR[1]
		2005	2035		
SW 7th Street	Brickell Ave./US 1 - S Miami Ave.	12,480	13,770	0.33%	1.12%
	S Miami Ave. - SW 2nd Ave.	10,795	15,315	1.17%	
	SW 2nd Ave. - SW 3rd Ave.	14,915	22,210	1.34%	
	SW 3rd Ave. - SW 4th Ave.	12,410	20,180	1.63%	
	SW 4th Ave. - SW 6th Ave.	20,980	24,150	0.47%	0.44%
	SW 6th Ave. - SR 7	17,110	19,340	0.41%	
	SR 7 - SW 12th Ave.	16,740	19,340	0.48%	0.46%
	SW 12th Ave. - SW 17th Ave.	21,880	24,875	0.43%	
	SW 17th Ave. - SW 22nd Ave.	21,090	24,755	0.54%	0.81%
	SW 22nd Ave. - Beacom Blvd.	16,290	22,680	1.11%	
	Beacom Blvd. - SW 27th Ave.	21,370	27,120	0.80%	
SW 8th Street	SW 27th Ave. - Beacom Blvd.	37,550	45,690	0.66%	0.79%
	Beacom Blvd. - SW 22nd Ave.	13,695	17,765	0.87%	
	SW 22nd Ave. - SW 17th Ave.	15,990	20,520	0.83%	
	SW 17th Ave. - SW 12th Ave.	17,650	21,395	0.64%	0.67%
	SW 12th Ave. - SR 7	15,970	19,635	0.69%	
	SR 7 - SW 4th Ave.	18,815	24,945	0.94%	0.91%
	SW 4th Ave. - I-95 Ramp	9,690	12,730	0.91%	
	I-95 Ramp - WB On-Ramp to I-95	10,220	13,300	0.88%	
	WB On-Ramp to I-95 - SW 3rd Ave.	21,600	25,600	0.57%	0.65%
	SW 3rd Ave. - SW 2nd Ave.	20,760	24,610	0.57%	
	SW 2nd Ave. - S. Miami Ave.	20,645	24,175	0.53%	
	S. Miami Ave. - Brickell Ave./US 1	16,880	22,210	0.92%	
Side Streets	SW 27th Ave.	43,440	59,840	1.07%	1.02%
	Beacom Blvd.	23,220	27,250	0.53%	
	SW 22nd Ave.	27,010	38,280	1.17%	
	SW 17th Ave.	11,100	17,540	1.54%	
	SW 12th Ave.	10,140	11,860	0.52%	
	SR 7	3,520	5,960	1.77%	
	SW 4th Ave.	12060	15400	0.82%	
	SB I-95	57,320	74,850	0.89%	
	NB I-95	83,770	99,110	0.56%	
	SW 3rd Ave.	2,750	2,310	-0.58%	
	SW 2nd Ave.	11,080	19,010	1.82%	
	S. Miami Ave.	8,400	15,760	2.12%	
	Brickell Ave./US 1	39,520	53,530	1.02%	

Note: CGR = Compound Growth Rate

Table 3-12: Compound Annual Growth Rate from SERPM Output Values for Build Scenario 2 (2-Way, Alternative 3)

	Segment	Model AADT		CGR[1] from Model	Average CGR[1]
		2005	2035		
SW 7th Street	Brickell Ave./US 1 - S Miami Ave.	11,270	14,640	0.88%	1.09%
	S Miami Ave. - SW 2nd Ave.	13,565	16,870	0.73%	
	SW 2nd Ave. - SW 3rd Ave.	11,065	16,790	1.40%	
	SW 3rd Ave. - SW 4th Ave.	13,240	19,840	1.36%	
	SW 4th Ave. - SW 6th Ave.	17,110	20,490	0.60%	0.47%
	SW 6th Ave. - SR 7	13,690	15,180	0.34%	
	SR 7 - SW 12th Ave.	12,440	15,090	0.65%	0.63%
	SW 12th Ave. - SW 17th Ave.	15,445	18,610	0.62%	
	SW 17th Ave. - SW 22nd Ave.	15,000	18,750	0.75%	1.05%
	SW 22nd Ave. - Beacom Blvd.	9,420	15,985	1.78%	
	Beacom Blvd. - SW 27th Ave.	21,850	26,450	0.64%	
SW 8th Street	SW 27th Ave. - Beacom Blvd.	32,130	43,540	1.02%	1.18%
	Beacom Blvd. - SW 22nd Ave.	11,416	18,025	1.53%	
	SW 22nd Ave. - SW 17th Ave.	13,220	17,810	1.00%	
	SW 17th Ave. - SW 12th Ave.	16,580	19,720	0.58%	0.57%
	SW 12th Ave. - SR 7	13,125	15,530	0.56%	
	SR 7 - SW 4th Ave.	15,197	18,335	0.63%	0.55%
	SW 4th Ave. - I-95 Ramp	13,610	16,170	0.58%	
	I-95 Ramp - WB On-Ramp to I-95	24,430	27,840	0.44%	
	WB On-Ramp to I-95 - SW 3rd Ave.	16,510	27,840	1.76%	0.86%
	SW 3rd Ave. - SW 2nd Ave.	20,420	23,505	0.47%	
	SW 2nd Ave. - S. Miami Ave.	13,355	16,200	0.65%	
	S. Miami Ave. - Brickell Ave./US 1	15,170	17,970	0.57%	
Side Streets	SW 27th Ave.	37,460	52,910	1.16%	1.19%
	Beacom Blvd.	18,290	25,320	1.09%	
	SW 22nd Ave.	23,450	33,670	1.21%	
	SW 17th Ave.	7,360	15,280	2.46%	
	SW 12th Ave.	6,460	8,030	0.73%	
	SR 7	690	710	0.10%	
	SW 4th Ave.	11,070	15,660	1.16%	
	SB I-95	55,830	75,510	1.01%	
	NB I-95	82,770	98,320	0.58%	
	SW 3rd Ave.	6,220	9,800	1.53%	
	SW 2nd Ave.	7,310	9,560	0.90%	
	S. Miami Ave.	6,750	14,180	2.51%	
	Brickell Ave./US 1	40,370	54,560	1.01%	

Note: (1) CGR = Compound Growth Rate

Table 3-13: Compound Annual Growth Rate from SERPM Output Values for Build Scenario 3 (3 Lanes Reversed, Alternative 3)

	Segment	Model AADT		CGR[1] from Model	Average CGR[1]
		2005	2035		
SW 7th Street	Brickell Ave./US 1 - S Miami Ave.	14,930	17,340	0.50%	0.89%
	S Miami Ave. - SW 2nd Ave.	14,020	20,325	1.25%	
	SW 2nd Ave. - SW 3rd Ave.	20,680	29,600	1.20%	
	SW 3rd Ave. - SW 4th Ave.	23,195	27,730	0.60%	
	SW 4th Ave. - SW 6th Ave.	29,210	34,280	0.53%	0.51%
	SW 6th Ave. - SR 7	25,240	29,430	0.51%	
	SR 7 - SW 12th Ave.	24,455	28,635	0.53%	0.53%
	SW 12th Ave. - SW 17th Ave.	29,825	34,960	0.53%	
	SW 17th Ave. - SW 22nd Ave.	29,870	36,130	0.64%	0.81%
	SW 22nd Ave. - Beacom Blvd.	22,770	30,685	1.00%	
	Beacom Blvd. - SW 27th Ave.	28,090	35,770	0.81%	
SW 8th Street	SW 27th Ave. - Beacom Blvd.	36,750	45,320	0.70%	1.02%
	Beacom Blvd. - SW 22nd Ave.	14,973	21,733	1.25%	
	SW 22nd Ave. - SW 17th Ave.	19,330	26,915	1.11%	
	SW 17th Ave. - SW 12th Ave.	20,685	28,065	1.02%	1.09%
	SW 12th Ave. - SR 7	18,300	25,865	1.16%	
	SR 7 - SW 4th Ave.	22,240	32,300	1.25%	1.86%
	SW 4th Ave. - I-95 Ramp	11,930	18,570	1.48%	
	I-95 Ramp - WB On-Ramp to I-95	13,520	31,560	2.86%	
	WB On-Ramp to I-95 - SW 3rd Ave.	25,040	31,560	0.77%	0.81%
	SW 3rd Ave. - SW 2nd Ave.	24,285	30,570	0.77%	
	SW 2nd Ave. - S. Miami Ave.	23,840	30,165	0.79%	
	S. Miami Ave. - Brickell Ave./US 1	19,390	25,490	0.92%	
Side Streets	SW 27th Ave.	47,270	62,440	0.93%	1.07%
	Beacom Blvd.	21,120	24,400	0.48%	
	SW 22nd Ave.	26,420	37,990	1.22%	
	SW 17th Ave.	10,310	18,260	1.92%	
	SW 12th Ave.	9,260	12,160	0.91%	
	SR 7	3,350	5,520	1.68%	
	SW 4th Ave.	13,130	18,310	1.11%	
	SB I-95	58,460	74,410	0.81%	
	NB I-95	85,220	100,800	0.56%	
	SW 3rd Ave.	2,560	2,150	-0.58%	
	SW 2nd Ave.	11,790	20,280	1.82%	
	S. Miami Ave.	7,920	14,590	2.06%	
	Brickell Ave./US 1	40,310	54,250	0.99%	

Note: (1) CGR = Compound Growth Rate

Table 3-14: Compound Annual Growth Rate from SERPM Output Values for Build Scenario 4 (3 Lanes, Alternative 4)

	Segment	Model AADT		CGR[1] from Model	Average CGR[1]
		2005	2035		
SW 7th Street	Brickell Ave./US 1 - S Miami Ave.	21,190	27,490	0.87%	0.95%
	S Miami Ave. - SW 2nd Ave.	25,775	32,360	0.76%	
	SW 2nd Ave. - SW 3rd Ave.	11,300	16,010	1.17%	
	SW 3rd Ave. - SW 4th Ave.	13,450	18,050	0.99%	
	SW 4th Ave. - SW 6th Ave.	25,020	35,810	1.20%	1.07%
	SW 6th Ave. - SR 7	19,970	26,410	0.94%	
	SR 7 - SW 12th Ave.	18,425	25,740	1.12%	1.12%
	SW 12th Ave. - SW 17th Ave.	19,890	27,730	1.11%	
	SW 17th Ave. - SW 22nd Ave.	18,990	27,430	1.23%	1.46%
	SW 22nd Ave. - Beacom Blvd.	11,425	19,500	1.80%	
	Beacom Blvd. - SW 27th Ave.	28,320	42,310	1.35%	
SW 8th Street	SW 27th Ave. - Beacom Blvd.	31,780	38,740	0.66%	0.98%
	Beacom Blvd. - SW 22nd Ave.	21,370	32,710	1.43%	
	SW 22nd Ave. - SW 17th Ave.	28,790	37,160	0.85%	
	SW 17th Ave. - SW 12th Ave.	30,540	37,485	0.69%	0.74%
	SW 12th Ave. - SR 7	25,140	31,795	0.79%	
	SR 7 - SW 4th Ave.	28,577	34,930	0.67%	0.73%
	SW 4th Ave. - I-95 Ramp	28,220	34,630	0.68%	
	I-95 Ramp - WB On-Ramp to I-95	18,830	24,160	0.83%	
	WB On-Ramp to I-95 - SW 3rd Ave.	18,830	24,160	0.83%	0.77%
	SW 3rd Ave. - SW 2nd Ave.	23,020	29,660	0.85%	
	SW 2nd Ave. - S. Miami Ave.	14,695	19,630	0.97%	
	S. Miami Ave. - Brickell Ave./US 1	17,380	19,680	0.42%	
Side Streets	SW 27th Ave.	47,480	61,120	0.85%	0.88%
	Beacom Blvd.	15,890	22,740	1.20%	
	SW 22nd Ave.	33,250	45,350	1.04%	
	SW 17th Ave.	7,320	18,720	3.18%	
	SW 12th Ave.	8,310	11,740	1.16%	
	SR 7	2,750	2,320	-0.57%	
	SW 4th Ave.	990	770	-0.83%	
	SB I-95	57,900	74,330	0.84%	
	NB I-95	89,690	111,810	0.74%	
	SW 3rd Ave.	2,190	2,060	-0.20%	
	SW 2nd Ave.	17,330	23,870	1.07%	
	S. Miami Ave.	10,330	18,430	1.95%	
	Brickell Ave./US 1	49,730	67,510	1.02%	

Note: (1) CGR = Compound Growth Rate

Table 3-15: Recommended Growth Rates for No-Build Scenario

	Segment	Model AADT 2005	Model AADT 2035	CGR[1] from Model	Average CGR[1]	CGR[1] from Historical Traffic Data	Average CGR[1]	Recommended CGR[1]
SW 7th Street	Brickell Ave./US 1 - S Miami Ave.	20,280	26,760	0.93%	0.92%	2.82%	1.87%	1.87%
	S Miami Ave. - SW 2nd Ave.	21,180	28,515	1.00%				
	SW 2nd Ave. - SW 3rd Ave.	20,840	27,430	0.92%				
	SW 3rd Ave. - SW 4th Ave.	23,100	29,570	0.83%				
	SW 4th Ave. - SW 6th Ave.	25,120	35,670	1.18%	1.04%	0.50%	1.10%	1.00%[2]
	SW 6th Ave. - SR 7	20,130	26,290	0.89%				
	SR 7 - SW 12th Ave.	18,755	25,785	1.07%	1.07%	0.92%		
	SW 12th Ave. - SW 17th Ave.	20,225	27,865	1.07%				
	SW 17th Ave. - SW 22nd Ave.	19,260	27,470	1.19%	1.31%	1.73%		
	SW 22nd Ave. - Beacom Blvd.	11,765	19,390	1.68%				
	Beacom Blvd. - SW 27th Ave.	28,860	39,700	1.07%				
SW 8th Street	SW 27th Ave. - Beacom Blvd.	31,530	38,510	0.67%	0.89%	0.91%	0.87%	1.00%[2]
	Beacom Blvd. - SW 22nd Ave.	21,250	29,500	1.10%				
	SW 22nd Ave. - SW 17th Ave.	28,725	35,510	0.71%				
	SW 17th Ave. - SW 12th Ave.	29,835	34,765	0.51%	0.58%	0.59%		
	SW 12th Ave. - SR 7	24,390	28,485	0.52%				
	SR 7 - SW 4th Ave.	27,267	31,420	0.47%	0.61%	1.64%		
	SW 4th Ave. - I-95 Ramp	39,520	49,520	0.75%				
	WB On-Ramp to I-95 - SW 3rd Ave.	20,230	27,870	1.07%	0.83%	0.26%	0.55%	1.87%[3]
	SW 3rd Ave. - SW 2nd Ave.	22,735	29,185	0.84%				
	SW 2nd Ave. - S. Miami Ave.	14,680	19,875	1.02%				
	S. Miami Ave. - Brickell Ave./US 1	17,230	19,430	0.40%				
Side Streets	SW 27th Ave.	47,600	61,070	0.83%	1.08%	-	0.93%	1.08%[4]
	Beacom Blvd.	16,000	22,170	1.09%		-		
	SW 22nd Ave.	32,960	45,300	1.07%		-		
	SW 17th Ave.	7,870	18,980	2.98%		-		
	SW 12th Ave.	8,340	11,810	1.17%		0.09%		
	SR 7	2,310	2,130	-0.27%		0.68%		
	SW 4th Ave.	13,510	19,390	1.21%		-		
	SB I-95	57,440	74,500	0.87%		-		
	NB I-95	82,930	100,220	0.63%		-		
	SW 3rd Ave.	2,170	2,030	-0.22%		-		
	SW 2nd Ave.	15,240	20,180	0.94%		-		
	S. Miami Ave.	9,630	16,840	1.88%		-		
	Brickell Ave./US 1	37,970	65,930	1.86%		0.10%		

Notes:
(1) CGR = Compound Growth Rate
(2) CGR obtained as follows= (1.10 + 0.87)*0.5=0.99≈1.00
(3) For conservative analysis the CGR was assumed to be the same as of that of SW 7th Street
(4) For conservative analysis the CGR was obtained from averaging all growth rates from the model output values

Table 3-16: Recommended Growth Rates for Build Scenario 1 (2 Lanes and Transit, Alternative 3)

	Segment	Model AADT 2005	Model AADT 2035	CGR[1] from Model	Average CGR[1]	CGR[1] from Historical Traffic Data	Average CGR[1]	Recommended CGR[1]
SW 7th Street	Brickell Ave./US 1 - S Miami Ave.	12,480	13,770	0.33%	1.12%	2.82%	1.97%	1.97%
	S Miami Ave. - SW 2nd Ave.	10,795	15,315	1.17%				
	SW 2nd Ave. - SW 3rd Ave.	14,915	22,210	1.34%				
	SW 3rd Ave. - SW 4th Ave.	12,410	20,180	1.63%				
	SW 4th Ave. - SW 6th Ave.	20,980	24,150	0.47%	0.44%	0.50%	0.81%	0.87%[2]
	SW 6th Ave. - SR 7	17,110	19,340	0.41%				
	SR 7 - SW 12th Ave.	16,740	19,340	0.48%	0.46%	0.92%		
	SW 12th Ave. - SW 17th Ave.	21,880	24,875	0.43%				
	SW 17th Ave. - SW 22nd Ave.	21,090	24,755	0.54%	0.81%	1.73%		
	SW 22nd Ave. - Beacom Blvd.	16,290	22,680	1.11%				
	Beacom Blvd. - SW 27th Ave.	21,370	27,120	0.80%				
SW 8th Street	SW 27th Ave. - Beacom Blvd.	37,550	45,690	0.66%	0.79%	0.91%	0.92%	0.87%[2]
	Beacom Blvd. - SW 22nd Ave.	13,695	17,765	0.87%				
	SW 22nd Ave. - SW 17th Ave.	15,990	20,520	0.83%				
	SW 17th Ave. - SW 12th Ave.	17,650	21,395	0.64%	0.67%	0.59%		
	SW 12th Ave. - SR 7	15,970	19,635	0.69%				
	SR 7 - SW 4th Ave.	18,815	24,945	0.94%	0.91%	1.64%		
	SW 4th Ave. - I-95 Ramp	9,690	12,730	0.91%				
	I-95 Ramp - WB On-Ramp to I-95	10,220	13,300	0.88%				
	WB On-Ramp to I-95 - SW 3rd Ave.	21,600	25,600	0.57%	0.65%	0.26%	0.45%	1.97%[3]
	SW 3rd Ave. - SW 2nd Ave.	20,760	24,610	0.57%				
	SW 2nd Ave. - S. Miami Ave.	20,645	24,175	0.53%				
	S. Miami Ave. - Brickell Ave./US 1	16,880	22,210	0.92%				
Side Streets	SW 27th Ave.	43,440	59,840	1.07%	1.02%	-	0.88%	1.02%[4]
	Beacom Blvd.	23,220	27,250	0.53%		-		
	SW 22nd Ave.	27,010	38,280	1.17%		-		
	SW 17th Ave.	11,100	17,540	1.54%		-		
	SW 12th Ave.	10,140	11,860	0.52%		0.09%		
	SR 7	3,520	5,960	1.77%		0.68%		
	SW 4th Ave.	12060	15400	0.82%		-		
	SB I-95	57,320	74,850	0.89%		-		
	NB I-95	83,770	99,110	0.56%		-		
	SW 3rd Ave.	2,750	2,310	-0.58%		-		
	SW 2nd Ave.	11,080	19,010	1.82%		-		
	S. Miami Ave.	8,400	15,760	2.12%		-		
	Brickell Ave./US 1	39,520	53,530	1.02%		0.10%		

Notes:
(1) CGR = Compound Growth Rate
(2) CGR obtained as follows= (0.81 + 0.92)*0.5≈0.87
(3) For conservative analysis the CGR was assumed to be the same as of that of SW 7th Street
(4) For conservative analysis the CGR was obtained from averaging all growth rates from the model output values

Table 3-17: Recommended Growth Rates for Build Scenario 2 (2-Way, Alternative 3)

	Segment	Model AADT		CGR[1] from Model	Average CGR[1]	CGR[1] from Historical Traffic Data	Average CGR[1]	Recommended CGR[1]
		2005	2035					
SW 7th Street	Brickell Ave./US 1 - S Miami Ave.	11,270	14,640	0.88%	1.09%	2.82%	1.85%	1.85%
	S Miami Ave. - SW 2nd Ave.	13,565	16,870	0.73%				
	SW 2nd Ave. - SW 3rd Ave.	11,065	16,790	1.40%				
	SW 3rd Ave. - SW 4th Ave.	13,240	19,840	1.36%				
	SW 4th Ave. - SW 6th Ave.	17,110	20,490	0.60%	0.47%	0.50%	0.89%	0.89%[2]
	SW 6th Ave. - SR 7	13,690	15,180	0.34%				
	SR 7 - SW 12th Ave.	12,440	15,090	0.65%	0.63%	0.92%		
	SW 12th Ave. - SW 17th Ave.	15,445	18,610	0.62%				
	SW 17th Ave. - SW 22nd Ave.	15,000	18,750	0.75%	1.05%	1.73%		
	SW 22nd Ave. - Beacom Blvd.	9,420	15,985	1.78%				
	Beacom Blvd. - SW 27th Ave.	21,850	26,450	0.64%				
SW 8th Street	SW 27th Ave. - Beacom Blvd.	32,130	43,540	1.02%	1.18%	0.91%	0.90%	0.89%[2]
	Beacom Blvd. - SW 22nd Ave.	11,416	18,025	1.53%				
	SW 22nd Ave. - SW 17th Ave.	13,220	17,810	1.00%				
	SW 17th Ave. - SW 12th Ave.	16,580	19,720	0.58%	0.57%	0.59%		
	SW 12th Ave. - SR 7	13,125	15,530	0.56%				
	SR 7 - SW 4th Ave.	15,197	18,335	0.63%	0.55%	1.64%		
	SW 4th Ave. - I-95 Ramp	13,610	16,170	0.58%				
	I-95 Ramp - WB On-Ramp to I-95	24,430	27,840	0.44%				
	WB On-Ramp to I-95 - SW 3rd Ave.	16,510	27,840	1.76%	0.86%	0.26%	0.56%	1.85%[3]
	SW 3rd Ave. - SW 2nd Ave.	20,420	23,505	0.47%				
	SW 2nd Ave. - S. Miami Ave.	13,355	16,200	0.65%				
	S. Miami Ave. - Brickell Ave./US 1	15,170	17,970	0.57%				
Side Streets	SW 27th Ave.	37,460	52,910	1.16%	1.19%	-	1.02%	1.19%[4]
	Beacom Blvd.	18,290	25,320	1.09%		-		
	SW 22nd Ave.	23,450	33,670	1.21%		-		
	SW 17th Ave.	7,360	15,280	2.46%		-		
	SW 12th Ave.	6,460	8,030	0.73%		0.09%		
	SR 7	690	710	0.10%		0.68%		
	SW 4th Ave.	11,070	15,660	1.16%		-		
	SB I-95	55,830	75,510	1.01%		-		
	NB I-95	82,770	98,320	0.58%		-		
	SW 3rd Ave.	6,220	9,800	1.53%		-		
	SW 2nd Ave.	7,310	9,560	0.90%		-		
	S. Miami Ave.	6,750	14,180	2.51%		-		
	Brickell Ave./US 1	40,370	54,560	1.01%		0.10%		

Notes:
(1) CGR = Compound Growth Rate
(2) CGR obtained as follows= (0.89 + 0.90)*0.5≈0.89
(3) For conservative analysis the CGR was assumed to be the same as of that of SW 7th Street
(4) For conservative analysis the CGR was obtained from averaging all growth rates from the model output values

Table 3-18: Recommended Growth Rates for Build Scenario 3 (3 Lanes Reversed, Alternative 3)

	Segment	Model AADT 2005	Model AADT 2035	CGR[1] from Model	Average CGR[1]	CGR[1] from Historical Traffic Data	Average CGR[1]	Recommended CGR[1]
SW 7th Street	Brickell Ave./US 1 - S Miami Ave.	14,930	17,340	0.50%	0.89%	2.82%	1.90%	1.90%
	S Miami Ave. - SW 2nd Ave.	14,020	20,325	1.25%				
	SW 2nd Ave. - SW 3rd Ave.	20,680	29,600	1.20%				
	SW 3rd Ave. - SW 4th Ave.	23,195	27,730	0.60%				
	SW 4th Ave. - SW 6th Ave.	29,210	34,280	0.53%	0.51%	0.50%	0.83%	0.94%[2]
	SW 6th Ave. - SR 7	25,240	29,430	0.51%				
	SR 7 - SW 12th Ave.	24,455	28,635	0.53%	0.53%	0.92%		
	SW 12th Ave. - SW 17th Ave.	29,825	34,960	0.53%				
	SW 17th Ave. - SW 22nd Ave.	29,870	36,130	0.64%	0.81%	1.73%		
	SW 22nd Ave. - Beacom Blvd.	22,770	30,685	1.00%				
	Beacom Blvd. - SW 27th Ave.	28,090	35,770	0.81%				
SW 8th Street	SW 27th Ave. - Beacom Blvd.	36,750	45,320	0.70%	1.02%	0.91%	1.18%	0.94%[2]
	Beacom Blvd. - SW 22nd Ave.	14,973	21,733	1.25%				
	SW 22nd Ave. - SW 17th Ave.	19,330	26,915	1.11%				
	SW 17th Ave. - SW 12th Ave.	20,685	28,065	1.02%	1.09%	0.59%		
	SW 12th Ave. - SR 7	18,300	25,865	1.16%				
	SR 7 - SW 4th Ave.	22,240	32,300	1.25%	1.86%	1.64%		
	SW 4th Ave. - I-95 Ramp	11,930	18,570	1.48%				
	I-95 Ramp - WB On-Ramp to I-95	13,520	31,560	2.86%				
	WB On-Ramp to I-95 - SW 3rd Ave.	25,040	31,560	0.77%	0.81%	0.26%	0.54%	1.90%[3]
	SW 3rd Ave. - SW 2nd Ave.	24,285	30,570	0.77%				
	SW 2nd Ave. - S. Miami Ave.	23,840	30,165	0.79%				
	S. Miami Ave. - Brickell Ave./US 1	19,390	25,490	0.92%				
Side Streets	SW 27th Ave.	47,270	62,440	0.93%	1.07%	-	0.92%	1.07%[4]
	Beacom Blvd.	21,120	24,400	0.48%		-		
	SW 22nd Ave.	26,420	37,990	1.22%		-		
	SW 17th Ave.	10,310	18,260	1.92%		-		
	SW 12th Ave.	9,260	12,160	0.91%		0.09%		
	SR 7	3,350	5,520	1.68%		0.68%		
	SW 4th Ave.	13,130	18,310	1.11%		-		
	SB I-95	58,460	74,410	0.81%		-		
	NB I-95	85,220	100,800	0.56%		-		
	SW 3rd Ave.	2,560	2,150	-0.58%		-		
	SW 2nd Ave.	11,790	20,280	1.82%		-		
	S. Miami Ave.	7,920	14,590	2.06%		-		
	Brickell Ave./US 1	40,310	54,250	0.99%		0.10%		

Notes:
(1) CGR = Compound Growth Rate
(2) CGR obtained as follows= Average (Average CGR and Average CGR from Historical Traffic Data)=0.94
(3) For conservative analysis the CGR was assumed to be the same as of that of SW 7th Street
(4) For conservative analysis the CGR was obtained from averaging all growth rates from the model output values

Table 3-19: Recommended Growth Rates for Build Scenario 4 (3 Lanes, Alternative 4)

	Segment	Model AADT 2005	Model AADT 2035	CGR[1] from Model	Average CGR[1]	CGR[1] from Historical Traffic Data	Average CGR[1]	Recommended CGR[1]
SW 7th Street	Brickell Ave./US 1 - S Miami Ave.	21,190	27,490	0.87%	0.95%	2.82%	1.88%	1.88%
	S Miami Ave. - SW 2nd Ave.	25,775	32,360	0.76%				
	SW 2nd Ave. - SW 3rd Ave.	11,300	16,010	1.17%				
	SW 3rd Ave. - SW 4th Ave.	13,450	18,050	0.99%				
	SW 4th Ave. - SW 6th Ave.	25,020	35,810	1.20%	1.07%	0.50%	1.13%	1.03%[2]
	SW 6th Ave. - SR 7	19,970	26,410	0.94%				
	SR 7 - SW 12th Ave.	18,425	25,740	1.12%	1.12%	0.92%		
	SW 12th Ave. - SW 17th Ave.	19,890	27,730	1.11%				
	SW 17th Ave. - SW 22nd Ave.	18,990	27,430	1.23%	1.46%	1.73%		
	SW 22nd Ave. - Beacom Blvd.	11,425	19,500	1.80%				
	Beacom Blvd. - SW 27th Ave.	28,320	42,310	1.35%				
SW 8th Street	SW 27th Ave. - Beacom Blvd.	31,780	38,740	0.66%	0.98%	0.91%	0.93%	1.03%[2]
	Beacom Blvd. - SW 22nd Ave.	21,370	32,710	1.43%				
	SW 22nd Ave. - SW 17th Ave.	28,790	37,160	0.85%				
	SW 17th Ave. - SW 12th Ave.	30,540	37,485	0.69%	0.74%	0.59%		
	SW 12th Ave. - SR 7	25,140	31,795	0.79%				
	SR 7 - SW 4th Ave.	28,577	34,930	0.67%	0.73%	1.64%		
	SW 4th Ave. - I-95 Ramp	28,220	34,630	0.68%				
	I-95 Ramp - WB On-Ramp to I-95	18,830	24,160	0.83%				
	WB On-Ramp to I-95 - SW 3rd Ave.	18,830	24,160	0.83%	0.77%	0.26%	0.51%	1.88%[3]
	SW 3rd Ave. - SW 2nd Ave.	23,020	29,660	0.85%				
	SW 2nd Ave. - S. Miami Ave.	14,695	19,630	0.97%				
	S. Miami Ave. - Brickell Ave./US 1	17,380	19,680	0.42%				
Side Streets	SW 27th Ave.	47,480	61,120	0.85%	0.88%	-	0.77%	0.88%[4]
	Beacom Blvd.	15,890	22,740	1.20%		-		
	SW 22nd Ave.	33,250	45,350	1.04%		-		
	SW 17th Ave.	7,320	18,720	3.18%		-		
	SW 12th Ave.	8,310	11,740	1.16%		0.09%		
	SR 7	2,750	2,320	-0.57%		0.68%		
	SW 4th Ave.	990	770	-0.83%		-		
	SB I-95	57,900	74,330	0.84%		-		
	NB I-95	89,690	111,810	0.74%		-		
	SW 3rd Ave.	2,190	2,060	-0.20%		-		
	SW 2nd Ave.	17,330	23,870	1.07%		-		
	S. Miami Ave.	10,330	18,430	1.95%		-		
	Brickell Ave./US 1	49,730	67,510	1.02%		0.10%		

Notes:
(1) CGR = Compound Growth Rate
(2) CGR obtained as follows= (1.13 + 0.93)*0.5≈1.03
(3) For conservative analysis the CGR was assumed to be the same as of that of SW 7th Street
(4) For conservative analysis the CGR was obtained from averaging all growth rates from the model output values

4. Future Conditions

4.1 Turning Movement Volumes

The Turning Movement Volumes (TMVs) at most of the intersections located along SW 7th Street and SW 8th Street were determined by utilizing FDOT's TMTOOL spreadsheet. The TMTOOL spreadsheet estimated TMVs for the Opening (2020) Year and Design (2040) Year for both No-Build and Build Scenarios based upon the field K and D factors, the SERPM output values, expected TMVs for the opening year, and recommended growth rates. Please note that the expected TMVs for the opening year considered traffic that will be generated by approved projects (i.e., committed trips) that had not been constructed when the planning study started. Appendix C includes a copy of the committed trips that were assigned to the roadway network by utilizing the existing TMVs and assignments provided in the respective Traffic Impact Analyses.

The resulting TMVs were manually adjusted to balance traffic within 10 percent between adjacent intersections and rounded the values to the nearest 10. Figure 4-1 to 4-20 show Turning Movement Volumes for each scenario during the AM and PM peak hours of the year 2020 and 2040. Appendix C includes the TMTOOL input and output reports for both No-Build and Build Scenarios and exhibits showing the balancing of the TMVs.

Figure 4-1: Turning Movement Volumes on SR 90/SW 7th Street, No-Build Scenario, Year 2020

Figure 4-2: Turning Movement Volumes on SR 90/SW 7th Street, No-Build Scenario, Year 2040

Figure 4-3: Turning Movement Volumes on SR 90/SW 8th Street, No-Build Scenario, Year 2020

Figure 4-4: Turning Movement Volumes on SR 90/SW 8th Street, No-Build Scenario, Year 2040

Figure 4-5: Turning Movement Volumes on SR 90/SW 7th Street, Build Scenario 1 (2 Lanes and Transit, Alternative 3), Year 2020

Figure 4-6: Turning Movement Volumes on SR 90/SW 7th Street, Build Scenario 1 (2 Lanes and Transit, Alternative 3), Year 2040

Figure 4-7: Turning Movement Volumes on SR 90/SW 8th Street, Build Scenario 1 (2 Lanes and Transit, Alternative 3), Year 2020

Figure 4-8: Turning Movement Volumes on SR 90/SW 8th Street, Build Scenario 1 (2 Lanes and Transit, Alternative 3), Year 2040

Figure 4-9: Turning Movement Volumes on SR 90/SW 7th Street, Build Scenario 2 (2-Way, Alternative 3), Year 2020

Figure 4-10: Turning Movement Volumes on SR 90/SW 7th Street, Build Scenario 2 (2-Way, Alternative 3), Year 2040

Figure 4-11: Turning Movement Volumes on SR 90/SW 8th Street, Build Scenario 2 (2-Way, Alternative 3), Year 2020

Figure 4-12: Turning Movement Volumes on SR 90/SW 8th Street, Build Scenario 2 (2-Way, Alternative 3), Year 2040

Figure 4-13: Turning Movement Volumes on SR 90/SW 7th Street, Build Scenario 3 (3 Lanes Reversed, Alternative 3), Year 2020

Figure 4-14: Turning Movement Volumes on SR 90/SW 7th Street, Build Scenario 3 (3 Lanes Reversed, Alternative 3), Year 2040

Figure 4-15: Turning Movement Volumes on SR 90/SW 8th Street, Build Scenario 3 (3 Lanes Reversed, Alternative 3), Year 2020

Figure 4-16: Turning Movement Volumes on SR 90/SW 8th Street, Build Scenario 3 (3 Lanes Reversed, Alternative 3), Year 2040

Figure 4-17: Turning Movement Volumes on SR 90/SW 7th Street, Build Scenario 4 (3 Lanes, Alternative 4), Year 2020

Figure 4-18: Turning Movement Volumes on SR 90/SW 7th Street, Build Scenario 4 (3 Lanes, Alternative 4), Year 2040

Figure 4-19: Turning Movement Volumes on SR 90/SW 8th Street, Build Scenario 4 (3 Lanes, Alternative 4), Year 2020

Figure 4-20: Turning Movement Volumes on SR 90/SW 8th Street, Build Scenario 4 (3 Lanes, Alternative 4), Year 2040

4.2 Operational Analyses

The adopted Level of Service (LOS) is LOS D based on Miami-Dade County Traffic Circulation Level of Service Standards (See Appendix D).

LOS analyses for the signalized intersections along the study corridor under the No-Build and Build scenarios were conducted by using Synchro 8.0. Synchro 8.0 utilizes the methodology described in both the 2000 HCM and 2010 HCM to conduct operational analyses of intersections and urban segments. The 2000 HCM methodology was utilized for those instances when the 2010 HCM methodology could not be applied. Synchro output reports for the No-Build and Build scenarios are included in Appendix D.

LOS analyses for the roadway segments were conducted by using ARTPLAN 2012 (ARTPLAN) for both No-Build and Build scenarios. ARTPLAN is a software program that performs LOS analyses for motorized and non-motorized modes of transportation on roadway segments.

Table 4-1 presents a summary of the general assumptions made for performing the operational analyses of the No-Build and Build scenarios.

Table 4-2 presents a summary of the Average AADT Volumes for No-Build and Build Scenarios. Refer to Appendix E for Average AADT calculation tables.

For a more detailed operational analysis, a VISSIM microsimulation was conducted on SW 8th Street and SW 7th Street between SW 5th Avenue and SR 5/Brickell Avenue. A VISSIM model was developed and calibrated to simulate five (5) scenarios for the AM and PM peak hours and ensure conditions and traffic behavior along the study corridor was reasonably reflected. VISSIM analyzes traffic and transit operations under constraints such as lane configuration, traffic composition, traffic signals, transit stops, etc. The following measures of effectiveness (MOEs) were computed from the model output to assess the impacts and benefits provided by each of the study alternatives:

- Intersection Delay per Vehicle – Average delay in seconds per vehicle of vehicles at the intersection. It should be noted that the delay parameter based on HCM 2010 thresholds was used to obtain LOS.
- Intersection Level of Service – Level of service for the intersection based on average delay per vehicle at the intersection.
- Network-wide Average Delay per Vehicle – Average delay in seconds per vehicle of all vehicles in the network.
- Network-wide Latent Demand – Number of vehicles that were denied entry into the network due to excessive delays and queues along the network links.

The results are presented in the following sections. For a more information on the microsimulation, refer to Appendix D.

Table 4-1: Assumptions Made for Performing Operational Analyses for No-Build and Build Scenarios

Description	No-Build	Build Scenario 1 (2 Lanes and Transit, Alternative 3)	Build Scenario 2 (2 Way, Alternative 3)	Build Scenario 3 (3 Lanes Reversed, Alternative 3)	Build Scenario 4 (3 Lanes, Alternative 4)
Design Factors	K=9%, D=100%	K=9%, D=100%	K=9%, D=58.9%	K=9%, D=100%	K=9%, D=100%
PHF	0.95 for both 2020 and 2040	0.95 for both 2020 and 2040	0.95 for both 2020 and 2040	0.95 for both 2020 and 2040	0.95 for both 2020 and 2040
Annual Growth Rates (Compound Growth Rates)	1.00% b/w SR 9 and SW 5th Ave. 1.87% b/w SW 4th Ave. and US 1 1.08% for side streets	0.87% b/w SR 9 and SW 5th Ave. 1.97% b/w SW 4th Ave. and US 1 1.02% for side streets	0.89% b/w SR 9 and SW 5th Ave. 1.85% b/w SW 4th Ave. and US 1 1.19% for side streets	0.94% b/w SR 9 and SW 5th Ave. 1.90% b/w SW 4th Ave. and US 1 1.07% for side streets	1.03% b/w SR 9 and SW 5th Ave. 1.88% b/w SW 4th Ave. and US 1 0.88% for side streets
Turning Movement Volumes (TMVs)	Utilized recommended growth rates to forecast traffic volumes based on the Base Year traffic volumes. Then, balanced traffic volumes within 10%.	Utilized TMTOOL spreadsheet and manually adjusted traffic volumes based on the Base Year TMVs (i.e., existing TMVs on SW 7th Street were used for SW 8th Street and vice versa). Applied reduction of 30% for NBLT, NBRT, SBLT, SBRT, EBLT and WBLT movements at most side streets. Balanced traffic volumes within 10%.	Utilized TMTOOL spreadsheet and manually adjusted traffic volumes based on the Base Year TMVs (i.e., existing TMVs on SW 7th Street were used for SW 8th Street and vice versa). Applied reduction of 45% for NBLT, NBRT, SBLT, SBRT, EBLT and WBLT movements at most side streets. Balanced traffic volumes within 10%. Exclusive left-turn lanes will be provided at each signalized intersection.	Utilized TMTOOL spreadsheet and manually adjusted traffic volumes based on the Base Year TMVs (i.e., existing TMVs on SW 7th Street were used for SW 8th Street and vice versa). Then, balanced traffic volumes within 10%.	Utilized TMTOOL spreadsheet and manually adjusted traffic volumes based on the Base Year traffic volumes. Then, balanced traffic volumes within 10%.
Signal Timing	Existing cycle lengths on SR 9/SW 27th Avenue and US 1 were not changed. Cycle length and splits were modified by applying engineering judgment. The following cycle lengths were utilized for the analyses: b/w SR 9 and SW 8th Ave. / b/w SW 5th Ave. and US 1 2020 AM: 100 sec / 120 sec 2020 PM: 120sec / 130 sec 2040 AM: 130 sec / 150 sec 2040 PM: 120 sec / 150 sec	Existing cycle lengths on SR 9/SW 27th Avenue and US 1 were not changed. Cycle length and splits were modified by applying engineering judgment. The following cycle lengths were utilized for the analyses: b/w SR 9 and SW 8th Ave. / b/w SW 5th Ave. and US 1 2020 AM: 100 sec / 120 sec 2020 PM: 120 sec / 130 sec 2040 AM: 130 sec / 150 sec 2040 PM: 150 sec / 150 sec	Existing cycle lengths on SR 9/SW 27th Avenue and US 1 were not changed. Cycle length and splits were modified by applying engineering judgment. The following cycle lengths were utilized for the analyses: b/w SR 9 and SW 8th Ave. / b/w SW 5th Ave. and US 1 2020 AM: 120 sec / 150 sec 2020 PM: 120 sec / 150 sec 2040 AM: 120 sec / 150 sec 2040 PM: 140 sec / 150 sec	Existing cycle lengths on SR 9/SW 27th Avenue and US 1 were not changed. Cycle length and splits were modified by applying engineering judgment. The following cycle lengths were utilized for the analyses: b/w SR 9 and SW 8th Ave. / b/w SW 5th Ave. and US 1 2020 AM: 100 sec / 120 sec 2020 PM: 120sec / 130 sec 2040 AM: 130 sec / 150 sec 2040 PM: 120 sec / 150 sec	Existing cycle lengths on SR 9/SW 27th Avenue and US 1 were not changed. Cycle length and splits were modified by applying engineering judgment. The following cycle lengths were utilized for the analyses: b/w SR 9 and SW 8th Ave. / b/w SW 5th Ave. and US 1 2020 AM: 100 sec / 120 sec 2020 PM: 120sec / 130 sec 2040 AM: 130 sec / 150 sec 2040 PM: 120 sec / 150 sec
Link Volumes	Obtained from the average link volumes between intersections after balancing traffic volumes	Obtained from the average link volumes between intersections after balancing traffic volumes	Obtained from the average link volumes between intersections after balancing traffic volumes	Obtained from the average link volumes between intersections after balancing traffic volumes	Obtained from the average link volumes between intersections after balancing traffic volumes
ARTPLAN Analyses	Automobile Mode: g/c values obtained from PM peak hour. Multimodal Data: Used no bike lane, adjacent sidewalk-roadway separation, bus load factor of 0.7, and fair amenities.	Automobile Mode: g/c values obtained from PM peak hour. Multimodal Data: Used bike lane, typical sidewalk-roadway separation, bus load factor of 0.85, and excellent amenities.	Automobile Mode: g/c values obtained from PM peak hour. Multimodal Data: Used no bike lane, wide sidewalk-roadway separation, bus load factor of 0.7, and fair amenities.	Automobile Mode: g/c values obtained from PM peak hour. Multimodal Data: Used no bike lane, adjacent sidewalk-roadway separation, bus load factor of 0.7, and fair amenities.	Automobile Mode: g/c values obtained from PM peak hour. Multimodal Data: Used no bike lane, adjacent sidewalk-roadway separation, bus load factor of 0.7, and fair amenities.

Table 4-2: AADT Volumes Summary

		No-Build		Build Scenario 1 (2 Lanes and Transit, Alternative 3)		Build Scenario 2 (2 Way, Alternative 3)		Build Scenario 3 (3 Lanes Reversed, Alternative 3)		Build Scenario 4 (3 Lanes, Alternative 4)	
SW 8th Street											
From	**To**	**2020**	**2040**	**2020**	**2040**	**2020**	**2040**	**2020**	**2040**	**2020**	**2040**
SR 9/SW 27th Ave.	SW 24th Ave.	19,170	23,390	12,110	15,780	11,110	13,780	10,500	12,720	19,670	24,000
SW 24th Ave.	SW 22nd Ave.	20,000	24,560	11,500	15,390	11,780	14,450	10,280	12,450	20,000	24,560
SW 22nd Ave.	SW 21st Ave.	22,340	27,390	12,610	16,610	12,780	15,560	12,340	14,890	22,340	27,390
SW 21st Ave.	SW 19th Ave.	22,340	27,390	12,610	16,610	12,800	15,560	12,340	14,890	22,340	27,390
SW 19th Ave.	SW 17th Ave.	22,340	27,390	12,610	16,610	12,800	15,560	12,340	14,890	22,340	27,390
SW 17th Ave.	SR 933/SW 12th Ave.	25,230	30,890	12,390	16,720	13,620	16,670	12,670	15,390	25,230	30,890
SR 933/SW 12th Ave.	SR 7/SW 8th Ave.	24,720	30,340	11,330	15,670	12,720	15,610	11,670	14,500	24,720	30,340
SR 7/SW 8th Ave.	SW 5th Ave.	24,170	30,280	11,340	15,560	12,560	15,340	11,450	14,890	24,280	30,450
SW 5th Ave.	SW 4th Ave.	24,610	33,340	11,670	15,890	11,950	15,720	12,110	16,890	25,890	35,060
SW 4th Ave.	SW 3rd Ave.	40,730	54,950	8,060	10,780	18,390	25,950	7,170	10,830	26,780	37,170
SW 3rd Ave.	SW 2nd Ave.	33,170	46,560	23,060	30,950	23,110	33,000	30,610	44,230	33,610	46,230
SW 2nd Ave.	SW 1st Ave.	28,500	40,730	21,780	29,280	20,390	29,170	27,780	40,220	28,060	40,450
SW 1st Ave.	S. Miami Ave.	29,000	41,390	20,840	28,440	21,000	29,950	27,110	38,840	29,620	42,280
S. Miami Ave.	SR 5/Brickell Ave.	20,390	29,390	18,940	26,000	19,610	27,840	24,840	34,840	22,780	32,950
SW 7th Street											
From	**To**	**2020**	**2040**	**2020**	**2040**	**2020**	**2040**	**2020**	**2040**	**2020**	**2040**
SR 5/Brickell Ave.	S. Miami Ave.	16,450	22,390	13,340	19,170	10,950	15,450	18,780	26,450	18,450	25,560
S. Miami Ave.	SW 1st Ave.	22,780	31,780	17,620	25,280	12,830	18,340	25,450	36,390	22,450	30,780
SW 1st Ave.	SW 2nd Ave.	23,000	32,280	16,780	24,670	12,060	17,280	24,280	35,170	23,780	33,280
SW 2nd Ave.	SW 3rd Ave.	24,280	34,440	21,170	31,110	14,230	20,170	31,060	43,950	22,830	25,220
SW 3rd Ave.	SW 4th Ave.	16,450	23,720	21,830	31,450	14,610	20,170	34,890	48,110	14,890	21,500
SW 4th Ave.	SR 7/SW 8th St.	16,060	21,330	20,390	30,560	11,940	15,830	27,620	37,220	15,560	20,780
SR 7/SW 8th St.	SR 933/SW 12th Ave.	16,940	21,670	20,170	29,840	11,720	14,890	27,720	34,280	16,610	21,280
SR 933/SW 12th Ave.	SW 16th Ave.	18,170	23,110	20,670	30,000	12,170	14,950	28,170	34,230	16,610	22,950
SW 16th Ave.	SW 17th Ave.	18,170	23,110	20,670	30,000	12,170	14,950	28,170	34,230	18,000	22,950
SW 17th Ave.	SW 19th Ave.	17,390	21,780	19,220	27,840	11,170	13,670	26,110	32,170	18,000	23,340
SW 19th Ave.	SW 22nd Ave.	17,390	21,780	19,220	27,840	11,170	13,670	25,500	32,170	18,230	23,340
SW 22nd Ave.	Beacom Blvd.	15,110	18,560	18,840	26,390	10,730	13,280	25,500	31,230	15,560	19,730
Beacom Blvd.	SR 9/SW 27th Ave.	11,000	13,670	16,450	22,280	9,000	11,120	21,500	26,170	13,450	16,170

4.2.1 No-Build Scenario

4.2.1.1 Intersection Level of Service Analyses

Tables 4-3 through 4-6 summarize the level of service of the study intersections along SR 90 during the AM and PM peak hours for the No-Build scenario. These tables show that the following study intersections will operate at unacceptable automobile LOS E or F:

- Opening Year (Year 2020):
  - AM Peak:
    SW 8th Street at SR 9/SW 27th Avenue, SR 933/SW 12th Avenue, SW 5th Avenue, SW 4th Avenue, SW 3rd Avenue, SW 2nd Avenue, SW 1st Avenue, S. Miami Avenue, and SR 5/Brickell Avenue;
    SW 7th Street at S. Miami Avenue, SW 3rd Avenue, SW 4th Avenue, and SR 933/SW 12th Avenue
  - PM Peak:
    SW 8th Street at SR 933/SW 12th Avenue, SW 5th Avenue, SW 4th Avenue, SW 2nd Avenue, SW 1st Avenue, S. Miami Avenue, and SR 5/Brickell Avenue;
    SW 7th Street at S. Miami Avenue, SW 1st Avenue, SW 2nd Avenue, SW 3rd Avenue, SW 4th Avenue, SR 933/SW 12th Avenue, and SW 17th Avenue.
- Design Year (Year 2040):
  - AM Peak:
    SW 8th Street at SR 9/SW 27th Avenue, SW 22nd Avenue, SW 17th Avenue, SR 933/SW 12th Avenue, SR 7/SW 8th Avenue, SW 5th Avenue, SW 4th Avenue, SW 3rd Avenue, SW 2nd Avenue, SW 1st Avenue, S. Miami Avenue, and SR 5/Brickell Avenue/US 1;
    SW 7th Street at SW 3rd Avenue, SW 4th Avenue, and SR 933/SW 12th Avenue
  - PM Peak:
    SW 8th Street at SR 9/SW 27th Avenue, SR 933/SW 12th Avenue, SW 5th Avenue, SW 4th Avenue, SW 3rd Avenue, SW 2nd Avenue, SW 1st Avenue, S. Miami Avenue, and SR 5/Brickell Avenue/US 1;
    SW 7th Street at SR 5/Brickell Avenue/US 1, S. Miami Avenue, SW 1st Avenue, SW 2nd Avenue, SW 3rd Avenue, SW 4th Avenue, SR 933/SW 12th Avenue, SW 16th Avenue, SW 17th Avenue, and SR 9/SW 27th Avenue.

Table 4-3: Intersection LOS and Delay for SR 90/SW 8th Street, No-Build Scenario (2020)

Automobile Mode											
Intersection	Peak Period	Approach								Intersection	
		EB		WB		NB		SB			
		LOS	DELAY (sec.)	LOS	DELAY (sec.)	LOS	DELAY (sec.)	LOS	DELAY (sec.)	LOS	DELAY (sec.)
SR 9/SW 27th Ave.	AM	D	48.5	D	39.7	E	72.4	F	172.6	F	92.9
	PM	D	48.5	F	87.7	D	41.4	D	35.7	D	51.3
SW 24th Ave.	AM	A	5.2			D	40.0	D	40.0	A	9.4
	PM	A	7.5			D	42.4	D	48.3	B	13.5
SW 22nd Ave.	AM	D	40.6			F	100.2	D	37.8	D	55.0
	PM	D	43.2			D	49.4	B	15.8	D	35.9
SW 21st Ave.	AM	B	17.1							B	17.1
	PM	C	23.8							C	23.8
SW 19th Ave.	AM	C	27.4			C	32.8	D	41.1	C	28.5
	PM	C	32.7			D	35.3	E	57.3	D	35.3
SW 17th Ave.	AM	D	45.5			C	31.5	C	34.4	D	38.9
	PM	C	29.4			D	50.9	B	14.5	C	29.3
SR 933/SW 12th Ave.	AM	F	100.1			B	16.1	F	664.0	F	166.6
	PM	E	67.7			B	16.8	F	1273.8	F	324.3
SW 11th Ave.	AM	C	28.6			C	31.0	C	32.7	C	28.9
	PM	C	29.0			D	40.2	D	41.8	C	30.1
SR 7/SW 8th Ave.	AM	D	37.8			C	27.9	F	81.6	D	42.4
	PM	D	41.0			C	34.5	E	62.4	D	42.7
SW 5th Ave.	AM	F	111.8			D	36.7			F	101.8
	PM	F	151.4			E	63.1			F	136.1
SW 4th Ave.	AM	F	152.7					F	164.9	F	160.4
	PM	F	129.6					D	49.3	F	85.8
SW 3rd Ave.	AM	B	12.0			F	85.0	F	327.1	E	69.8
	PM	C	25.9			D	43.0	F	288.0	D	47.9
SW 2nd Ave.	AM	F	183.2			E	61.0	F	581.6	F	187.1
	PM	F	118.5			F	83.5	F	1044.4	F	223.0
SW 1st Ave.	AM	D	42.5					F	2038.8	F	610.8
	PM	D	50.6					F	1608.1	F	639.2
S. Miami Ave.	AM	F	469.6			D	45.2			F	368.6
	PM	F	3190.7			E	61.5			F	2274.4
SR 5/Brickell Ave.	AM	F	175.2	F	1107.4	F	90.8	F	170.9	F	330.8
	PM	F	112.3	F	1300.9	F	201.8	F	182.6	F	369.8

Table 4-4: Intersection LOS and Delay for SR 90/SW 7th Street, No-Build Scenario (2020)

Automobile Mode													
Intersection	Peak Period	Approach										Intersection	
		EB		WB		NB		SB		SWB			
		LOS	DELAY (sec.)	LOS	DELAY (sec.)	LOS	DELAY (sec.)	LOS	DELAY (sec.)	LOS	DELAY (sec.)	LOS	DELAY (sec.)
SR 5/Brickell Ave.	AM			E	57.0	C	22.4	B	16.4			C	20.7
	PM			E	77.7	B	17.8	F	82.1			D	52.7
S. Miami Ave.	AM			A	4.0	F	310.5					F	151.0
	PM			E	71.8	F	85.5					E	77.9
SW 1st Ave.	AM			C	28.2			C	33.1			C	30.7
	PM			F	267.6			C	29.4			F	187.1
SW 2nd Ave.	AM			D	49.8	A	4.0	C	32.8			C	28.2
	PM			F	132.5	D	50.6	E	60.9			F	99.5
SW 3rd Ave.	AM			F	580.7	F	129.0					F	496.7
	PM			F	1378.3	F	261.8					F	1195.7
SW 4th Ave.	AM			E	66.3			F	578.9	F	262.1	F	250.5
	PM			F	164.0			F	570.6	F	184.0	F	222.8
SR 7/SW 8th Ave.	AM			B	13.5	D	47.2	C	25.4			C	23.8
	PM			B	15.6	E	63.7	C	32.8			C	23.0
SR 933/SW 12th Ave.	AM			C	29.2	F	818.3	B	12.9			F	277.7
	PM			E	70.2	F	1284.6	C	20.6			F	310.5
SW 16th Ave.	AM			C	24.7			D	39.5			C	25.4
	PM			D	44.5			D	43.8			D	44.4
SW 17th Ave.	AM			D	48.2	A	2.7	C	22.7			C	27.1
	PM			F	115.4	A	2.6	C	25.3			E	68.1
SW 19th Ave.	AM			B	16.1	D	37.3	C	30.3			B	19.4
	PM			C	23.2	D	47.2	D	36.3			C	25.6
SW 22nd Ave.	AM			C	27.4	C	21.9	C	30.1			C	26.7
	PM			C	31.7	B	17.7	D	51.6			C	33.4
Beacom Blvd.	AM			A	9.4	C	20.7	C	34.9			B	19.8
	PM			B	15.6	C	30.0	C	24.6			B	19.7
SR 9/SW 27th Ave.	AM	F	316.7	D	37.0	B	15.2	C	21.4			C	34.0
	PM	F	588.5	F	84.5	A	1.1	B	15.3			D	51.5

Table 4-5: Intersection LOS and Delay for SR 90/SW 8th Street, No-Build Scenario (2040)

Automobile Mode											
Intersection	Peak Period	Approach								Intersection	
		EB		WB		NB		SB			
		LOS	DELAY (sec.)	LOS	DELAY (sec.)	LOS	DELAY (sec.)	LOS	DELAY (sec.)	LOS	DELAY (sec.)
SR 9/SW 27th Ave.	AM	F	106.2	E	78.2	F	146.5	F	287.2	F	169.4
	PM	F	84.5	F	180.7	E	61.8	F	123.8	F	111.2
SW 24th Ave.	AM	A	7.8			D	48.6	D	53.5	B	12.8
	PM	B	11.8			D	40.8	E	55.0	B	17.5
SW 22nd Ave.	AM	E	73.7			E	73.4	C	22.3	E	58.6
	PM	D	50.6			E	75.3	D	46.6	D	54.3
SW 21st Ave.	AM	C	30.0							C	30.0
	PM	C	31.6							C	31.6
SW 19th Ave.	AM	D	37.1			D	47.1	D	36.3	D	37.8
	PM	D	37.7			D	36.9	E	79.9	D	41.9
SW 17th Ave.	AM	F	81.5			F	113.8	C	23.0	E	72.1
	PM	D	51.4			E	70.9	C	28.4	D	48.6
SR 933/SW 12th Ave.	AM	E	75.4			C	32.9	F	1159.9	F	220.8
	PM	F	141.0			B	17.7	F	1597.9	F	438.2
SW 11th Ave.	AM	D	37.2			D	46.7	D	50.4	D	38.1
	PM	C	33.2			D	40.7	D	42.5	C	34.0
SR 7/SW 8th Ave.	AM	E	76.7			C	29.4	E	76.0	E	72.5
	PM	D	50.3			D	35.7	E	57.1	D	50.0
SW 5th Ave.	AM	F	213.0			E	56.3			F	192.4
	PM	F	331.2			F	94.1			F	293.4
SW 4th Ave.	AM	F	307.7					F	307.6	F	307.6
	PM	F	195.6					F	239.7	F	217.6
SW 3rd Ave.	AM	F	146.5			E	61.6	F	184.2	F	141.9
	PM	F	177.2			D	42.5	F	366.9	F	172.8
SW 2nd Ave.	AM	F	380.7			F	170.7	F	952.7	F	378.3
	PM	F	355.8			F	108.5	F	1460.0	F	426.2
SW 1st Ave.	AM	F	256.3					F	2924.2	F	913.5
	PM	F	239.4					F	2155.7	F	877.1
S. Miami Ave.	AM	F	1034.4			F	88.8			F	841.5
	PM	F	5547.0			F	124.6			F	4228.6
SR 5/Brickell Ave.	AM	F	405.9	F	1415.6	F	158.7	F	202.0	F	484.4
	PM	F	254.3	F	1656.5	F	301.7	F	298.5	F	513.9

Table 4-6: Intersection LOS and Delay for SR 90/SW 7th Street, No-Build Scenario (2040)

Automobile Mode													
Intersection	Peak Period	Approach										Intersection	
		EB		WB		NB		SB		SWB		LOS	DELAY (sec.)
		LOS	DELAY (sec.)	LOS	DELAY (sec.)	LOS	DELAY (sec.)	LOS	DELAY (sec.)	LOS	DELAY (sec.)		
SR 5/Brickell Ave.	AM			E	58.0	A	6.9	C	24.4			B	16.0
	PM			F	158.1	F	91.2	F	173.4			F	135.5
S. Miami Ave.	AM			C	25.8	C	20.5					C	23.5
	PM			F	222.7	F	221.5					F	222.3
SW 1st Ave.	AM			C	28.7			D	45.8			D	36.7
	PM			F	260.0			F	231.2			F	251.5
SW 2nd Ave.	AM			E	70.2	C	28.9	D	53.9			D	51.9
	PM			F	298.7	E	75.4	F	142.2			F	223.9
SW 3rd Ave.	AM			F	1125.1	F	261.9					F	990.7
	PM			F	2469.9	F	466.3					F	2175.8
SW 4th Ave.	AM			F	312.5			F	281.1	F	387.4	F	348.4
	PM			F	371.7			F	261.5	F	396.7	F	370.4
SR 7/SW 8th Ave.	AM			C	21.7	D	45.0	C	31.0			C	28.3
	PM			C	20.2	F	95.1	C	33.8			C	30.2
SR 933/SW 12th Ave.	AM			D	40.3	F	1481.2	B	17.7			F	465.2
	PM			F	152.2	F	1583.9	C	22.3			F	418.2
SW 16th Ave.	AM			D	40.2			D	48.6			D	40.6
	PM			E	61.1			D	45.0			E	60.5
SW 17th Ave.	AM			E	69.1	A	4.6	D	40.4			D	43.0
	PM			F	215.3	A	3.4	C	29.9			F	123.3
SW 19th Ave.	AM			C	28.2	D	38.7	D	40.6			C	30.3
	PM			C	30.7	D	50.6	D	35.1			C	32.2
SW 22nd Ave.	AM			C	34.7	A	2.2	D	45.1			C	28.5
	PM			D	37.6	B	11.8	F	123.4			D	52.8
Beacom Blvd.	AM			B	15.3	C	26.0	D	40.7			C	25.3
	PM			D	45.1	F	110.2	C	26.4			D	50.2
SR 9/SW 27th Ave.	AM	E	68.6	D	39.6	A	3.5	C	25.5			C	20.3
	PM	F	795.2	F	135.2	A	0.9	B	16.6			E	75.2

4.2.1.2 Static Link Analysis

Static link analyses for the No-Build scenario were performed by utilizing FDOT's ARTPLAN 2012 Software. ARTPLAN performs level of service analyses for automobile, pedestrian, bicycle and transit modes on arterial streets. Refer to Appendix F for ARTPLAN LOS Reports. Note that the level of service for automobiles on urban segments is based on travel speed as a percentage of base free flow according to the methodology outlined on the 2010 HCM. Since the adopted LOS is LOS D, this study highlights, for the automobile mode, those segments of SR 90 operating at a LOS E or F.

Also, this study highlights those roadway segments where pedestrians, bicyclists and transit users perceive the quality of service to be LOS E or F. It is this study's author's opinion that a LOS E for non-automobile modes may indicate traveling experiences that are very close to be perceived as "worst"; therefore, these should be highlighted.

Tables 4-7 and 4-8 summarize the level of service for street segments along SR 90 during the peak hours for the No-Build scenario. These tables show that the following study segments are expected to operate at LOS E or LOS F for automobile and non-automobile modes:

- Opening Year (Year 2020):
  - <u>Automobile Mode</u>
    SW 8th Street from SW 19th Avenue to SR 933/SW 12th Avenue
    SW 8th Street from SW 5th Avenue to SR 5/Brickell Avenue
    SW 7th Street from S. Miami Avenue to SW 4th Avenue
    SW 7th Street from SR 7/SW 8th Avenue to SR 933/SW 12th Avenue
    SW 7th Street from SW 16th Avenue to SW 17th Avenue
    SW 7th Street from SW 19th Avenue to SW 22nd Avenue
    SW 7th Street from Beacom Boulevard to SR 9/SW 27th Avenue
  - <u>Bicycle</u>
    SW 7th Street from S. Miami Avenue to SW 3rd Avenue
    SW 7th Street from SR 7/SW 8th Avenue to SW 16th Avenue
    SW 7th Street from SW 17th Avenue to SW 22nd Avenue
  - <u>Pedestrian</u>
    SW 8th Street from SW 4th Avenue to SW 3rd Avenue
    SW 7th Street from SW 2nd Avenue to SW 3rd Avenue
    SW 7th Street from Beacom Boulevard to SR 9/SW 27th Avenue

- Design Year (Year 2040):
  - <u>Automobile Mode</u>
    SW 8th Street from SW 24th Avenue to SW 22nd Avenue
    SW 8th Street from SW 19th Avenue to SR 5/Brickell Avenue
    SW 7th Street from S. Miami Avenue to SR 933/SW 12th Avenue
    SW 7th Street from SW 16th Avenue to SW 17th Avenue
    SW 7th Street from SW 19th Avenue to SW 22nd Avenue
    SW 7th Street from Beacom Boulevard to SR 9/SW 27th Avenue
  - <u>Bicycle</u>
    SW 7th Street from S. Miami Avenue to SW 3rd Avenue
    SW 7th Street from SR 7/SW 8th Avenue to SW 16th Avenue
    SW 7th Street from SW 17th Avenue to SW 22nd Avenue
  - <u>Pedestrian</u>
    SW 8th Street from SW 4th Avenue to S. Miami Avenue
    SW 7th Street from SW 2nd Avenue to SW 3rd Avenue
    SW 7th Street from Beacom Boulevard to SR 9/SW 27th Avenue

Table 4-7: Multimodal LOS on SR 90/SW 8th Street, No-Build Scenario

Segment		Automobile Mode		Bicycle Mode		Pedestrian Mode		Transit Mode	
From	To	2020 LOS	2040 LOS	2020 LOS	2040 LOS	2020 LOS	2040 LOS	2020 LOS	2040 LOS
SR 9/SW 27th Ave.	SW 24th Ave.	B	C	D	D	C	C	B	B
SW 24th Ave.	SW 22nd Ave.	D	F	D	D	C	C	B	A
SW 22nd Ave.	SW 19th Ave.	B	C	D	D	C	D	B	B
SW 19th Ave.	SW 17th Ave.	F	F	D	D	C	C	B	A
SW 17th Ave.	SR 933/SW 12th Ave.	F	F	D	D	C	D	A	A
SR 933/SW 12th Ave.	SR 7/SW 8th Ave.	C	F	D	D	C	D	A	A
SR 7/SW 8th Ave.	SW 5th Ave.	C	F	D	D	C	D	B	A
SW 5th Ave.	SW 4th Ave.	F	F	D	D	C	D	A	A
SW 4th Ave.	SW 3rd Ave.	F	F	D	D	E	F	A	C
SW 3rd Ave.	SW 2nd Ave.	F	F	D	D	D	E	A	A
SW 2nd Ave.	SW 1st Ave.	E	F	D	D	C	E	B	A
SW 1st Ave.	S. Miami Ave.	F	F	D	D	D	E	B	A
S. Miami Ave.	SR 5/Brickell Ave.	F	F	D	D	C	D	B	B
	Facility	**F**	**F**	**D**	**D**	**C**	**D**	**A**	**A**

Table 4-8: Multimodal LOS on SR 90/SW 7th Street, No-Build Scenario

Segment		Automobile Mode		Bicycle Mode		Pedestrian Mode		Transit Mode	
From	To	2020 LOS	2040 LOS	2020 LOS	2040 LOS	2020 LOS	2040 LOS	2020 LOS	2040 LOS
SR 5/Brickell Ave.	S. Miami Ave.	D	D	D	D	C	C	C	B
S. Miami Ave.	SW 1st Ave.	F	F	E	E	D	D	A	A
SW 1st Ave.	SW 2nd Ave.	F	F	E	E	D	D	A	A
SW 2nd Ave.	SW 3rd Ave.	F	F	E	E	E	E	A	B
SW 3rd Ave.	SW 4th Ave.	F	F	D	D	D	D	B	B
SW 4th Ave.	SR 7/SW 8th Ave.	B	F	D	D	C	C	B	A
SR 7/SW 8th Ave.	SR 933/SW 12th Ave.	F	F	E	E	D	D	A	A
SR 933/SW 12th Ave.	SW 16th Ave.	B	B	E	E	D	D	B	B
SW 16th Ave.	SW 17th Ave.	F	F	D	D	C	C	A	A
SW 17th Ave.	SW 19th Ave.	D	B	E	E	D	D	B	B
SW 19th Ave.	SW 22nd Ave.	F	E	E	E	D	D	B	B
SW 22nd Ave.	Beacom Blvd.	C	C	D	D	C	C	B	B
Beacom Blvd.	SR 9/SW 27th Ave.	F	F	D	D	E	E	A	A
	Facility	**F**	**F**	**D**	**D**	**D**	**D**	**B**	**A**

4.2.1.3 VISSIM Microsimulation Analysis

Tables 4-9 and 4-10 summarize VISSIM Microsimulation Analysis based on intersection level of service, delay, demand volume and processed volume for the No-Build scenario of SR 90/SW 8th Street and SW 7th Street, respectively, between SW 5th Avenue and SR 5/Brickell Avenue. These levels of service are estimates based on vehicle delay obtained from VISSIM using HCM 2010 thresholds. Since VISSIM's and HCM 2010's measures of effectiveness (MOEs) differ in definitions, care should be exercised when interpreting these LOS. According to the LOS estimates obtained from VISSIM, the intersections below will operate at unacceptable LOS E or F

- Opening Year (Year 2020):
  - AM Peak:
    SW 8th Street at SW 5th Avenue, SW 4th Avenue, S. Miami Avenue, and SR 5/Brickell Avenue
    SW 7th Street at S. Miami Avenue, SW 1st Avenue, SW 4th Avenue
  - PM Peak:
    SW 8th Street at SW 5th Avenue, SW 4th Avenue, SW 3rd Avenue, SW 2nd Avenue, SW 1st Avenue, S. Miami Avenue, and SR 5/Brickell Avenue
    SW 7th Street at SR 5/Brickell Avenue, S. Miami Avenue, SW 1st Avenue, SW 4th Avenue
- Design Year (Year 2040):
  - AM Peak:
    SW 8th Street at SW 5th Avenue, SW 4th Avenue, SW 2nd Avenue, SW 1st Avenue, S. Miami Avenue, and SR 5/Brickell Avenue
    SW 7th Street at SR 5/Brickell Avenue, S. Miami Avenue, SW 1st Avenue, SW 2nd Avenue, SW 4th Avenue
  - PM Peak:
    SW 8th Street at SW 5th Avenue, SW 4th Avenue, SW 3rd Avenue, SW 2nd Avenue, S. Miami Avenue, and SR 5/Brickell Avenue
    SW 7th Street at SR 5/Brickell Avenue, S. Miami Avenue, SW 1st Avenue, SW 2nd Avenue, SW 3rd Avenue, SW 4th Avenue

Table 4-9: VISSIM Intersection LOS and Delay for SR 90/SW 8th Street and SW 7th Street, No-Build Scenario (2020)

Intersection	AM Peak				PM Peak			
	Delay (sec/veh)	LOS	Demand Vol.	Processed Veh.	Delay (sec/veh)	LOS	Demand Vol.	Processed Veh.
6 - SW 8th St. and 5th Ave.	90.45	F	2,470	1,713	59.86	E	2,650	585
2 - SW 8th St. and 4th Ave.	63.47	E	5,650	3,135	68.85	E	5,010	730
1 - SW 8th St. and 3rd Ave.	14.61	B	4,070	2,073	106.86	F	3,410	456
7 - SW 8th St. and 2nd Ave.	34.7	C	4,600	2,793	96.77	F	4,600	619
8 - SW 8th St. and 1st Ave.	37.85	D	3,970	2,102	123.03	F	3,940	303
11 - SW 8th St. and Miami Ave.	95.81	F	3,530	1,753	179.71	F	3,550	258
12 - SW 8th St. and SR 5/Brickell Ave.	74.85	E	5,260	4,071	116.28	F	5,450	666
13 - SW 7th St. and SR 5/Brickell Ave.	45.66	D	4,105	3,413	81.82	F	4,710	610
10 - SW 7th St. and Miami Ave.	152.1	F	2,250	1,182	179.68	F	4,260	256
9 - SW 7th St. and 1st Ave.	184.92	F	2,740	1,353	257.61	F	4,260	207
5 - SW 7th St. and 2nd Ave.	27.52	C	3,060	2,260	49.94	D	4,580	539
4 - SW 7th St. and 3rd Ave.	22.24	C	1,880	1,330	51.39	D	3,300	332
3 - SW 7th St. and 4th Ave.	87.08	F	4,150	2,148	113.93	F	4,470	543
Network-wide Parameter	AM Peak				PM Peak			
Average Delay Time per Vehicle (sec/veh)	202.69				734.38			
Latent Demand (Vehicles Denied Entry)	4,026				13,359			

Table 4-10: VISSIM Intersection LOS and Delay for SR 90/SW 8th Street and SW 7th Street, No-Build Scenario (2040)

Intersection	AM Peak				PM Peak			
	Delay (sec/veh)	LOS	Demand Vol.	Processed Veh.	Delay (sec/veh)	LOS	Demand Vol.	Processed Veh.
6 - SW 8th St. and 5th Ave.	107.42	F	3,040	1,487	77.78	E	3,450	1,097
2 - SW 8th St. and 4th Ave.	75.22	E	7,270	2,556	67.51	E	6,510	1,516
1 - SW 8th St. and 3rd Ave.	41.6	D	5,270	1,746	75.18	E	4,610	1,036
7 - SW 8th St. and 2nd Ave.	72.08	E	6,320	2,353	70.48	E	6,080	1,243
8 - SW 8th St. and 1st Ave.	60.26	E	5,000	1,757	50.97	D	4,770	1,016
11 - SW 8th St. and S. Miami Ave.	130.94	F	4,900	1,376	97.11	F	4,810	944
12 - SW 8th St. and SR 5/Brickell Ave.	111.84	F	6,750	2,505	90.72	F	6,900	1,801
13 - SW 7th St. and SR 5/Brickell Ave.	82.02	F	4,910	1,912	79.36	E	5,780	1,595
10 - SW 7th St. and S. Miami Ave.	244.08	F	2,980	692	82.3	F	5,680	908
9 - SW 7th St. and 1st Ave.	240.01	F	3,470	954	175.65	F	5,790	710
5 - SW 7th St. and 2nd Ave.	62.72	E	4,150	1,694	107.66	F	6,140	1,006
4 - SW 7th St. and 3rd Ave.	18.81	B	2,630	937	69.57	E	4,700	729
3 - SW 7th St. and 4th Ave.	107.44	F	5,270	1,610	106.57	F	5,790	1,049
Network-wide Parameter	AM Peak				PM Peak			
Average Delay Time per Vehicle (sec/veh)	302.69				444.91			
Latent Demand (Vehicles Denied Entry)	10,054				14,501			

4.2.2 Build Scenarios

4.2.2.1 Intersection Level of Service Analyses

Tables 4-9 through 4-26 summarize the level of service of the study intersections along SR 90 during the AM and PM peak hours for the Build scenarios. These tables show that the following study intersections will operate at LOS E or F:

- Build Scenario 1 (2 Lanes and Transit, Alternative 3) (Year 2020):
  - AM Peak:
    SW 8th Street at SR 9/SW 27th Avenue, SW 5th Avenue, SW 3rd Avenue, SW 2nd Avenue, SW 1st Avenue, S. Miami Avenue, and SR 5/Brickell Avenue;
    SW 7th Street at SR 5/Brickell Avenue, S. Miami Avenue, SW 1st Avenue, SW 2nd Avenue, SW 3rd Avenue, SW 4th Avenue, SR 7/SW 8th Avenue, and SR 9/SW 27th Avenue
  - PM Peak:
    SW 8th Street at SR 9/SW 27th Avenue, SW 22nd Avenue, SW 5th Avenue, SW 3rd Avenue, SW 2nd Avenue, SW 1st Avenue, S. Miami Avenue, and SR 5/Brickell Avenue;
    SW 7th Street at SR 5/Brickell Avenue, S. Miami Avenue, SW 1st Avenue, SW 2nd Avenue, SW 3rd Avenue, SW 4th Avenue, SR 933/SW 12th Avenue, SW 17th Avenue, and SW 22nd Avenue
- Build Scenario 1 (2 Lanes and Transit, Alternative 3) (Year 2040):
  - AM Peak:
    SW 8th Street at SR 9/SW 27th Avenue, SW 5th Avenue, SW 4th Avenue, SW 3rd Avenue, SW 2nd Avenue, SW 1st Avenue, S. Miami Avenue, and SR 5/Brickell Avenue;
    SW 7th Street at SR 5/Brickell Avenue, S. Miami Avenue, SW 1st Avenue, SW 2nd Avenue, SW 3rd Avenue, SW 4th Avenue, SR 7/SW 8th Avenue, SR 933/SW 12th Avenue, SW 17th Avenue, SW 22nd Avenue, and SR 9/SW 27th Avenue
  - PM Peak:
    SW 8th Street at SR 9/SW 27th Avenue, SW 22nd Avenue, SR 933/SW 12th Avenue, SR 7/SW 8th Avenue, SW 5th Avenue, SW 3rd Avenue, SW 2nd Avenue, SW 1st Avenue, S. Miami Avenue, and SR 5/Brickell Avenue;
    SW 7th Street at SR 5/Brickell Avenue, S. Miami Avenue, SW 1st Avenue, SW 2nd Avenue, SW 3rd Avenue, SW 4th Avenue, SR 7/SW 8th Avenue, SR 933/SW 12th Avenue, SW 16th Avenue, SW 17th Avenue, SW 19th Avenue, SW 22nd Avenue, Beacom Boulevard, and SR 9/SW 27th Avenue
- Build Scenario 2 (2-Way, Alternative 3) (Year 2020):
  - AM Peak:
    SW 8th Street at SW 4th Avenue, SW 2nd Avenue, SW 1st Avenue, SR 5/Brickell Avenue;
    SW 7th Street at SW 1st Avenue, SW 4th Avenue, SR 7/SW 8th Avenue, SR 933/SW 12th Avenue, Beacom Boulevard, and SR 9/SW 27th Avenue
  - PM Peak:
    SW 8th Street at SR 9/SW 27th Avenue, SW 3rd Avenue, SW 2nd Avenue, SW 1st Avenue, and SR 5/Brickell Avenue;
    SW 7th Street at SR 5/Brickell Avenue, S. Miami Avenue, SW 1st Avenue, SW 3rd Avenue, SW 4th Avenue, SR 933/SW 12th Avenue, Beacom Boulevard, and SR 9/SW 27th Avenue

- Build Scenario 2 (2-Way Alternative 3) (Year 2040):
  - AM Peak:
    SW 8th Street at SR 9/SW 27th Avenue, SR 933/SW 12th Avenue, SW 4th Avenue, SW 3rd Avenue, SW 2nd Avenue, SW 1st Avenue, S. Miami Avenue, and SR 5/Brickell Avenue;
    SW 7th Street at SR 5/Brickell Avenue, SW 1st Avenue, SW 3rd Avenue, SW 4th Avenue, SR 7/SW 8th Avenue , SR 933/SW 12th Avenue, Beacom Boulevard, and SR 9/SW 27th Avenue
  - PM Peak:
    SW 8th Street at SR 9/SW 27th Avenue, SR 933/SW 12th Avenue, SW 4th Avenue, SW 3rd Avenue, SW 2nd Avenue, SW 1st Avenue, S. Miami Avenue, and SR 5/Brickell Avenue;
    SW 7th Street at SR 5/Brickell Avenue, S. Miami Avenue, SW 1st Avenue, SW 3rd Avenue, SW 4th Avenue, SR 7/SW 8th Avenue, SR 933/SW 12th Avenue, Beacom Boulevard, and SR 9/SW 27th Avenue
- Build Scenario 3 (3 Lanes Reversed, Alternative 3) (Year 2020)
  - AM Peak:
    SW 8th Street at SR 9/SW 27th Avenue, SR 933/SW 12th Avenue, SW 5th Avenue, SW 2nd Avenue, SW 1st Avenue, S. Miami Avenue, and SR 5/Brickell Avenue;
    SW 7th Street at SR 5/Brickell Avenue, S. Miami Avenue, SW 1st Avenue, SW 2nd Avenue, SW 3rd Avenue, SW 4th Avenue, SR 7/SW 8th Avenue, SW 22nd Avenue, and SR 9/SW 27th Avenue
  - PM Peak:
    SW 8th Street at SR 9/SW 27th Avenue, SW 5th Avenue, SW 2nd Avenue, SW 1st Avenue, S. Miami Avenue, and SR 5/Brickell Avenue;
    SW 7th Street at SR 5/Brickell Avenue, S. Miami Avenue, SW 1st Avenue, SW 2nd Avenue, SW 3rd Avenue, SW 4th Avenue, and SR 933/SW 12th Avenue
- Build Scenario 3 (3 Lanes Reversed, Alternative 3) (Year 2040)
  - AM Peak:
    SW 8th Street at SR 9/SW 27th Avenue, SW 22nd Avenue, SR 933/SW 12th Avenue, SR 7/SW 8th Avenue, SW 5th Avenue, SW 3rd Avenue, SW 2nd Avenue, SW 1st Avenue, S. Miami Avenue, and SR 5/Brickell Avenue;
    SW 7th Street at SR 5/Brickell Avenue, S. Miami Avenue, SW 1st Avenue, SW 2nd Avenue, SW 3rd Avenue, SW 4th Avenue, SR 7/SW 8th Avenue, SR 933/SW 12th Avenue, SW 17th Avenue, SW 22nd Avenue, Beacom Boulevard, and SR 9/SW 27th Avenue
  - PM Peak:
    SW 8th Street at SR 9/SW 27th Avenue, SW 22nd Avenue, SR 933/SW 12th Avenue, SR 7/SW 8th Avenue, SW 5th Avenue, SW 4th Avenue, SW 3rd Avenue, SW 2nd Avenue, SW 1st Avenue, S. Miami Avenue, and SR 5/Brickell Avenue;
    SW 7th Street at SR 5/Brickell Avenue, S. Miami Avenue, SW 1st Avenue, SW 2nd Avenue, SW 3rd Avenue, SW 4th Avenue, SR 7/SW 8th Avenue, SR 933/SW 12th Avenue, SW 17th Avenue, SW 22nd Avenue, and SR 9/SW 27th Avenue

- Build Scenario 4 (3 Lanes, Alternative 4) (Year 2020)
  - AM Peak:
    SW 8th Street at SR 9/SW 27th Avenue, SR 933/SW 12th Avenue, SW 5th Avenue, SW 3rd Avenue, SW 2nd Avenue, SW 1st Avenue, S. Miami Avenue, and SR 5/Brickell Avenue;
    SW 7th Street at S. Miami Avenue, SW 3rd Avenue, SR 933/SW 12th Avenue, and SR 9/SW 27th Avenue
  - PM Peak:
    SW 8th Street at SR 9/SW 27th Avenue, SR 933/SW 12th Avenue, SW 5th Avenue, SW 3rd Avenue, SW 2nd Avenue, SW 1st Avenue, S. Miami Avenue, and SR 5/Brickell Avenue;
    SW 7th Street at SR 5/Brickell Avenue, S. Miami Avenue, SW 1st Avenue, SW 2nd Avenue, SW 3rd Avenue, SW 4th Avenue, and SR 933/SW 12th Avenue
- Build Scenario 4 (3 Lanes, Alternative 4) (Year 2040)
  - AM Peak
    SW 8th Street at SR 9/SW 27th Avenue, SW 22nd Avenue, SW 17th Avenue, SR 933/SW 12th Avenue, SR 7/SW 8th Avenue, SW 5th Avenue, SW 4th Avenue, SW 3rd Avenue, SW 2nd Avenue, SW 1st Avenue, S. Miami Avenue, and SR 5/Brickell Avenue;
    SW 7th Street at SW 2nd Avenue, SW 3rd Avenue, SR 933/SW 12th Avenue and SR 9/SW 27th Avenue
  - PM Peak:
    SW 8th Street at SR 9/SW 27th Avenue, SR 933/SW 12th Avenue, SW 5th Avenue, SW 4th Avenue, SW 3rd Avenue, SW 2nd Avenue, SW 1st Avenue, S. Miami Avenue, and SR 5/Brickell Avenue;
    SW 7th Street at SR 5/Brickell Avenue, S. Miami Avenue, SW 1st Avenue, SW 2nd Avenue, SW 3rd Avenue, SW 4th Avenue, SR 933/SW 12th Avenue, SW 16th Avenue, SW 17th Avenue, and SR 9/SW 27th Avenue

Table 4-11: Intersection LOS and Delay for SR 90/SW 8th Street, Build Scenario 1 (2 Lanes and Transit, Alternative 3) (2020)

Automobile Mode											
Intersection	Peak Period	Approach								Intersection	
		EB		WB		NB		SB			
		LOS	DELAY (sec.)	LOS	DELAY (sec.)	LOS	DELAY (sec.)	LOS	DELAY (sec.)	LOS	DELAY (sec.)
SR 9/SW 27th Ave.	AM	F	2925.8	F	409.5	F	99.3	F	627.2	F	831.9
	PM	F	3949.4	F	1126.7	F	83.2	F	420.8	F	1200.3
SW 24th Ave.	AM			B	12.9	D	40.3	D	39.3	B	18.0
	PM			C	23.8	D	47.9	D	46.4	C	27.2
SW 22nd Ave.	AM			D	36.1	B	19.7	C	32.3	C	29.3
	PM			F	94.3	C	20.6	D	35.1	E	57.6
SW 21st Ave.	AM			A	0.4			D	47.2	A	2.3
	PM			A	0.8			E	55.4	A	2.9
SW 19th Ave.	AM			A	7.3	D	38.3	C	32.8	B	14.7
	PM			B	14.3	D	41.6	D	36.1	B	18.9
SW 17th Ave.	AM			C	21.4	B	17.4	C	26.0	C	22.2
	PM			C	28.4	C	25.0	D	35.0	C	29.8
SR 933/SW 12th Ave.	AM			C	25.4	D	45.6	C	26.4	C	32.8
	PM			D	46.2	D	40.6	C	25.8	D	39.7
SW 11th Ave. [1]	AM			A	1.9	C	31.3	C	30.8	A	8.3
	PM			A	2.3	D	42.1	D	40.7	A	6.7
SR 7/SW 8th Ave.	AM			C	31.7	C	25.5	C	22.1	C	27.9
	PM			D	38.1	D	40.5	C	31.3	D	37.7
SW 5th Ave.	AM			C	22.8	F	2138.9			F	666.3
	PM			D	38.7	F	2402.4			F	646.7
SW 4th Ave.	AM			C	24.4			E	70.4	D	46.5
	PM			C	31.2			C	32.4	C	31.7
SW 3rd Ave.	AM			E	57.0	D	46.0	D	49.0	E	55.2
	PM			E	61.5	D	54.4	E	55.6	E	59.8
SW 2nd Ave.	AM			D	52.9	D	52.4	F	94.4	E	58.1
	PM			F	154.2	D	44.3	F	104.7	F	120.3
SW 1st Ave.	AM			F	521.2			D	42.8	F	334.0
	PM			F	825.7			F	116.2	F	559.7
S. Miami Ave.	AM			B	16.4	F	502.0			F	195.0
	PM			D	38.5	F	1401.7			F	666.2
SR 5/Brickell Ave.	AM			F	109.7	F	259.8	D	52.0	F	139.1
	PM			F	109.9	F	239.6	F	156.1	F	176.4

Table 4-12: Intersection LOS and Delay for SR 90/SW 7th Street, Build Scenario 1 (2 Lanes and Transit, Alternative 3) (2020)

Automobile Mode													
Intersection	Peak Period	Approach										Intersection	
		EB		WB		NB		SB		SWB			
		LOS	DELAY (sec.)	LOS	DELAY (sec.)	LOS	DELAY (sec.)	LOS	DELAY (sec.)	LOS	DELAY (sec.)	LOS	DELAY (sec.)
SR 5/Brickell Ave.	AM	F	278.7	F	98.4	B	13.1	D	36.8			F	101.4
	PM	F	529.6	F	80.1	A	4.0	E	65.9			F	156.2
S. Miami Ave.	AM	F	446.7			D	44.1					F	304.2
	PM	F	2300.9			D	37.7					F	1388.3
SW 1st Ave.	AM	E	62.3					E	55.1			E	59.6
	PM	F	178.0					F	143.1			F	162.0
SW 2nd Ave.	AM	F	109.9			D	52.3	C	29.7			F	87.2
	PM	F	90.8			F	101.0	D	43.2			F	85.3
SW 3rd Ave.	AM	F	514.4			F	125.8					F	422.7
	PM	F	675.2			F	149.7					F	544.9
SW 4th Ave.	AM	F	302.4					E	58.3	D	49.9	F	198.8
	PM	F	140.5					D	51.1	E	58.6	F	109.2
SR 7/SW 8th Ave.	AM	E	77.2			C	20.6	D	38.2			E	62.5
	PM	D	51.2			D	35.5	D	53.0			D	49.8
SR 933/SW 12th Ave.	AM	E	57.6			C	25.3	C	33.7			D	46.9
	PM	E	79.8			C	28.9	D	52.8			E	64.1
SW 16th Ave.	AM	C	26.2					D	53.4			C	27.3
	PM	D	37.5					F	118.3			D	40.6
SW 17th Ave.	AM	E	69.6			D	42.7	C	26.0			D	48.9
	PM	E	79.2			E	56.8	D	35.3			E	61.9
SW 19th Ave.	AM	C	24.4			C	31.9	C	33.9			C	25.7
	PM	A	5.3			C	34.9	D	42.8			C	31.5
SW 22nd Ave.	AM	E	70.9			C	33.3	C	21.9			D	45.4
	PM	F	97.6			C	31.2	C	30.9			E	61.4
Beacom Blvd.	AM	C	29.8			C	30.6	B	19.9			C	27.6
	PM	C	27.8			D	44.4	C	31.5			C	30.8
SR 9/SW 27th Ave.	AM	D	36.1			F	102.2	D	46.7			E	75.6
	PM	E	76.0			B	13.1	B	14.7			B	15.7

Table 4-13: Intersection LOS and Delay for SR 90/SW 8th Street, Build Scenario 1 (2 Lanes and Transit, Alternative 3) (2040)

Automobile Mode											
Intersection	Peak Period	Approach								Intersection	
		EB		WB		NB		SB			
		LOS	DELAY (sec.)	LOS	DELAY (sec.)	LOS	DELAY (sec.)	LOS	DELAY (sec.)	LOS	DELAY (sec.)
SR 9/SW 27th Ave.	AM	F	3645.0	F	685.2	F	121.1	F	794.4	F	1071.8
	PM	F	4975.5	F	1508.0	F	154.7	F	567.4	F	1576.3
SW 24th Ave.	AM			C	21.1	E	56.0	D	51.1	C	26.7
	PM			D	36.5	E	65.1	E	60.5	D	39.9
SW 22nd Ave.	AM			D	51.2	C	28.6	D	52.4	D	44.8
	PM			F	160.7	C	32.4	F	96.8	F	111.7
SW 21st Ave.	AM			A	3.8			E	61.3	A	5.8
	PM			A	4.9			E	70.4	A	7.2
SW 19th Ave.	AM			B	12.7	D	44.1	D	37.2	B	18.8
	PM			B	17.7	E	69.0	D	49.3	C	24.8
SW 17th Ave.	AM			C	33.4	C	24.3	D	35.4	C	31.7
	PM			E	61.7	C	34.4	D	48.2	D	51.5
SR 933/SW 12th Ave.	AM			D	42.1	E	55.2	C	29.0	D	43.2
	PM			E	76.1	F	81.1	C	34.1	E	67.6
SW 11th Ave.	AM			A	2.1	D	42.8	D	41.6	A	8.6
	PM			A	2.0	E	60.4	E	56.4	A	7.6
SR 7/SW 8th Ave.	AM			D	42.5	E	67.3	C	32.6	D	46.0
	PM			E	59.1	E	56.2	D	36.0	E	56.1
SW 5th Ave.	AM			C	34.4	F	4063.3			F	1105.6
	PM			E	59.1	F	5210.2			F	1296.3
SW 4th Ave.	AM			C	31.2			F	181.7	F	96.6
	PM			D	52.5			D	36.8	D	46.1
SW 3rd Ave.	AM			F	135.1	F	96.8	C	25.8	F	125.9
	PM			F	153.1	F	126.2	E	59.3	F	141.9
SW 2nd Ave.	AM			F	191.0	F	148.3	F	212.6	F	183.0
	PM			F	248.1	F	86.7	F	246.9	F	213.5
SW 1st Ave.	AM			F	899.4			F	174.3	F	649.3
	PM			F	1193.5			F	232.2	F	844.7
S. Miami Ave.	AM			E	68.7	F	864.8			F	325.8
	PM			F	189.0	F	2149.5			F	1036.5
SR 5/Brickell Ave.	AM			F	257.6	F	297.9	F	168.9	F	236.1
	PM			F	321.0	F	362.6	F	286.8	F	320.1

Table 4-14: Intersection LOS and Delay for SR 90/SW 7th Street, Build Scenario 1 (2 Lanes and Transit, Alternative 3) (2040)

Automobile Mode													
Intersection	Peak Period	Approach										Intersection	
		EB		WB		NB		SB		SWB			
		LOS	DELAY (sec.)	LOS	DELAY (sec.)	LOS	DELAY (sec.)	LOS	DELAY (sec.)	LOS	DELAY (sec.)	LOS	DELAY (sec.)
SR 5/Brickell Ave.	AM	F	546.0	F	158.7	B	13.9	F	155.3			F	246.4
	PM	F	901.0	F	91.3	B	10.6	F	155.8			F	307.2
S. Miami Ave.	AM	F	998.8			E	56.9					F	705.4
	PM	F	4046.9			F	147.0					F	2651.8
SW 1st Ave.	AM	F	206.2					F	163.6			F	192.0
	PM	F	366.3					F	293.2			F	336.9
SW 2nd Ave.	AM	F	265.6			F	200.5	E	55.6			F	231.4
	PM	F	299.8			F	213.1	F	80.0			F	252.2
SW 3rd Ave.	AM	F	860.1			F	242.0					F	733.8
	PM	F	1150.6			F	347.7					F	983.9
SW 4th Ave.	AM	F	442.0					F	211.0	F	222.4	F	354.6
	PM	F	582.2					F	249.9	E	76.0	F	457.1
SR 7/SW 8th Ave.	AM	F	223.1			C	30.0	F	234.2			F	200.4
	PM	F	202.5			D	48.3	F	229.8			F	192.4
SR 933/SW 12th Ave.	AM	F	130.8			D	42.4	F	99.0			F	109.3
	PM	F	258.7			D	39.6	F	159.8			F	203.7
SW 16th Ave.	AM	D	41.5					F	160.4			D	45.7
	PM	F	97.3					F	336.5			F	105.1
SW 17th Ave.	AM	F	170.8			F	124.9	D	52.7			F	124.8
	PM	F	237.2			F	129.5	E	61.2			F	172.2
SW 19th Ave.	AM	D	51.6			D	44.8	D	51.0			D	51.2
	PM	F	105.1			D	52.1	F	150.9			F	105.8
SW 22nd Ave.	AM	F	161.5			F	111.0	D	41.5			F	114.5
	PM	F	188.4			F	82.7	F	114.9			F	145.6
Beacom Blvd.	AM	C	31.3			D	53.9	D	38.3			C	34.9
	PM	E	76.3			F	88.4	F	83.8			E	79.1
SR 9/SW 27th Ave.	AM	D	37.3			F	179.4	F	116.4			F	146.8
	PM	D	46.1			F	209.0	C	26.1			F	137.5

Table 4-15: Intersection LOS and Delay for SR 90/SW 8th Street, Build Scenario 2 (2-Way, Alternative 3) (2020)

Automobile Mode											
Intersection	Peak Period	Approach								Intersection	
		EB		WB		NB		SB			
		LOS	DELAY (sec.)	LOS	DELAY (sec.)	LOS	DELAY (sec.)	LOS	DELAY (sec.)	LOS	DELAY (sec.)
SR 9/SW 27th Ave.	AM	D	51.9	F	86.7	D	38.6	C	32.8	D	41.2
	PM	D	47.6	F	109.3	E	58.2	E	65.1	E	63.5
SW 24th Ave.	AM	A	1.1	A	1.3	D	47.8	D	47.9	B	10.7
	PM	A	8.7	A	4.1	D	47.7	D	48.5	B	12.3
SW 22nd Ave.	AM	B	20.0	C	23.9	C	33.6	B	13.5	C	22.1
	PM	D	42.0	D	37.8	C	28.3	B	16.2	C	28.3
SW 21st Ave.	AM	A	1.0	A	0.8			E	56.5	A	3.1
	PM	A	3.4	A	1.7			E	56.5	A	4.2
SW 19th Ave.	AM	A	3.7	A	6.9	D	45.2	C	33.7	B	12.9
	PM	A	2.0	B	10.2	D	43.6	D	50.5	B	12.6
SW 17th Ave.	AM	C	28.9	B	18.7	D	38.0	B	19.4	C	26.9
	PM	C	25.0	C	21.1	D	35.0	C	20.5	C	25.2
SR 933/SW 12th Ave.	AM	C	20.7	A	1.9	D	43.1	C	21.7	C	26.1
	PM	C	27.8	A	4.7	D	37.1	B	14.0	C	20.9
SW 11th Ave.	AM	A	3.4	A	3.9	D	39.8	D	43.5	A	9.6
	PM	A	2.1	A	7.6	D	43.8	D	47.9	A	8.3
SR 7/SW 8th Ave.	AM	A	3.4	C	27.2	D	36.5	B	17.4	B	16.5
	PM	B	15.9	A	1.6	D	41.8	C	25.3	B	15.2
SW 5th Ave.	AM	B	19.5	A	0.6	E	78.8			D	39.1
	PM	B	17.2	A	3.3	F	111.8			D	40.7
SW 4th Ave.	AM	D	52.6	E	55.9			D	74.4	E	64.0
	PM	B	16.8	A	3.7			E	61.9	C	34.2
SW 3rd Ave.	AM	C	22.5	C	26.1	D	48.1	F	201.4	D	53.5
	PM	D	50.8	F	297.4	E	63.7	F	414.7	F	202.7
SW 2nd Ave.	AM	E	75.7	B	13.0	F	142.5	D	37.2	E	79.0
	PM	E	56.0	E	66.5	F	86.4	F	147.5	F	80.6
SW 1st Ave.	AM	E	58.5	A	6.5			F	121.1	E	68.6
	PM	E	68.0	C	27.7			F	138.4	F	82.1
S. Miami Ave.	AM	A	2.3	B	16.2	E	70.5			C	28.0
	PM	A	6.5	C	33.7	D	54.6			C	34.5
SR 5/Brickell Ave.	AM	F	346.1	F	161.4	F	262.1	F	116.6	F	221.3
	PM	F	254.1	F	228.7	F	225.1	F	173.7	F	212.5

Table 4-16: Intersection LOS and Delay for SR 90/SW 7th Street, Build Scenario 2 (2-Way, Alternative 3) (2020)

Automobile Mode											
Intersection	Peak Period	Approach								Intersection	
		EB		WB		NB		SB			
		LOS	DELAY (sec.)	LOS	DELAY (sec.)	LOS	DELAY (sec.)	LOS	DELAY (sec.)	LOS	DELAY (sec.)
SR 5/Brickell Ave.	AM	E	71.3	E	65.1	C	22.3	F	88.6	D	54.7
	PM	E	64.6	E	69.9	C	24.2	F	290.1	F	141.9
S. Miami Ave.	AM	A	2.3	C	21.5	E	56.2			C	30.9
	PM	F	142.9	D	42.7	F	85.0			F	86.3
SW 1st Ave.	AM	F	151.0	C	26.5			F	158.0	F	129.2
	PM	D	39.3	C	24.9			F	161.8	F	104.1
SW 2nd Ave.	AM	A	8.1	A	8.1	B	17.5	D	37.5	B	15.3
	PM	B	13.5	B	11.1	C	20.1	D	37.3	B	19.0
SW 3rd Ave.	AM	A	5.9	A	2.8	D	48.6			B	13.3
	PM	A	3.9	A	2.5	F	215.1			E	58.7
SW 4th Ave.	AM	F	224.4	E	69.6	E	70.9	F	208.0	F	177.8
	PM	F	224.4	E	69.6	E	70.9	F	208.0	F	177.8
SR 7/SW 8th Ave.	AM	A	8.3	B	16.4	A	9.2	F	492.0	F	117.0
	PM	C	26.3	B	19.0	A	9.4	F	173.2	D	42.5
SR 933/SW 12th Ave.	AM	B	15.7	C	25.7	F	984.1	F	636.3	F	467.5
	PM	D	42.1	A	2.9	F	896.6	F	1069.9	F	521.4
SW 16th Ave.	AM	A	1.0	A	0.9			D	45.1	A	5.7
	PM	A	1.2	A	1.0			D	43.3	A	3.9
SW 17th Ave.	AM	B	15.1	B	11.9	A	7.7	C	31.8	B	19.1
	PM	B	12.6	A	5.5	B	17.8	D	41.3	C	22.9
SW 19th Ave.	AM	A	1.1	A	0.8	C	33.7	D	42.0	B	10.4
	PM	A	1.4	A	0.8	D	49.8	D	46.7	B	10.1
SW 22nd Ave.	AM	B	11.3	D	38.8	A	6.7	C	31.0	C	21.1
	PM	A	8.5	B	11.1	A	9.9	D	38.7	C	21.1
Beacom Blvd.	AM	F	115.0	E	72.7	B	14.2	D	53.1	E	55.3
	PM	F	155.8	F	110.0	B	16.6	F	111.2	F	103.4
SR 9/SW 27th Ave.	AM	E	58.3	D	35.9	F	124.6	E	62.7	F	85.9
	PM	E	72.3	E	57.9	E	78.1	D	37.8	E	58.6

Table 4-17: Intersection LOS and Delay for SR 90/SW 8th Street, Build Scenario 2 (2-Way, Alternative 3) (2040)

Automobile Mode											
Intersection	Peak Period	Approach								Intersection	
		EB		WB		NB		SB			
		LOS	DELAY (sec.)	LOS	DELAY (sec.)	LOS	DELAY (sec.)	LOS	DELAY (sec.)	LOS	DELAY (sec.)
SR 9/SW 27th Ave.	AM	E	76.9	F	146.9	E	70.3	F	148.5	F	104.6
	PM	E	65.5	F	1360.3	F	95.7	F	178.3	F	235.8
SW 24th Ave.	AM	A	2.4	A	1.9	D	46.0	D	45.9	B	13.6
	PM	B	14.0	A	9.5	E	59.1	E	57.8	B	18.6
SW 22nd Ave.	AM	E	56.2	B	10.8	D	46.7	C	28.9	D	38.8
	PM	D	49.7	C	34.4	C	34.8	D	37.9	D	39.0
SW 21st Ave.	AM	A	2.7	A	3.5			E	56.4	A	5.4
	PM	A	2.8	A	4.0			E	66.6	A	4.9
SW 19th Ave.	AM	A	4.2	A	7.4	D	50.8	D	37.9	B	13.8
	PM	A	2.6	B	11.9	E	56.5	E	63.6	B	16.1
SW 17th Ave.	AM	E	61.3	C	23.5	D	51.8	D	39.6	D	46.9
	PM	D	43.6	C	32.9	D	47.6	C	24.1	D	36.1
SR 933/SW 12th Ave.	AM	D	37.1	A	3.2	F	149.2	D	49.7	E	70.8
	PM	E	58.3	B	13.6	F	144.5	F	97.8	E	78.5
SW 11th Ave.	AM	A	4.8	A	8.4	D	39.9	D	44.8	B	11.5
	PM	A	3.3	A	5.8	D	52.6	E	60.0	A	9.2
SR 7/SW 8th Ave.	AM	A	6.9	C	29.7	D	39.2	C	27.5	C	21.1
	PM	A	3.6	A	1.1	D	49.6	C	28.0	B	12.4
SW 5th Ave.	AM	C	24.3	A	0.8	F	101.7			D	49.2
	PM	C	26.0	B	13.1	F	93.1			D	40.8
SW 4th Ave.	AM	F	166.4	F	246.6			F	150.4	F	182.5
	PM	C	34.7	F	321.0			E	66.7	F	152.2
SW 3rd Ave.	AM	F	273.3	F	337.7	D	48.3	F	503.6	F	299.2
	PM	F	318.4	F	724.4	E	70.7	F	888.0	F	528.3
SW 2nd Ave.	AM	F	296.7	F	170.6	F	267.3	D	45.5	F	233.2
	PM	F	267.8	F	292.6	F	163.0	F	266.3	F	251.9
SW 1st Ave.	AM	F	273.0	C	26.1			F	285.6	F	208.8
	PM	F	301.8	F	186.4			F	309.8	F	264.8
S. Miami Ave.	AM	F	102.7	C	20.3	F	151.3			F	91.6
	PM	E	68.6	F	95.7	F	127.0			F	99.5
SR 5/Brickell Ave.	AM	F	664.8	F	305.0	F	420.0	F	247.1	F	402.8
	PM	F	584.5	F	289.2	F	351.4	F	417.5	F	390.0

Table 4-18: Intersection LOS and Delay for SR 90/SW 7th Street, Build Scenario 2 (2-Way, Alternative 3) (2040)

Automobile Mode											
Intersection	Peak Period	Approach								Intersection	
		EB		WB		NB		SB			
		LOS	DELAY (sec.)	LOS	DELAY (sec.)	LOS	DELAY (sec.)	LOS	DELAY (sec.)	LOS	DELAY (sec.)
SR 5/Brickell Ave.	AM	F	131.7	E	62.6	F	108.7	F	276.5	F	174.3
	PM	E	68.2	F	238.7	D	49.0	F	471.7	F	244.1
S. Miami Ave.	AM	A	5.2	D	38.5	E	64.0			D	38.0
	PM	F	147.5	F	243.1	F	235.2			F	217.4
SW 1st Ave.	AM	F	320.5	D	36.4			F	354.2	F	275.8
	PM	F	138.4	F	161.0			F	291.3	F	226.5
SW 2nd Ave.	AM	E	55.8	B	12.5	D	35.1	D	44.0	D	38.0
	PM	C	33.6	D	48.9	E	78.9	E	57.3	D	54.8
SW 3rd Ave.	AM	F	100.6	E	56.7	F	146.2			F	93.7
	PM	F	128.4	E	72.7	F	198.5			F	122.4
SW 4th Ave.	AM	F	516.9	F	109.8	E	70.9	F	335.3	F	333.7
	PM	F	483.5	F	109.1	F	124.8	F	387.0	F	335.9
SR 7/SW 8th Ave.	AM	D	53.4	C	20.1	A	8.5	F	857.1	F	212.0
	PM	C	33.1	B	16.5	C	21.2	F	671.1	F	114.0
SR 933/SW 12th Ave.	AM	D	36.3	C	28.5	F	1306.9	F	859.0	F	629.2
	PM	D	52.3	B	16.8	F	1412.6	F	1691.8	F	834.6
SW 16th Ave.	AM	A	1.1	A	1.1			D	47.3	A	6.0
	PM	A	0.8	A	0.9			E	55.7	A	4.7
SW 17th Ave.	AM	C	23.6	B	14.7	A	8.9	D	46.4	C	27.2
	PM	E	58.5	A	10.0	B	19.4	E	58.5	D	41.1
SW 19th Ave.	AM	A	2.1	A	1.1	C	31.4	D	42.3	B	10.1
	PM	A	2.9	A	1.0	E	60.3	E	55.8	B	12.6
SW 22nd Ave.	AM	B	13.1	D	43.8	A	7.8	D	43.2	C	27.1
	PM	B	16.8	D	36.3	A	9.5	E	61.1	D	35.3
Beacom Blvd.	AM	F	226.2	F	109.1	B	16.0	F	110.1	F	105.2
	PM	F	242.9	F	131.8	C	21.1	F	209.3	F	169.8
SR 9/SW 27th Ave.	AM	F	114.7	D	39.3	F	257.5	F	171.7	F	192.8
	PM	F	131.7	E	63.4	F	192.1	E	76.3	F	128.0

Table 4-19: Intersection LOS and Delay for SR 90/SW 8th Street, Build Scenario 3 (3 Lanes Reversed, Alternative 3) (2020)

Automobile Mode											
Intersection	Peak Period	Approach								Intersection	
		EB		WB		NB		SB			
		LOS	DELAY (sec.)	LOS	DELAY (sec.)	LOS	DELAY (sec.)	LOS	DELAY (sec.)	LOS	DELAY (sec.)
SR 9/SW 27th Ave.	AM	F	4414.9	F	697.6	F	98.2	F	712.8	F	1284.6
	PM	F	3948.4	F	380.5	F	92.9	F	414.0	F	1063.0
SW 24th Ave.	AM			B	14.5	D	41.0	D	37.6	B	19.2
	PM			B	16.2	D	49.2	D	45.2	C	23.8
SW 22nd Ave.	AM			D	35.4	C	27.2	D	43.1	C	34.8
	PM			D	44.5	C	20.7	D	41.3	D	37.1
SW 21st Ave.	AM			A	0.3			D	47.2	A	1.9
	PM			A	0.8			E	56.0	A	4.0
SW 19th Ave.	AM			A	7.2	D	43.9	C	33.7	B	14.2
	PM			A	9.8	D	49.2	D	37.5	B	18.6
SW 17th Ave.	AM			C	21.0	B	17.9	C	26.7	C	22.2
	PM			B	18.3	C	24.8	D	37.1	C	27.0
SR 933/SW 12th Ave.	AM			C	22.2	F	131.2	C	31.3	E	58.1
	PM			C	31.4	E	76.0	C	30.3	D	44.1
SW 11th Ave.	AM			A	2.5	C	31.8	C	30.8	A	7.1
	PM			A	3.9	D	42.9	D	40.6	A	9.7
SR 7/SW 8th Ave.	AM			C	30.9	C	31.9	C	22.6	C	29.4
	PM			C	27.3	E	74.8	D	35.1	D	38.0
SW 5th Ave.	AM			C	33.0	F	1254.2			F	336.3
	PM			C	33.3	F	3048.4			F	959.0
SW 4th Ave.	AM			C	23.6			D	41.6	C	32.3
	PM			C	29.4			C	23.1	C	25.8
SW 3rd Ave.	AM			A	8.4	D	43.8	C	33.0	B	13.7
	PM			C	27.3	D	53.3	C	24.7	C	31.2
SW 2nd Ave.	AM			D	54.9	E	55.9	F	139.9	E	65.2
	PM			E	71.3	E	61.7	F	139.4	F	81.9
SW 1st Ave.	AM			F	376.4			F	97.5	F	275.2
	PM			F	795.2			E	79.7	F	527.7
S. Miami Ave.	AM			B	19.9	F	854.7			F	297.4
	PM			D	39.2	F	2340.1			F	1040.2
SR 5/Brickell Ave.	AM			F	201.2	F	320.3	F	170.6	F	232.8
	PM			F	178.0	F	272.3	F	274.6	F	256.2

Table 4-20: Intersection LOS and Delay for SR 90/SW 7th Street, Build Scenario 3 (3 Lanes Reversed, Alternative 3) (2020)

Automobile Mode													
Intersection	Peak Period	Approach										Intersection	
		EB		WB		NB		SB		SWB			
		LOS	DELAY (sec.)	LOS	DELAY (sec.)	LOS	DELAY (sec.)	LOS	DELAY (sec.)	LOS	DELAY (sec.)	LOS	DELAY (sec.)
SR 5/Brickell Ave.	AM	F	501.4	F	81.9	A	9.0	F	82.8			F	191.4
	PM	F	1007.7	F	83.3	A	5.0	F	82.0			F	333.4
S. Miami Ave.	AM	F	521.9			D	44.3					F	386.0
	PM	F	3231.0			D	42.3					F	2094.1
SW 1st Ave.	AM	E	57.1					E	69.0			E	61.1
	PM	F	165.2					F	139.7			F	155.1
SW 2nd Ave.	AM	F	128.9			E	59.6	C	32.4			F	105.5
	PM	F	90.8			F	121.6	E	62.6			F	92.6
SW 3rd Ave.	AM	F	282.0			F	237.4					F	272.5
	PM	F	565.7			F	167.7					F	491.6
SW 4th Ave.	AM	F	353.0					F	155.1	F	146.0	F	264.4
	PM	F	235.1					F	201.0	F	218.3	F	225.2
SR 7/SW 8th Ave.	AM	E	73.5			B	19.8	F	86.4			E	69.5
	PM	E	55.2			C	30.1	E	56.4			D	53.2
SR 933/SW 12th Ave.	AM	D	48.6			C	25.8	D	41.1			D	43.6
	PM	E	72.9			C	25.7	E	57.2			E	62.1
SW 16th Ave.	AM	C	25.0					E	79.5			C	26.5
	PM	C	33.0					F	118.3			D	35.6
SW 17th Ave.	AM	E	59.1			E	68.7	C	32.2			D	53.6
	PM	E	57.4			E	62.0	D	35.3			D	52.5
SW 19th Ave.	AM	A	7.7			C	34.1	C	32.2			B	10.8
	PM	D	37.7			C	33.1	D	45.5			D	38.1
SW 22nd Ave.	AM	F	93.9			F	98.7	C	22.2			E	74.9
	PM	E	63.2			C	32.1	C	30.9			D	48.0
Beacom Blvd.	AM	C	25.9			C	31.3	C	22.6			C	25.6
	PM	C	21.3			D	45.5	C	31.1			C	26.0
SR 9/SW 27th Ave.	AM	D	36.1			F	175.2	D	51.4			F	120.7
	PM	E	76.0			E	56.8	C	23.0			D	44.0

Table 4-21: Intersection LOS and Delay for SR 90/SW 8th Street, Build Scenario 3 (3 Lanes Reversed, Alternative 3) (2040)

Automobile Mode											
Intersection	Peak Period	Approach								Intersection	
		EB		WB		NB		SB			
		LOS	DELAY (sec.)	LOS	DELAY (sec.)	LOS	DELAY (sec.)	LOS	DELAY (sec.)	LOS	DELAY (sec.)
SR 9/SW 27th Ave.	AM	F	5526.9	F	886.3	F	204.7	F	909.8	F	1660.4
	PM	F	4974.5	F	504.7	F	193.1	F	599.3	F	1392.2
SW 24th Ave.	AM			C	22.3	E	63.8	D	48.4	C	29.3
	PM			B	19.6	D	48.6	D	42.6	C	26.2
SW 22nd Ave.	AM			D	48.1	D	52.1	F	92.6	E	64.4
	PM			D	48.3	C	24.2	F	94.6	E	60.6
SW 21st Ave.	AM			A	0.4			E	61.1	A	2.7
	PM			A	0.5			E	55.3	A	3.7
SW 19th Ave.	AM			A	6.3	F	148.9	D	47.6	C	27.2
	PM			B	14.8	E	62.8	D	38.9	C	20.7
SW 17th Ave.	AM			C	30.5	C	26.1	D	37.6	C	31.8
	PM			C	22.2	C	27.0	D	50.4	C	34.0
SR 933/SW 12th Ave.	AM			C	29.8	F	301.6	D	41.8	F	116.6
	PM			C	33.9	F	194.4	C	32.3	F	80.6
SW 11th Ave.	AM			A	2.0	D	48.7	D	46.1	A	9.2
	PM			A	3.3	D	43.9	D	40.8	A	9.0
SR 7/SW 8th Ave.	AM			C	34.9	F	514.1	D	39.9	F	137.9
	PM			C	30.3	F	297.4	D	36.6	F	82.7
SW 5th Ave.	AM			D	38.0	F	3523.8			F	914.2
	PM			D	38.6	F	8612.0			F	2391.2
SW 4th Ave.	AM			C	33.5			D	38.0	D	35.5
	PM			D	44.3			F	152.1	F	96.5
SW 3rd Ave.	AM			F	102.1	F	86.8	E	74.6	F	99.3
	PM			F	177.9	F	135.2	E	77.8	F	165.2
SW 2nd Ave.	AM			F	218.2	F	131.5	F	231.4	F	200.9
	PM			F	258.9	F	140.7	F	307.2	F	244.7
SW 1st Ave.	AM			F	802.2			F	221.5	F	613.5
	PM			F	1437.9			F	252.5	F	1038.2
S. Miami Ave.	AM			D	46.5	F	1463.9			F	464.0
	PM			F	202.1	F	3457.9			F	1504.4
SR 5/Brickell Ave.	AM			F	403.8	F	492.3	F	329.5	F	404.8
	PM			F	379.4	F	430.6	F	442.7	F	425.4

Table 4-22: Intersection LOS and Delay for SR 90/SW 7th Street, Build Scenario 3 (3 Lanes Reversed, Alternative 3) (2040)

Automobile Mode													
Intersection	Peak Period	Approach										Intersection	
		EB		WB		NB		SB		SWB			
		LOS	DELAY (sec.)	LOS	DELAY (sec.)	LOS	DELAY (sec.)	LOS	DELAY (sec.)	LOS	DELAY (sec.)	LOS	DELAY (sec.)
SR 5/Brickell Ave.	AM	F	918.5	F	85.3	E	74.3	F	211.7			F	406.6
	PM	F	1788.3	F	93.8	B	10.6	F	206.0			F	660.3
S. Miami Ave.	AM	F	1134.8			D	54.2					F	855.9
	PM	F	5661.8			F	190.7					F	3838.1
SW 1st Ave.	AM	F	226.8					F	177.4			F	211.5
	PM	F	375.8					F	292.2			F	346.5
SW 2nd Ave.	AM	F	261.4			F	226.7	F	98.8			F	241.6
	PM	F	323.2			F	262.8	F	129.6			F	287.9
SW 3rd Ave.	AM	F	622.8			F	395.0					F	581.2
	PM	F	893.2			F	382.0					F	795.1
SW 4th Ave.	AM	F	477.7					F	297.3	F	425.9	F	439.6
	PM	F	237.2					F	317.0	F	208.5	F	247.5
SR 7/SW 8th Ave.	AM	F	175.9			C	28.5	F	404.9			F	192.2
	PM	F	105.3			C	29.1	F	141.0			F	102.3
SR 933/SW 12th Ave.	AM	F	92.6			C	34.8	F	95.5			F	82.4
	PM	F	171.1			C	25.1	F	109.1			F	134.4
SW 16th Ave.	AM	C	33.9					F	242.2			D	39.9
	PM	D	39.0					F	199.1			D	43.9
SW 17th Ave.	AM	F	133.1			F	114.1	E	64.0			F	109.5
	PM	F	98.2			F	105.7	E	65.6			F	91.0
SW 19th Ave.	AM	D	41.6			D	43.7	D	53.7			D	42.3
	PM	D	54.9			C	31.4	D	53.9			D	53.5
SW 22nd Ave.	AM	F	182.2			F	209.3	D	52.6			F	153.7
	PM	F	116.2			D	40.7	D	43.3			F	80.2
Beacom Blvd.	AM	D	36.8			E	78.5	F	103.8			E	61.4
	PM	C	29.6			E	57.2	D	46.8			D	36.5
SR 9/SW 27th Ave.	AM	D	37.3			F	319.3	F	144.7			F	239.7
	PM	F	87.8			F	161.9	D	42.2			F	112.6

Table 4-23: Intersection LOS and Delay for SR 90/SW 8th Street, Build Scenario 4 (3 Lanes, Alternative 4) (2020)

Automobile Mode											
Intersection	Peak Period	Approach								Intersection	
		EB		WB		NB		SB			
		LOS	DELAY (sec.)	LOS	DELAY (sec.)	LOS	DELAY (sec.)	LOS	DELAY (sec.)	LOS	DELAY (sec.)
SR 9/SW 27th Ave.	AM	D	48.5	D	39.7	E	72.6	F	256.2	F	126.7
	PM	D	53.4	F	95.5	D	54.3	C	29.8	E	56.0
SW 24th Ave.	AM	A	5.3			D	40.0	D	40.0	A	9.4
	PM	A	8.4			D	41.3	D	50.0	B	14.6
SW 22nd Ave.	AM	D	42.9			E	75.9	A	8.0	D	41.0
	PM	D	43.1			D	49.4	B	18.6	D	36.8
SW 21st Ave.	AM	B	17.0							B	17.0
	PM	C	23.8							C	23.8
SW 19th Ave.	AM	C	28.3			C	33.6	D	41.8	C	29.5
	PM	C	34.9			D	36.0	E	61.2	D	37.4
SW 17th Ave.	AM	D	38.0			E	61.1	C	30.1	D	41.2
	PM	C	30.2			D	53.1	B	10.2	C	28.9
SR 933/SW 12th Ave.	AM	C	28.0			C	26.2	F	656.0	F	117.4
	PM	E	67.7			B	16.8	F	1273.7	F	324.3
SW 11th Ave.	AM	A	9.4			D	40.6	D	44.6	B	12.3
	PM	A	2.4			D	39.5	D	39.7	A	5.6
SR 7/SW 8th Ave.	AM	D	39.0			C	27.9	F	81.2	D	43.3
	PM	D	41.2			C	34.5	C	32.8	D	39.9
SW 5th Ave.	AM	F	111.8			D	47.2			F	100.8
	PM	F	190.1			F	147.3			F	181.0
SW 4th Ave.	AM	C	28.6					C	24.9	C	27.1
	PM	A	9.5					C	34.0	B	17.2
SW 3rd Ave.	AM	F	87.6			F	286.6	D	53.6	F	172.9
	PM	F	82.8			F	282.5	F	118.7	F	157.7
SW 2nd Ave.	AM	F	183.2			E	61.6	F	548.5	F	183.8
	PM	F	93.9			F	86.2	F	1006.3	F	207.6
SW 1st Ave.	AM	D	46.7					F	1979.3	F	596.9
	PM	E	79.2					F	1501.5	F	616.7
S. Miami Ave.	AM	F	485.7			D	45.2			F	387.0
	PM	F	3138.5			D	53.9			F	2235.2
SR 5/Brickell Ave.	AM	F	305.9	F	1117.4	F	90.8	F	169.8	F	370.7
	PM	F	110.9	F	1307.6	F	201.8	F	173.3	F	365.4

Table 4-24: Intersection LOS and Delay for SR 90/SW 7th Street, Build Scenario 4 (3 Lanes, Alternative 4) (2020)

Automobile Mode													
Intersection	Peak Period	Approach										Intersection	
		EB		WB		NB		SB		SWB			
		LOS	DELAY (sec.)	LOS	DELAY (sec.)	LOS	DELAY (sec.)	LOS	DELAY (sec.)	LOS	DELAY (sec.)	LOS	DELAY (sec.)
SR 5/Brickell Ave.	AM			E	55.4	C	22.8	B	19.3			C	22.0
	PM			F	154.2	C	24.7	F	200.0			F	122.7
S. Miami Ave.	AM			A	4.6	F	445.3					F	227.9
	PM			B	14.0	F	772.4					F	357.1
SW 1st Ave.	AM			C	28.0			C	33.1			C	30.5
	PM			F	232.8			C	31.9			F	164.3
SW 2nd Ave.	AM			D	48.8	A	5.1	D	40.0			C	29.2
	PM			F	133.0	D	39.2	F	81.4			F	100.6
SW 3rd Ave.	AM			E	55.7	F	152.6					F	80.1
	PM			F	267.4	F	264.0					F	266.8
SW 4th Ave.	AM			B	14.4			F	196.7	D	45.7	D	54.1
	PM			C	24.0			F	292.5	E	62.8	E	57.9
SR 7/SW 8th Ave.	AM			B	13.7	D	47.2	C	25.4			C	23.9
	PM			B	15.1	D	35.8	C	33.1			B	19.4
SR 933/SW 12th Ave.	AM			C	29.2	F	817.0	B	12.9			F	277.3
	PM			E	65.9	F	1317.8	C	20.6			F	318.9
SW 16th Ave.	AM			C	24.4			D	39.5			C	25.1
	PM			D	47.3			D	43.9			D	47.2
SW 17th Ave.	AM			D	47.1	A	3.3	C	28.7			C	27.8
	PM			D	54.0	A	6.0	D	51.1			D	44.0
SW 19th Ave.	AM			B	17.6	D	37.7	C	30.3			C	20.4
	PM			C	25.9	D	51.7	D	38.1			C	28.5
SW 22nd Ave.	AM			C	27.4	A	2.7	D	35.5			C	23.0
	PM			D	35.0	A	7.3	D	44.3			C	30.9
Beacom Blvd.	AM			B	10.2	C	20.7	C	34.9			C	20.2
	PM			B	11.9	C	31.4	C	25.3			B	17.6
SR 9/SW 27th Ave.	AM	F	341.9	F	129.8	B	16.3	C	21.4			E	58.4
	PM	F	588.5	F	93.8	A	1.2	B	15.3			D	53.8

Table 4-25: Intersection LOS and Delay for SR 90/SW 8th Street, Build Scenario 4 (3 Lanes, Alternative 4) (2040)

Automobile Mode											
Intersection	Peak Period	Approach								Intersection	
		EB		WB		NB		SB			
		LOS	DELAY (sec.)	LOS	DELAY (sec.)	LOS	DELAY (sec.)	LOS	DELAY (sec.)	LOS	DELAY (sec.)
SR 9/SW 27th Ave.	AM	F	106.2	E	78.2	F	146.7	F	359.9	F	201.2
	PM	F	102.1	F	192.9	F	112.8	E	73.3	F	117.3
SW 24th Ave.	AM	A	7.8			D	48.6	D	53.5	B	12.8
	PM	B	11.9			D	37.9	D	46.1	B	16.7
SW 22nd Ave.	AM	E	73.7			F	86.4	B	14.7	E	59.7
	PM	D	50.6			E	75.3	D	46.6	D	54.4
SW 21st Ave.	AM	C	31.2							C	31.2
	PM	D	36.0							D	36.0
SW 19th Ave.	AM	D	37.7			D	48.4	D	38.5	D	38.6
	PM	D	42.7			D	36.9	F	80.5	D	45.7
SW 17th Ave.	AM	F	81.5			F	113.8	C	22.2	E	71.9
	PM	E	60.2			F	88.2	B	10.4	D	51.4
SR 933/SW 12th Ave.	AM	D	48.6			D	39.0	F	1126.0	F	198.5
	PM	E	72.7			C	23.3	F	1602.4	F	398.8
SW 11th Ave.	AM	A	2.6			D	53.3	E	59.5	A	6.8
	PM	A	5.1			D	40.0	D	40.0	A	8.0
SR 7/SW 8th Ave.	AM	F	84.0			C	28.9	E	73.6	E	77.6
	PM	E	58.6			C	32.0	D	35.2	D	54.6
SW 5th Ave.	AM	F	201.4			F	117.8			F	187.5
	PM	F	417.5			F	222.1			F	379.3
SW 4th Ave.	AM	F	147.9					D	49.4	F	112.4
	PM	F	102.1					D	45.3	F	85.5
SW 3rd Ave.	AM	F	345.7			F	385.1	F	83.7	F	351.7
	PM	F	285.0			F	284.5	F	331.8	F	287.9
SW 2nd Ave.	AM	F	380.7			E	62.7	F	892.5	F	370.2
	PM	F	320.8			F	137.8	F	1462.3	F	410.0
SW 1st Ave.	AM	F	256.3					F	2924.2	F	913.5
	PM	F	239.4					F	2155.7	F	877.1
S. Miami Ave.	AM	F	1042.4			F	88.8			F	859.8
	PM	F	5555.3			F	94.4			F	4227.6
SR 5/Brickell Ave.	AM	F	628.4	F	1417.4	F	158.7	F	201.8	F	579.4
	PM	F	259.6	F	1659.5	F	301.7	F	295.5	F	512.6

Table 4-26: Intersection LOS and Delay for SR 90/SW 7th Street, Build Scenario 4 (3 Lanes, Alternative 4) (2040)

Automobile Mode													
Intersection	Peak Period	Approach										Intersection	
		EB		WB		NB		SB		SWB			
		LOS	DELAY (sec.)	LOS	DELAY (sec.)	LOS	DELAY (sec.)	LOS	DELAY (sec.)	LOS	DELAY (sec.)	LOS	DELAY (sec.)
SR 5/Brickell Ave.	AM			E	59.5	A	6.5	C	32.1			B	18.8
	PM			F	374.2	F	107.1	F	430.3			F	298.0
S. Miami Ave.	AM			C	26.9	B	19.9					C	23.5
	PM			F	222.3	F	207.3					F	216.2
SW 1st Ave.	AM			C	32.6			D	45.8			D	38.8
	PM			F	243.9			F	218.6			F	236.2
SW 2nd Ave.	AM			E	64.9	D	45.0	F	95.9			E	60.7
	PM			F	311.1	F	117.5	F	164.5			F	247.9
SW 3rd Ave.	AM			F	194.2	F	282.3					F	212.7
	PM			F	564.4	F	432.4					F	541.9
SW 4th Ave.	AM			C	31.4			F	83.9	E	55.8	D	51.5
	PM			F	174.5			F	199.2	F	169.2	F	174.8
SR 7/SW 8th Ave.	AM			C	23.2	C	24.0	C	27.9			C	24.3
	PM			B	19.7	F	95.6	C	33.8			C	30.0
SR 933/SW 12th Ave.	AM			D	41.7	F	1476.4	B	17.1			F	464.3
	PM			F	144.1	F	1583.2	C	22.4			F	417.5
SW 16th Ave.	AM			D	40.1			D	48.6			D	40.5
	PM			E	66.7			D	45.1			E	65.9
SW 17th Ave.	AM			E	77.1	A	7.3	E	61.7			D	52.8
	PM			F	82.6	A	6.2	F	93.1			E	71.1
SW 19th Ave.	AM			C	28.1	D	38.7	D	40.6			C	30.3
	PM			C	32.7	D	54.0	D	37.4			C	34.3
SW 22nd Ave.	AM			D	42.0	A	4.9	D	47.8			C	33.9
	PM			D	50.6	A	10.0	E	76.0			D	47.6
Beacom Blvd.	AM			A	9.1	C	24.5	D	39.6			C	20.5
	PM			D	39.9	F	121.8	C	27.2			D	48.6
SR 9/SW 27th Ave.	AM	E	70.3	F	202.7	A	5.3	C	25.3			E	65.7
	PM	F	795.2	F	146.5	A	1.2	B	16.6			E	78.6

4.2.2.2 Static Link Analysis Scenario

Tables 4-27 through 4-34 summarize the level of service for street segments along SR 90 during a peak hour for the Build scenarios. These tables show that the following study segments are expected to operate at LOS E or LOS F for automobile mode and LOS E or LOS F for non-automobile modes:

- Build Scenario 1 (2 Lanes and Transit, Alternative 3) (Year 2020):
  - Automobile Mode
    SW 8th Street from SW 24th Avenue to SW 2nd Avenue
    SW 8th Street from SW 19th Avenue to SW 17th Avenue
    SW 8th Street from SW 5th Avenue to SW 4th Avenue
    SW 8th Street from SW 3rd Avenue to SR 5/Brickell Avenue
    SW 7th Street from SR 5/Brickell Avenue to SW 1st Avenue
    SW 7th Street from SW 3rd Avenue to SW 4th Avenue
    SW 7th Street from SR 7/SW 8th Avenue to SR 933/SW 12th Avenue
    SW 7th Street from SW 16th Avenue to SW 17th Avenue
    SW 7th Street from SW 19th Avenue to SR 9/SW 27th Avenue
  - Pedestrian Mode
    SW 8th Street from S. Miami Avenue to SR 5/Brickell Avenue
    SW 7th Street from Beacom Boulevard to SR 9/SW 27th Avenue
  - Transit Mode
    SW 7th Street from SR 5/Brickell Avenue to SW 1st Avenue

- Build Scenario 1 (2 Lanes and Transit, Alternative 3) (Year 2040):
  - Automobile Mode
    SW 8th Street from SW 24th Avenue to SW 22nd Avenue
    SW 8th Street from SW 19th Avenue to SR 933/SW 12th Avenue
    SW 8th Street from SW 5th Avenue to SW 4th Avenue
    SW 8th Street from SW 3rd Avenue to SR 5/Brickell Avenue
    SW 7th Street from S. Miami Avenue to SW 1st Avenue
    SW 7th Street from SW 2nd Avenue to SR 9/SW 27th Avenue
  - Bicycle Mode
    SW 8th Street from S. Miami Avenue to SR 5/Brickell Avenue
    SW 7th Street from Beacom Boulevard to SR 9/SW 27th Avenue
  - Pedestrian Mode
    SW 8th Street from SW 3rd Avenue to SW 1st Avenue
    SW 8th Street from S. Miami Avenue to SR 5/Brickell Avenue
    SW 7th Street from SW 3rd Avenue to SR 9/SW 27th Avenue
  - Transit Mode
    SW 8th Street from S. Miami Avenue to SR 5/Brickell Avenue
    SW 7th Street from Beacom Boulevard to SR 9/SW 27th Avenue

- Build Scenario 2 (2-Way, Alternative 3) (Year 2020):
  - Automobile Mode
    SW 8th Street from SW 24th Avenue to SW 22nd Avenue
    SW 8th Street from SW 19th Avenue to SW 17th Avenue
    SW 8th Street from SW 5th Avenue to SR 5/Brickell Avenue
    SW 7th Street from SR 5/Brickell Avenue to SW 4th Avenue
    SW 7th Street from SR 7/SW 8th Avenue to SR 933/SW 12th Avenue
    SW 7th Street from SW 16th Avenue to SW 17th Avenue
    SW 7th Street from SW 19th Avenue to SR 9/SW 27th Avenue
  - Bicycle Mode
    SW 7th Street from SR 5/Brickell Avenue to SW 4th Avenue
    SW 7th Street from SR 7/SW 8th Avenue to SW 16th Avenue
    SW 7th Street from SW 17th Avenue to Beacom Boulevard
  - Pedestrian Mode
    SW 7th Street from SR 5/Brickell Avenue to SW 1st Avenue
    SW 7th Street from SW 2nd Avenue to SW 4th Avenue
    SW 7th Street from SW 16th Avenue to SW 17th Avenue
    SW 7th Street from SW 19th Avenue to SW 22nd Avenue

- Build Scenario 2 (2-Way, Alternative 3) (Year 2040):
  - Automobile Mode
    SW 8th Street from SW 24th Avenue to SW 22nd Avenue
    SW 8th Street from SW 19th Avenue to SW 17th Avenue
    SW 8th Street from SW 5th Avenue to SR 5/Brickell Avenue
    SW 7th Street from SR 5/Brickell Avenue to SW 4th Avenue
    SW 7th Street from SR 7/SW 8th Avenue to SR 933/SW 12th Avenue
    SW 7th Street from SW 16th Avenue to SW 17th Avenue
    SW 7th Street from SW 19th Avenue to SR 9/SW 27th Avenue
  - Bicycle Mode
    SW 7th Street from SR 5/Brickell Avenue to SW 4th Avenue
    SW 7th Street from SR 7/SW 8th Avenue to SR 5/Beacom Boulevard
  - Pedestrian Mode
    SW 8th Street from SW 4th Avenue to SW 2nd Avenue
    SW 7th Street from SR 5/Brickell Avenue to SW 1st Avenue
    SW 7th Street from SW 2nd Avenue to SW 4th Avenue
    SW 7th Street from SW 16th Avenue to SW 17th Avenue
    SW 7th Street from SW 19th Avenue to SW 22nd Avenue

- Build Scenario 3 (3 Lanes Reversed, Alternative 3) (Year 2020):
  - Automobile Mode
    SW 8th Street from SW 5th Avenue to SW 4th Avenue
    SW 8th Street from SW 3rd Avenue to SR 5/Brickell Avenue
    SW 7th Street from S. Miami Avenue to SR 933/SW 12th Avenue
    SW 7th Street from SW 16th Avenue to SW 17th Avenue
    SW 7th Street from SW 19th Avenue to SR 9/SW 27th Avenue

- Bicycle Mode
  SW 7th Street from SW 2nd Avenue to SW 16th Avenue
  SW 7th Street from SW 17th Avenue to SR 9/SW 27th Avenue
- Pedestrian Mode
  SW 7th Street from SW 3rd Avenue to SW 4th Avenue
  SW 7th Street from Beacom Boulevard to SR 9/SW 27th Avenue
- Transit Mode
  SW 7th Street from Beacom Boulevard to SR 9/SW 27th Avenue

- Build Scenario 3 (3 Lanes Reversed, Alternative 3) (Year 2040):
  - Automobile Mode
    SW 8th Street from SW 19th Avenue to SW 17th Avenue
    SW 8th Street from SW 5th Avenue to SW 4th Avenue
    SW 8th Street from SW 3rd Avenue to SR 5/Brickell Avenue
    SW 7th Street from S. Miami Avenue to SR 933/SW 12th Avenue
    SW 7th Street from SW 16th Avenue to SR 9/SW 27th Avenue
  - Bicycle Mode
    SW 7th Street from SR 5/Brickell Avenue to S. Miami Avenue
    SW 7th Street from SW 1st Avenue to SW 16th Avenue
    SW 7th Street from SW 17th Avenue to SR 9/SW 27th Avenue
  - Pedestrian Mode
    SW 8th Street from SW 3rd Avenue to SW 1st Avenue
    SW 7th Street from SW 1st Avenue to SW 17th Avenue
    SW 7th Street from Beacom Boulevard to SR 9/SW 27th Avenue
  - Transit Mode
    SW 7th Street from Beacom Boulevard to SR 9/SW 27th Avenue

- Build Scenario 4 (3 Lanes, Alternative 4) (Year 2020):
  - Automobile Mode
    SW 8th Street from SW 19th Avenue to SR 933/SW 12th Avenue
    SW 8th Street from SW 5th Avenue to SR 5/Brickell Avenue
    SW 7th Street from S. Miami Avenue to SW 2nd Avenue
    SW 7th Street from SW 3rd Avenue to SW 4th Avenue
    SW 7th Street from SW 16th Avenue to SW 17th Avenue
    SW 7th Street from Beacom Boulevard to SR 9/SW 27th Avenue

- Build Scenario 4 (3 Lanes, Alternative 4) (Year 2040):
  - Automobile Mode
    SW 8th Street from SW 24th Avenue to SW 22nd Avenue
    SW 8th Street from SW 19th Avenue to SR 5/Brickell Avenue
    SW 7th Street from S. Miami Avenue to SW 4th Avenue
    SW 7th Street from SR 7/SW 8th Avenue to SR 933/SW 12th Avenue
    SW 7th Street from SW 16th Avenue to SW 17th Avenue
    SW 7th Street from SW 19th Avenue to SW 22nd Avenue
    SW 7th Street from Beacom Boulevard to SR 9/SW 27th Avenue

- Bicycle Mode
  SW 7th Street from SR 5/Brickell Avenue to SW 2nd Avenue
  SW 7th Street from SW 4th Avenue to SW 16th Avenue
  SW 7th Street from SW 17th Avenue to SW 22nd Avenue

- Pedestrian Mode
  SW 8th Street from SW 3rd Avenue to S. Miami Avenue
  SW 7th Street from SW 1st Avenue to SW 2nd Avenue
  SW 7th Street from Beacom Boulevard to SR 9/SW 27th Avenue

Further review of Tables 4-27 through 4-34 indicates the following:

- SR 90/SW 8th Street
  - Automobile Mode
    Based on the number of roadway segments that are expected to operate at LOS E and F, Build Scenario 1 (2 Lanes and Transit, Alternative 3) and Build Scenario 3 (3 Lanes Reversed, Alternative 3) would operate with fewer segments failing (i.e., LOS F) between SR 9 and SW 3rd Avenue. However, most of the roadway segments located east of SW 3rd Avenue are expected to operate at LOS F for all the alternatives and for both the opening and design years.

    Build Scenario 2 (2-Way, Alternative 3) is expected to operate at acceptable LOS between SR 933/SW 12th Avenue and SW 5th Avenue during the opening and design years. Build Scenario 4 (3 Lanes, Alternative 4) is expected to operate at acceptable LOS between SR 9/SW 27th Avenue and SW 19th Avenue , and between SR 933/SW 12th Avenue and SW 5th Avenue during the opening year. However, Build Scenario 4 (3 Lanes, Alternative 4) is expected to operate at an acceptable LOS between SR 9/SW 27th Avenue and SW 24th Avenue, and from SW 22nd Avenue to SW 19th Avenue during the design year.

  - Pedestrian Mode
    Overall, some segments in the Build Scenario 1 (2 Lanes and Transit, Alternative 3), Build Scenario 2 (2-Way, Alternative 3) and Build Scenario 3 (3 Lanes Reversed, Alternative 3) are expected to operate at a better LOS when compared against the No-Build scenario. Also, the No-Build scenario and Build Scenario 4 (3 Lanes, Alternative 4) are expected to operate at very similar LOS.

  - Bicycle Mode
    Overall, most of the roadway segments of the Build Scenarios 1, 2 and 3 are expected to operate at a better LOS than those of the No-Build scenario and Build Scenario 4 (3 Lanes, Alternative 4).

  - Transit Mode
    Overall, the ARTPLAN analyses show that the No-Build and Build scenarios are expected to operate at the same LOS.

- SR 90/SW 7th Street
  - Automobile Mode

    Based on the number of roadway segments that are expected to operate at LOS F, Build Scenario 4 (3 Lanes, Alternative 4) is the scenario with fewer roadway segments failing.

    Build Scenario 1 (2 Lanes and Transit, Alternative 3) is expected to provide better LOS between SW 1st Avenue and SR 7/SW 8th Avenue during the opening year when compared against the No-Build scenario. However, Build Scenario 1 (2 Lanes and Transit, Alternative 3) will have several segments operating at LOS F during the design year.

    Overall, Build Scenarios 2 (2-Way, Alternative 3) and 3 (3 Lanes Reversed, Alternative 3) do not appear to operate at a better LOS than the No-Build scenario.
  - Pedestrian Mode

    Several segments under the Build Scenario 4 (3 Lanes, Alternative 4) are expected to operate at LOS C during both opening and design years.

    Build Scenario 2 (2-Way, Alternative 3) was expected to provide better LOS for the pedestrian mode since traffic volumes on the roadway are lower than those of the other scenarios, and a wide separation between the through lane and the sidewalk was utilized for the ARTPLAN analyses. However, the ARTPLAN analyses show that SW 7th Street is expected to have several segments operating at LOS E during both opening and design years. In addition, SW 7th Street between SR 5/Brickell Avenue and S. Miami Avenue are expected to operate at LOS F.
  - Bicycle Mode

    Build Scenario 1 (2 Lanes and Transit, Alternative 3) is expected to provide a better LOS for bicyclists since the ARTPLAN analyses assumed that the exclusive transit lane would operate as an exclusive bicycle lane.

    Build Scenario 2 (2-Way, Alternative 3) is expected to be perceived to have several segments operating at LOS E, and there are no major differences in terms of LOS among the No-Build, Build Scenario 3 (3 Lanes Reversed, Alternative 3) and Build Scenario 4 (3 Lanes, Alternative 4).
  - Transit Mode

    Overall, the ARTPLAN analyses show that the No-Build and Build scenarios are expected to operate at LOS C or better in several segments.

Table 4-27: Multimodal LOS on SR 90/SW 8th Street, Build Scenario 1 (2 Lanes and Transit, Alternative 3)

		Automobile Mode		Bicycle Mode		Pedestrian Mode		Transit Mode	
Segment		2020 LOS	2040 LOS	2020 LOS	2040 LOS	2020 LOS	2040 LOS	2020 LOS	2040 LOS
From	To								
SR 9/SW 27th Ave.	SW 24th Ave.	B	B	A	A	B	C	A	B
SW 24th Ave.	SW 22nd Ave.	E	F	A	A	B	C	A	A
SW 22nd Ave.	SW 19th Ave.	C	C	A	A	B	C	A	A
SW 19th Ave.	SW 17th Ave.	E	F	A	A	B	C	A	A
SW 17th Ave.	SR 933/SW 12th Ave.	C	E	A	A	B	C	A	A
SR 933/SW 12th Ave.	SR 7/SW 8th Ave.	B	C	A	A	B	C	A	A
SR 7/SW 8th Ave.	SW 5th Ave.	B	C	A	A	B	C	B	A
SW 5th Ave.	SW 4th Ave.	E	F	A	A	B	C	A	A
SW 4th Ave.	SW 3rd Ave.	D	D	A	A	B	B	B	B
SW 3rd Ave.	SW 2nd Ave.	F	F	A	A	D	E	A	A
SW 2nd Ave.	SW 1st Ave.	F	F	A	A	D	E	A	A
SW 1st Ave.	S. Miami Ave.	F	F	A	A	C	D	A	A
S. Miami Ave.	SR 5/Brickell Ave.	F	F	A	F	F	F	B	F
	Facility	**F**	**F**	**A**	**F**	**C**	**F**	**A**	**A**

Table 4-28: Multimodal LOS on SR 90/SW 7th Street, Build Scenario 1 (2 Lanes and Transit, Alternative 3)

		Automobile Mode		Bicycle Mode		Pedestrian Mode		Transit Mode	
Segment		2020 LOS	2040 LOS	2020 LOS	2040 LOS	2020 LOS	2040 LOS	2020 LOS	2040 LOS
From	To								
SR 5/Brickell Ave.	S. Miami Ave.	F	C	B	B	C	D	F	B
S. Miami Ave.	SW 1st Ave.	F	F	A	B	A	B	F	A
SW 1st Ave.	SW 2nd Ave.	C	D	A	B	B	C	B	B
SW 2nd Ave.	SW 3rd Ave.	D	F	A	B	B	D	B	A
SW 3rd Ave.	SW 4th Ave.	E	F	A	B	B	E	B	A
SW 4th Ave.	SR 7/SW 8th Ave.	D	F	B	C	C	E	A	A
SR 7/SW 8th Ave.	SR 933/SW 12th Ave.	F	F	B	C	D	E	A	A
SR 933/SW 12th Ave.	SW 16th Ave.	B	E	B	C	D	E	A	A
SW 16th Ave.	SW 17th Ave.	F	F	B	B	D	E	A	A
SW 17th Ave.	SW 19th Ave.	C	F	B	C	D	E	B	A
SW 19th Ave.	SW 22nd Ave.	F	F	B	C	D	E	A	A
SW 22nd Ave.	Beacom Blvd.	F	F	B	C	D	E	A	A
Beacom Blvd.	SR 9/SW 27th Ave.	F	F	B	F	E	F	C	F
	Facility	**F**	**F**	**B**	**F**	**C**	**F**	**A**	**A**

Table 4-29: Multimodal LOS on SR 90/SW 8th Street, Build Scenario 2 (2-Way, Alternative 3)

Segment		Automobile Mode		Bicycle Mode		Pedestrian Mode		Transit Mode	
From	To	2020 LOS	2040 LOS	2020 LOS	2040 LOS	2020 LOS	2040 LOS	2020 LOS	2040 LOS
SR 9/SW 27th Ave.	SW 24th Ave.	B	C	A	A	B	C	A	B
SW 24th Ave.	SW 22nd Ave.	E	F	A	A	C	C	A	A
SW 22nd Ave.	SW 19th Ave.	B	B	A	A	C	C	A	A
SW 19th Ave.	SW 17th Ave.	E	F	A	A	C	C	A	A
SW 17th Ave.	SR 933/SW 12th Ave.	C	E	A	A	C	C	A	A
SR 933/SW 12th Ave.	SR 7/SW 8th Ave.	B	C	A	A	C	C	A	A
SR 7/SW 8th Ave.	SW 5th Ave.	C	D	A	A	C	C	A	A
SW 5th Ave.	SW 4th Ave.	E	F	A	A	B	C	A	A
SW 4th Ave.	SW 3rd Ave.	F	F	A	A	C	E	A	A
SW 3rd Ave.	SW 2nd Ave.	F	F	A	A	D	E	A	A
SW 2nd Ave.	SW 1st Ave.	F	F	A	A	D	D	A	A
SW 1st Ave.	S. Miami Ave.	F	F	A	A	D	D	A	A
S. Miami Ave.	SR 5/Brickell Ave.	F	F	A	A	D	D	A	A
	Facility	**F**	**F**	**A**	**A**	**C**	**C**	**A**	**A**

Table 4-30: Multimodal LOS on SR 90/SW 7th Street, Build Scenario 2 (2-Way, Alternative 3)

Segment		Automobile Mode		Bicycle Mode		Pedestrian Mode		Transit Mode	
From	To	2020 LOS	2040 LOS	2020 LOS	2040 LOS	2020 LOS	2040 LOS	2020 LOS	2040 LOS
SR 5/Brickell Ave.	S. Miami Ave.	F	F	E	E	E	F	A	C
S. Miami Ave.	SW 1st Ave.	F	F	E	E	E	F	A	C
SW 1st Ave.	SW 2nd Ave.	F	F	E	E	D	D	B	B
SW 2nd Ave.	SW 3rd Ave.	F	F	E	E	E	E	B	A
SW 3rd Ave.	SW 4th Ave.	F	F	E	E	E	E	A	A
SW 4th Ave.	SR 7/SW 8th Ave.	B	B	D	D	C	C	B	B
SR 7/SW 8th Ave.	SR 933/SW 12th Ave.	F	E	E	E	D	D	A	A
SR 933/SW 12th Ave.	SW 16th Ave.	D	D	E	E	D	D	A	A
SW 16th Ave.	SW 17th Ave.	F	F	D	E	E	E	A	A
SW 17th Ave.	SW 19th Ave.	C	C	E	E	D	D	B	B
SW 19th Ave.	SW 22nd Ave.	F	F	E	E	E	E	A	A
SW 22nd Ave.	Beacom Blvd.	F	F	E	E	D	D	A	A
Beacom Blvd.	SR 9/SW 27th Ave.	F	F	D	D	C	C	A	A
	Facility	**F**	**F**	**E**	**E**	**D**	**D**	**A**	**A**

Table 4-31: Multimodal LOS on SR 90/SW 8th Street, Build Scenario 3 (3 Lanes Reversed, Alternative 3)

Segment		Automobile Mode		Bicycle Mode		Pedestrian Mode		Transit Mode	
From	To	2020 LOS	2040 LOS	2020 LOS	2040 LOS	2020 LOS	2040 LOS	2020 LOS	2040 LOS
SR 9/SW 27th Ave.	SW 24th Ave.	A	B	C	C	B	B	B	B
SW 24th Ave.	SW 22nd Ave.	D	D	C	C	B	B	B	B
SW 22nd Ave.	SW 19th Ave.	A	B	C	C	B	B	B	B
SW 19th Ave.	SW 17th Ave.	C	E	C	C	B	B	B	B
SW 17th Ave.	SR 933/SW 12th Ave.	B	B	C	C	B	B	B	B
SR 933/SW 12th Ave.	SR 7/SW 8th Ave.	B	C	C	C	B	B	B	B
SR 7/SW 8th Ave.	SW 5th Ave.	B	B	C	C	B	B	B	B
SW 5th Ave.	SW 4th Ave.	F	F	C	C	B	B	B	B
SW 4th Ave.	SW 3rd Ave.	D	D	C	C	A	B	B	B
SW 3rd Ave.	SW 2nd Ave.	F	F	D	D	D	E	A	A
SW 2nd Ave.	SW 1st Ave.	F	F	D	D	C	E	A	A
SW 1st Ave.	S. Miami Ave.	F	F	D	D	C	D	A	A
S. Miami Ave.	SR 5/Brickell Ave.	F	F	D	D	C	D	A	A
	Facility	**F**	**F**	**C**	**C**	**B**	**C**	**B**	**B**

Table 4-32: Multimodal LOS on SR 90/SW 7th Street, Build Scenario 3 (3 Lanes Reversed, Alternative 3)

Segment		Automobile Mode		Bicycle Mode		Pedestrian Mode		Transit Mode	
From	To	2020 LOS	2040 LOS	2020 LOS	2040 LOS	2020 LOS	2040 LOS	2020 LOS	2040 LOS
SR 5/Brickell Ave.	S. Miami Ave.	C	D	D	E	C	D	B	B
S. Miami Ave.	SW 1st Ave.	F	F	D	D	C	D	A	A
SW 1st Ave.	SW 2nd Ave.	E	F	D	E	D	E	B	A
SW 2nd Ave.	SW 3rd Ave.	F	F	E	E	D	E	A	A
SW 3rd Ave.	SW 4th Ave.	F	F	E	E	E	F	A	C
SW 4th Ave.	SR 7/SW 8th Ave.	E	F	E	E	D	E	A	A
SR 7/SW 8th Ave.	SR 933/SW 12th Ave.	F	F	E	E	D	E	A	A
SR 933/SW 12th Ave.	SW 16th Ave.	B	B	E	E	D	E	B	B
SW 16th Ave.	SW 17th Ave.	F	F	D	D	D	E	A	A
SW 17th Ave.	SW 19th Ave.	C	F	E	E	D	D	B	A
SW 19th Ave.	SW 22nd Ave.	F	F	E	E	D	D	A	A
SW 22nd Ave.	Beacom Blvd.	F	F	E	E	D	D	A	A
Beacom Blvd.	SR 9/SW 27th Ave.	F	F	F	F	F	F	F	F
	Facility	**F**	**F**	**F**	**F**	**F**	**F**	**A**	**A**

Table 4-33: Multimodal LOS on SR 90/SW 8th Street, Build Scenario 4 (3 Lanes, Alternative 4)

Segment		Automobile Mode		Bicycle Mode		Pedestrian Mode		Transit Mode	
From	To	2020 LOS	2040 LOS	2020 LOS	2040 LOS	2020 LOS	2040 LOS	2020 LOS	2040 LOS
SR 9/SW 27th Ave.	SW 24th Ave.	B	C	D	D	C	C	B	B
SW 24th Ave.	SW 22nd Ave.	D	F	D	D	C	C	B	A
SW 22nd Ave.	SW 19th Ave.	B	A	D	D	C	D	B	B
SW 19th Ave.	SW 17th Ave.	F	F	D	D	C	C	B	A
SW 17th Ave.	SR 933/SW 12th Ave.	F	F	D	D	C	D	A	A
SR 933/SW 12th Ave.	SR 7/SW 8th Ave.	C	F	D	D	C	D	A	A
SR 7/SW 8th Ave.	SW 5th Ave.	C	F	D	D	C	D	B	A
SW 5th Ave.	SW 4th Ave.	E	F	D	D	C	D	B	B
SW 4th Ave.	SW 3rd Ave.	F	F	D	D	C	D	A	A
SW 3rd Ave.	SW 2nd Ave.	F	F	D	D	D	E	A	A
SW 2nd Ave.	SW 1st Ave.	F	F	D	D	C	E	A	A
SW 1st Ave.	S. Miami Ave.	F	F	D	D	D	E	B	A
S. Miami Ave.	SR 5/Brickell Ave.	F	F	D	D	C	D	B	B
	Facility	**F**	**F**	**D**	**D**	**C**	**D**	**A**	**A**

Table 4-34: Multimodal LOS on SR 90/SW 7th Street, Build Scenario 4 (3 Lanes, Alternative 4)

Segment		Automobile Mode		Bicycle Mode		Pedestrian Mode		Transit Mode	
From	To	2020 LOS	2040 LOS	2020 LOS	2040 LOS	2020 LOS	2040 LOS	2020 LOS	2040 LOS
SR 5/Brickell Ave.	S. Miami Ave.	D	D	D	E	C	D	B	B
S. Miami Ave.	SW 1st Ave.	F	F	D	E	C	D	A	B
SW 1st Ave.	SW 2nd Ave.	F	F	D	E	D	E	B	A
SW 2nd Ave.	SW 3rd Ave.	D	E	D	D	C	D	B	B
SW 3rd Ave.	SW 4th Ave.	E	F	D	D	C	C	B	B
SW 4th Ave.	SR 7/SW 8th Ave.	B	B	D	E	C	C	A	A
SR 7/SW 8th Ave.	SR 933/SW 12th Ave.	C	E	D	E	C	C	A	A
SR 933/SW 12th Ave.	SW 16th Ave.	A	A	D	E	C	C	A	A
SW 16th Ave.	SW 17th Ave.	F	F	D	D	C	C	B	A
SW 17th Ave.	SW 19th Ave.	B	B	D	E	C	D	B	B
SW 19th Ave.	SW 22nd Ave.	D	F	D	E	C	D	A	A
SW 22nd Ave.	Beacom Blvd.	B	C	D	D	C	C	A	A
Beacom Blvd.	SR 9/SW 27th Ave.	F	F	D	D	E	F	A	C
	Facility	**F**	**F**	**D**	**E**	**C**	**D**	**B**	**A**

4.2.2.3 VISSIM Microsimulation Analysis

Tables 4-35 and 4-42 summarize VISSIM Microsimulation Analysis based on intersection level of service, delay, demand volume, and processed volume for the Build Scenarios of SR90/SW 8th Street and SW 7th Street, respectively, between SW 5th Avenue and SR 5/Brickell Avenue. These levels of service are estimates based on vehicle delay obtained from VISSIM using HCM 2010 thresholds. Since VISSIM's and HCM 2010's measures of effectiveness (MOEs) differ in definitions, care should be exercised when interpreting these LOS. These tables show that the following study intersections will operate at unacceptable LOS E or F:

- Build Scenario 1 (2 Lanes and Transit, Alternative 3) (Year 2020):
  - AM Peak:
    SW 8th Street at SR 5/Brickell Avenue;
    SW 7th Street at SR 5/Brickell Avenue, SW 1st Avenue, SW 4th Avenue
  - PM Peak:
    SW 8th Street at SW 3rd Avenue, SW 2nd Avenue, SW 1st Avenue, S. Miami Avenue, and SR 5/Brickell Avenue;
    SW 7th Street at SR 5/Brickell Avenue, S. Miami Avenue, SW 1st Avenue, SW 2nd Avenue, SW 3rd Avenue, SW 4th Avenue
- Build Scenario 1 (2 Lanes and Transit, Alternative 3) (Year 2040):
  - AM Peak:
    SW 8th Street at SW 3rd Avenue, SW 2nd Avenue, S. Miami Avenue, and SR 5/Brickell Avenue;
    SW 7th Street at SR 5/Brickell Avenue, SW 1st Avenue, SW 4th Avenue
  - PM Peak:
    SW 8th Street at SW 3rd Avenue, SW 2nd Avenue, SW 1st Avenue, S. Miami Avenue, and SR 5/Brickell Avenue;
    SW 7th Street at SR 5/Brickell Avenue, S. Miami Avenue, SW 1st Avenue, SW 2nd Avenue, SW 3rd Avenue, SW 4th Avenue
- Build Scenario 2 (2-Way, Alternative 3) (Year 2020):
  - AM Peak:
    SW 8th Street at SW 5th Avenue, SW 4th Avenue, SW 3rd Avenue, SW 2nd Avenue, S. Miami Avenue, SR 5/Brickell Avenue;
    SW 7th Street at SW 1st Avenue, SW 4th Avenue
  - PM Peak:
    SW 8th Street at SW 5th Avenue, SW 4th Avenue, SW 3rd Avenue, SW 2nd Avenue, SW 1st Avenue, S. Miami Avenue, SR 5/Brickell Avenue;
    SW 7th Street at SR 5/Brickell Avenue, SW 1st Avenue, SW 2nd Avenue, SW 3rd Avenue, SW 4th Avenue
- Build Scenario 2 (2-Way Alternative 3) (Year 2040):
  - AM Peak:
    SW 8th Street at SW 5th Avenue, SW 4th Avenue, SW 3rd Avenue, SW 2nd Avenue, SW 1st Avenue, S. Miami Avenue, SR 5/Brickell Avenue;
    SW 7th Street at SR 5/Brickell Avenue, SW 1st Avenue, SW 4th Avenue

- PM Peak:
  SW 8th Street at SW 5th Avenue, SW 4th Avenue, SW 3rd Avenue, SW 2nd Avenue, SW 1st Avenue, S. Miami Avenue, SR 5/Brickell Avenue;
  SW 7th Street at SR 5/Brickell Avenue, SW 1st Avenue, SW 2nd Avenue, SW 3rd Avenue, SW 4th Avenue

- Build Scenario 3 (3 Lanes Reversed, Alternative 3) (Year 2020)
  - AM Peak:
    SW 8th Street at SW 3rd Avenue, SW 2nd Avenue, SW 1st Avenue, S. Miami Avenue, and SR 5/Brickell Avenue;
    SW 7th Street at SR 5/Brickell Avenue, S. Miami Avenue, SW 1st Avenue, SW 2nd Avenue, SW 3rd Avenue, SW 4th Avenue
  - PM Peak:
    SW 8th Street at SW 3rd Avenue, SW 2nd Avenue, SW 1st Avenue, S. Miami Avenue, and SR 5/Brickell Avenue;
    SW 7th Street at SR 5/Brickell Avenue, S. Miami Avenue, SW 1st Avenue, SW 2nd Avenue, SW 3rd Avenue, SW 4th Avenue
- Build Scenario 3 (3 Lanes Reversed, Alternative 3) (Year 2040)
  - AM Peak:
    SW 8th Street at SW 3rd Avenue, SW 2nd Avenue, SW 1st Avenue, S. Miami Avenue, and SR 5/Brickell Avenue;
    SW 7th Street at SR 5/Brickell Avenue, S. Miami Avenue, SW 1st Avenue, SW 2nd Avenue, SW 4th Avenue
  - PM Peak:
    SW 8th Street at SW 3rd Avenue, SW 2nd Avenue, SW 1st Avenue, S. Miami Avenue, and SR 5/Brickell Avenue;
    SW 7th Street at SR 5/Brickell Avenue, S. Miami Avenue, SW 1st Avenue, SW 2nd Avenue, SW 3rd Avenue, SW 4th Avenue
- Build Scenario 4 (3 Lanes, Alternative 4) (Year 2020)
  - AM Peak:
    SW 8th Street at SW 3rd Avenue, SW 1st Avenue, S. Miami Avenue, and SR 5/Brickell Avenue;
    SW 7th Street at S. Miami Avenue, SW 1st Avenue
  - PM Peak:
    SW 8th Street at S. Miami Avenue, and SR 5/Brickell Avenue;
    SW 7th Street at SR 5/Brickell Avenue, S. Miami Avenue, SW 1st Avenue, SW 2nd Avenue
- Build Scenario 4 (3 Lanes, Alternative 4) (Year 2040)
  - AM Peak
    SW 8th Street at SW 5th Avenue, SW 4th Avenue, SW 3rd Avenue, SW 2nd Avenue, SW 1st Avenue, S. Miami Avenue, and SR 5/Brickell Avenue;
    SW 7th Street at SR 5/Brickell Avenue, S. Miami Avenue, SW 1st Avenue, SW 3rd Avenue, SW 4th Avenue
  - PM Peak:
    SW 8th Street at SW 3rd Avenue, SW 2nd Avenue, SW 1st Avenue, S. Miami Avenue, and SR 5/Brickell Avenue;
    SW 7th Street at SR 5/Brickell Avenue, S. Miami Avenue, SW 1st Avenue, SW 2nd Avenue

Based on network-wide vehicle average delay and latent demand, microsimulation shows that No-Build Scenario ranked 3rd among all scenarios during the AM peak of Opening (2020) Year and Design (2040) Year. However, the No-Build scenario ranked last during the PM peak period of Opening (2020) Year and 3rd during PM peak period of Design (2040) Year.

Build Scenario 1 (2 Lanes and Transit Alternative 3) averaged the best results during the AM peak period of Opening (2020) Year and Design (2040) Year. Build Scenario 4 (3 Lanes and Alternative 4) averaged the best results during the PM peak period of Opening (2020) Year and Design (2040) Year. In general, Build Scenario 4 (3 Lanes and Alternative 4) evaluations processed more vehicles (less amount of vehicles denied entry) and had lower average delay per vehicle when compared to the other build scenarios. Still, many intersections have failing traffic operations (LOS E or F) for every evaluation scenario due to extremely high traffic volumes. The high traffic volumes cause excessive delays and vehicle queuing throughout the network.

Table 4-35: VISSIM Intersection LOS and Delay for SR 90/SW 8th Street and SW 7th Street, Build Scenario 1 (2 Lanes and Transit, Alternative 3) (2020)

Intersection	AM Peak				PM Peak			
	Delay (sec/veh)	LOS	Demand Vol.	Processed Veh.	Delay (sec/veh)	LOS	Demand Vol.	Processed Veh.
6 - SW 8th St. and 5th Ave.	22.12	C	1,150	977	22.9	C	1,710	888
2 - SW 8th St. and 4th Ave.	11.64	B	960	728	18.34	B	1,570	681
1 - SW 8th St. and 3rd Ave.	27.28	C	2,640	1,830	85.57	F	2,790	839
7 - SW 8th St. and 2nd Ave.	35.29	D	3,230	2,519	107.51	F	3,570	1,109
8 - SW 8th St. and 1st Ave.	24.1	C	2,830	2,052	92.18	F	3,540	841
11 - SW 8th St. and Miami Ave.	28.56	C	2,610	1,982	133.33	F	3,280	890
12 - SW 8th St. and SR 5/Brickell Ave.	175	F	4,920	3,324	219.83	F	6,260	1,592
13 - SW 7th St. and SR 5/Brickell Ave.	151.45	F	4,290	3,076	193.81	F	4,640	1,277
10 - SW 7th St. and Miami Ave.	40.61	D	2,260	1,668	95.76	F	2,950	656
9 - SW 7th St. and 1st Ave.	68.77	E	2,570	1,797	154.22	F	2,890	665
5 - SW 7th St. and 2nd Ave.	22.14	C	3,020	2,384	93.99	F	3,240	1,001
4 - SW 7th St. and 3rd Ave.	25.68	C	2,330	1,727	79.84	E	2,540	710
3 - SW 7th St. and 4th Ave.	63.69	E	3,060	2,298	119.13	F	3,200	1,096
Network-wide Parameter	AM Peak				PM Peak			
Average Delay Time per Vehicle (sec/veh)	130.02				429.78			
Latent Demand (Vehicles Denied Entry)	2,288				9,591			

Table 4-36: VISSIM Intersection LOS and Delay for SR 90/SW 8th Street and SW 7th Street, Build Scenario 1 (2 Lanes and Transit, Alternative 3) (2040)

Intersection	AM Peak				PM Peak			
	Delay (sec/veh)	LOS	Demand Vol.	Processed Veh.	Delay (sec/veh)	LOS	Demand Vol.	Processed Veh.
6 - SW 8th St. and 5th Ave.	29.5	C	1,540	938	39.57	D	2,250	658
2 - SW 8th St. and 4th Ave.	9.08	A	1,290	562	8.56	A	2,030	126
1 - SW 8th St. and 3rd Ave.	58.22	E	3,350	1,836	149.24	F	3,460	273
7 - SW 8th St. and 2nd Ave.	81.44	F	4,360	2,468	249.64	F	4,410	350
8 - SW 8th St. and 1st Ave.	50.68	D	3,560	2,046	168.56	F	4,420	265
11 - SW 8th St. and Miami Ave.	77.36	E	3,530	2,006	267.22	F	4,210	244
12 - SW 8th St. and SR 5/Brickell Ave.	180.67	F	6,240	3,409	280.15	F	7,960	510
13 - SW 7th St. and SR 5/Brickell Ave.	151.61	F	5,460	3,104	247.84	F	5,880	475
10 - SW 7th St. and Miami Ave.	36.59	D	3,080	1,571	87.21	F	3,970	195
9 - SW 7th St. and 1st Ave.	65.57	E	3,480	1,645	168.15	F	3,950	254
5 - SW 7th St. and 2nd Ave.	30.24	C	4,130	2,049	124.85	F	4,500	408
4 - SW 7th St. and 3rd Ave.	34.43	C	3,180	1,311	78.19	E	3,660	339
3 - SW 7th St. and 4th Ave.	219.63	F	4,250	1,450	136.4	F	4,510	405
Network-wide Parameter	AM Peak				PM Peak			
Average Delay Time per Vehicle (sec/veh)	176.91				635.85			
Latent Demand (Vehicles Denied Entry)	6,697				18,620			

Table 4-37: VISSIM Intersection LOS and Delay for SR 90/SW 8th Street and SW 7th Street, Build Scenario 2 (2-Way, Alternative 3) (2020)

Intersection	AM Peak				PM Peak			
	Delay (sec/veh)	LOS	Demand Vol.	Processed Veh.	Delay (sec/veh)	LOS	Demand Vol.	Processed Veh.
6 - SW 8th St. and 5th Ave.	62.27	E	1,520	1,218	74.02	E	1,960	1,255
2 - SW 8th St. and 4th Ave.	96.21	F	2,440	1,562	95.31	F	2,270	1,216
1 - SW 8th St. and 3rd Ave.	61.93	E	2,540	1,871	114.65	F	3,120	1,379
7 - SW 8th St. and 2nd Ave.	77.69	E	3,290	2,472	138.68	F	3,390	1,685
8 - SW 8th St. and 1st Ave.	49.69	D	3,060	1,816	82.06	F	3,330	1,451
11 - SW 8th St. and Miami Ave.	66.57	E	2,710	1,971	125.69	F	3,180	1,498
12 - SW 8th St. and SR 5/Brickell Ave.	96.11	F	5,640	3,864	126.28	F	5,550	2,653
13 - SW 7th St. and SR 5/Brickell Ave.	48.59	D	4,290	3,334	83.78	F	4,190	2,290
10 - SW 7th St. and Miami Ave.	29.37	C	1,920	1,528	34	C	2,500	1,331
9 - SW 7th St. and 1st Ave.	67.19	E	2,350	1,351	70.34	E	2,450	1,232
5 - SW 7th St. and 2nd Ave.	31.53	C	2,420	2,015	98.9	F	2,360	1,338
4 - SW 7th St. and 3rd Ave.	39.96	D	1,670	1,193	79.96	E	1,950	914
3 - SW 7th St. and 4th Ave.	129.76	F	2,350	1,498	145.5	F	2,350	1,127
Network-wide Parameter	AM Peak				PM Peak			
Average Delay Time per Vehicle (sec/veh)	181.71				335.97			
Latent Demand (Vehicles Denied Entry)	3,152				6,020			

Table 4-38: VISSIM Intersection LOS and Delay for SR 90/SW 8th Street and SW 7th Street, Build Scenario 2 (2-Way, Alternative 3) (2040)

Intersection	AM Peak				PM Peak			
	Delay (sec/veh)	LOS	Demand Vol.	Processed Veh.	Delay (sec/veh)	LOS	Demand Vol.	Processed Veh.
6 - SW 8th St. and 5th Ave.	84.63	F	1,820	1,009	72.87	E	2,330	1,247
2 - SW 8th St. and 4th Ave.	95.75	F	3,330	1,260	117.67	F	3,460	1,214
1 - SW 8th St. and 3rd Ave.	72.95	E	3,620	1,514	111.96	F	4,360	1,480
7 - SW 8th St. and 2nd Ave.	99.74	F	4,460	2,028	135.61	F	4,670	1,605
8 - SW 8th St. and 1st Ave.	67.27	E	3,860	1,550	65.94	E	4,110	1,473
11 - SW 8th St. and Miami Ave.	95.88	F	3,750	1,641	111.52	F	4,370	1,537
12 - SW 8th St. and SR 5/Brickell Ave.	97.43	F	7,560	3,387	106.6	F	7,330	2,634
13 - SW 7th St. and SR 5/Brickell Ave.	56.57	E	5,560	2,922	86.26	F	5,450	2,130
10 - SW 7th St. and Miami Ave.	38.21	D	2,630	1,354	32.78	C	3,380	1,364
9 - SW 7th St. and 1st Ave.	75.04	E	3,200	1,319	58.9	E	3,290	1,260
5 - SW 7th St. and 2nd Ave.	44.87	D	3,280	1,807	115.35	F	3,210	1,262
4 - SW 7th St. and 3rd Ave.	41.99	D	2,310	1,094	68.34	E	2,710	961
3 - SW 7th St. and 4th Ave.	129.95	F	3,060	1,317	173.84	F	3,890	1,292
Network-wide Parameter	AM Peak				PM Peak			
Average Delay Time per Vehicle (sec/veh)	269.75				346.62			
Latent Demand (Vehicles Denied Entry)	9,014				11,922			

Table 4-39: VISSIM Intersection LOS and Delay for SR 90/SW 8th Street and SW 7th Street, Build Scenario 3 (3 Lanes Reversed, Alternative 3) (2020)

Intersection	AM Peak				PM Peak			
	Delay (sec/veh)	LOS	Demand Vol.	Processed Veh.	Delay (sec/veh)	LOS	Demand Vol.	Processed Veh.
6 - SW 8th St. and 5th Ave.	24.42	C	1,450	664	31.76	C	1,530	709
2 - SW 8th St. and 4th Ave.	32.71	C	1,360	462	19.69	B	1,280	331
1 - SW 8th St. and 3rd Ave.	110.21	F	3,150	1,171	118.37	F	3,520	654
7 - SW 8th St. and 2nd Ave.	112.06	F	4,150	1,568	163.04	F	4,080	855
8 - SW 8th St. and 1st Ave.	70.93	E	3,850	1,144	178.22	F	3,410	532
11 - SW 8th St. and Miami Ave.	84.03	F	3,250	1,230	235.79	F	4,160	597
12 - SW 8th St. and SR 5/Brickell Ave.	84.74	F	6,000	2,526	141.01	F	7,120	1,280
13 - SW 7th St. and SR 5/Brickell Ave.	92.39	F	5,360	1,918	132.87	F	5,230	963
10 - SW 7th St. and Miami Ave.	219.62	F	2,950	683	173.5	F	3,900	331
9 - SW 7th St. and 1st Ave.	289.49	F	3,460	660	244.82	F	3,730	343
5 - SW 7th St. and 2nd Ave.	113.18	F	4,040	1,315	122.34	F	4,230	793
4 - SW 7th St. and 3rd Ave.	139.28	F	3,150	894	92.21	F	3,600	600
3 - SW 7th St. and 4th Ave.	206.74	F	4,280	1,200	153.76	F	4,469	905
Network-wide Parameter	AM Peak				PM Peak			
Average Delay Time per Vehicle (sec/veh)	364.93				600.95			
Latent Demand (Vehicles Denied Entry)	8,565				13,177			

Table 4-40: VISSIM Intersection LOS and Delay for SR 90/SW 8th Street and SW 7th Street, Build Scenario 3 (3 Lanes Reversed, Alternative 3) (2040)

Intersection	AM Peak				PM Peak			
	Delay (sec/veh)	LOS	Demand Vol.	Processed Veh.	Delay (sec/veh)	LOS	Demand Vol.	Processed Veh.
6 - SW 8th St. and 5th Ave.	31.18	C	1,750	902	33.45	C	2,150	930
2 - SW 8th St. and 4th Ave.	17.69	B	1,830	544	21.44	C	1,880	441
1 - SW 8th St. and 3rd Ave.	61.7	E	4,480	1,556	130.6	F	5,000	959
7 - SW 8th St. and 2nd Ave.	114.19	F	5,780	1,847	170.67	F	5,840	1,174
8 - SW 8th St. and 1st Ave.	77.68	E	4,750	1,360	121.54	F	4,130	976
11 - SW 8th St. and Miami Ave.	111.97	F	4,550	1,522	157.65	F	5,600	1,029
12 - SW 8th St. and SR 5/Brickell Ave.	74.8	E	7,830	2,946	86.76	F	9,150	2,205
13 - SW 7th St. and SR 5/Brickell Ave.	81.37	F	6,860	2,234	106.47	F	6,800	1,609
10 - SW 7th St. and Miami Ave.	204.09	F	3,990	793	171.7	F	5,490	489
9 - SW 7th St. and 1st Ave.	266.44	F	4,680	679	228.46	F	5,190	511
5 - SW 7th St. and 2nd Ave.	76.21	E	5,550	1,395	128.92	F	5,940	912
4 - SW 7th St. and 3rd Ave.	54.73	D	4,540	951	89.57	F	4,850	761
3 - SW 7th St. and 4th Ave.	257.09	F	5,830	1,090	142.2	F	4,620	1,258
Network-wide Parameter	AM Peak				PM Peak			
Average Delay Time per Vehicle (sec/veh)	343.07				517.83			
Latent Demand (Vehicles Denied Entry)	13,502				17,348			

Table 4-41: VISSIM Intersection LOS and Delay for SR 90/SW 8th Street and SW 7th Street, Build Scenario 4 (3 Lanes, Alternative 4) (2020)

Intersection	AM Peak				PM Peak			
	Delay (sec/veh)	LOS	Demand Vol.	Processed Veh.	Delay (sec/veh)	LOS	Demand Vol.	Processed Veh.
6 - SW 8th St. and 5th Ave.	43.07	D	2,580	1,936	27.09	C	2,820	2,494
2 - SW 8th St. and 4th Ave.	48.76	D	3,680	2,792	21.15	C	3,470	3,519
1 - SW 8th St. and 3rd Ave.	70.43	E	3,600	1,901	40.76	D	3,560	2,095
7 - SW 8th St. and 2nd Ave.	54.8	D	4,590	2,764	51.39	D	4,420	2,720
8 - SW 8th St. and 1st Ave.	62.61	E	4,120	2,041	21.09	C	3,940	2,428
11 - SW 8th St. and Miami Ave.	139.89	F	3,750	1,644	86	F	3,550	1,967
12 - SW 8th St. and SR 5/Brickell Ave.	86.02	F	5,870	3,809	103.29	F	5,500	3,705
13 - SW 7th St. and SR 5/Brickell Ave.	54.09	D	4,595	3,110	61.84	E	5,560	3,387
10 - SW 7th St. and Miami Ave.	208.71	F	2,230	891	58.5	E	4,200	1,789
9 - SW 7th St. and 1st Ave.	207.72	F	2,750	962	95.05	F	4,220	2,081
5 - SW 7th St. and 2nd Ave.	33.55	C	3,080	1,897	80.36	F	4,780	2,370
4 - SW 7th St. and 3rd Ave.	19.1	B	1,390	764	19.27	B	2,880	1,297
3 - SW 7th St. and 4th Ave.	43.16	D	2,330	1,642	45.26	D	2,810	2,547
Network-wide Parameter	AM Peak				PM Peak			
Average Delay Time per Vehicle (sec/veh)	261.2				225.21			
Latent Demand (Vehicles Denied Entry)	4,946				4,594			

Table 4-42: VISSIM Intersection LOS and Delay for SR 90/SW 8th Street and SW 7th Street, Build Scenario 4 (3 Lanes, Alternative 4) (2040)

Intersection	AM Peak				PM Peak			
	Delay (sec/veh)	LOS	Demand Vol.	Processed Veh.	Delay (sec/veh)	LOS	Demand Vol.	Processed Veh.
6 - SW 8th St. and 5th Ave.	120.53	F	3,170	1,023	54.98	D	3,680	2,555
2 - SW 8th St. and 4th Ave.	130.88	F	4,960	1,438	53.21	D	4,880	3,479
1 - SW 8th St. and 3rd Ave.	121.26	F	4,790	1,052	58.22	E	4,530	2,535
7 - SW 8th St. and 2nd Ave.	100.79	F	5,900	1,589	67.32	E	5,990	3,178
8 - SW 8th St. and 1st Ave.	112.09	F	5,000	1,232	57.75	E	4,770	2,680
11 - SW 8th St. and Miami Ave.	194.29	F	5,220	1,014	109.92	F	4,810	2,313
12 - SW 8th St. and SR 5/Brickell Ave.	134.93	F	7,630	2,309	108.23	F	6,970	3,760
13 - SW 7th St. and SR 5/Brickell Ave.	94.68	F	5,690	1,830	67.94	E	7,220	3,325
10 - SW 7th St. and Miami Ave.	334.17	F	2,850	556	66.18	E	5,590	1,956
9 - SW 7th St. and 1st Ave.	301.41	F	3,480	713	130.6	F	5,650	2,100
5 - SW 7th St. and 2nd Ave.	54.08	D	4,060	1,231	88.87	F	6,440	2,578
4 - SW 7th St. and 3rd Ave.	60	E	1,950	475	19.47	B	4,050	1,627
3 - SW 7th St. and 4th Ave.	151.2	F	2,540	868	43.4	D	3,810	2,621
Network-wide Parameter	AM Peak				PM Peak			
Average Delay Time per Vehicle (sec/veh)	385.25				239.9			
Latent Demand (Vehicles Denied Entry)	10,630				9,077			

5. Summary of Findings

This technical memorandum documents the expected Level of Service (LOS) of intersections and roadway segments within the study area for the No-Build and Build scenarios during the Opening (2020) Year and Design (2040) Year.

Tables 5-1 and 5-2 summarize the intersection LOS for the No-Build and Build scenarios along SR 90/SW 8th Street and SR 90/SW 7th Street, respectively. Table 5-1 shows that most intersections along SR 90/SW 8th Street between SW 5th Avenue and SR 5/Brickell Avenue will operate at unacceptable levels of service (i.e. LOS E or F during Opening (2020) Year and Design (2040) Year). Table 5-2 shows the intersection of SR 90/SW 7th Street and SR 933/SW 12th Avenue, and most of the intersections east of SW 4th Avenue, will operate at LOS F.

Table 5-3 shows most segments along SR 90/SW 8th Street, east of SW 5th Avenue, of the No-Build and Build Scenarios operating at unacceptable vehicular LOS E of F.

Table 5-4 shows most of SR 90/SW 7th Street operating at unacceptable vehicular LOS E or F during Opening (2020) Year and Design (2040) Year, regardless of scenario.

Table 5-5 shows all bicycle mode segments along SR 90/SW 8th Street under all scenarios during both, Opening (2020) Year and Design (2040) Year operating at acceptable LOS with the exception of the segment from S. Miami Avenue to SR 5/Brickell Avenue under Build Scenario 1 (2 Lanes and Transit, Alternative 3) Design (2040) Year, which operates at LOS F.

Table 5-6 shows show most segments along SR 90/SW 7th Street operating at unacceptable bicycle mode levels of service (i.e. LOS E or F) in all but Build Scenario 1 (2 Lanes and Transit, Alternative 3) where only one segment is failing during the Design (2040) Year.

Table 5-7 shows pedestrian mode segments along SR 90/SW 8th Street from SW 4th Avenue to S. Miami Avenue failing on the No-Build Scenario during Design (2040) Year. Also, segments from SW 3rd Avenue to SW 1st Avenue, and from S. Miami Avenue to SR 5/Brickell Avenue operate at unacceptable LOS E or F under Build Scenario 1 (2 Lanes and Transit, Alternative 3). For the most part, all other segments under the remaining build scenarios for pedestrian mode will operate at acceptable LOS along SR 90/SW 8th Street.

Table 5-8 shows several segments along SR 90/SW 7th Street failing on Build Scenario 1 (2 Lanes and Transit, Alternative 3), Scenario 2 (2-Way, Alternative 3), and Build Scenario 3 (3 Lanes Reversed, Alternative 3) during Design (2040) Year for the pedestrian mode. Notable segment operational failures includes SR 90/SW 7th Street from SR 9/SW 27th Avenue to SW 3rd Avenue under Build Scenario 1 (2 Lanes and Transit, Alternative 3) Design (2040) Year, as well as SR 90/SW 7th Street from SW 17th Avenue to SW 1st Avenue under Build Scenario 3 (3 Lanes Reversed, Alternative 3) Design (2040) Year.

Table 5-9 and 5-10 show that overall, transit along SR 90/SW 7th Street and SR 90/SW 8th Street will operate at acceptable LOS under all scenarios during Opening (2020) Year and Design (2040) Year.

Table 5-11 and 5-12 show the summaries of VISSIM's estimated LOS for SR 90/SW 8th Street and SR 90/SW 7th Street, respectively. It should be noted that these LOS are VISSIM's estimates based on HCM 2010 methodology. Since VISSIM and HCM 2010 definitions of MOE's differ, interpretation of these LOS should be done with care. Table 5-11 and 5-12 show the following results:

- SW 8th Street at SW 5th Avenue, SW 4th Avenue, S. Miami Avenue, and SR 5/Brickell Avenue; and SW 7th Street at S. Miami Avenue, SW 1st Avenue, SW 4th Avenue operate at LOS E or F during the AM peak of Opening (2020) Year for the No-Build scenario. Only SW 7th Street with SW 2nd Avenue and SW 3rd Avenue operate at acceptable LOS during the PM peak of Opening (2020) Year for the No-Build scenario.
- Only SW 8th Street with SW 4th Avenue and SW 7th Street with SW 3rd Avenue will operate at acceptable LOS during the AM peak of Design (2040) Year for the No-Build scenario. Similarly, only SW 8th Street with SW 1st Avenue will operate at acceptable LOS during the PM peak of Design (2040) Year for the No-Build scenario
- SW 8th Street at SR 5/Brickell Avenue; and SW 7th Street at SR 5/Brickell Avenue, SW 1st Avenue, and SW 4th Avenue operate at LOS E or F during the AM peak of Opening (2020) Year for Build Scenario 1 (2 Lanes and Transit, Alternative 3). All intersections during Opening (2020) Year's PM peak of Build Scenario 1 (2 Lanes and Transit, Alternative 3), except SW 8th Street at SW 5th Avenue and SW 4th Avenue operate at unacceptable LOS E or F.
- SW 8th Street at SW 5th Avenue, SW 4th Avenue, and 1st Avenue; and SW 7th Street at S. Miami Avenue, SW 2nd Avenue, and SW 3rd Avenue operate acceptable LOS during the AM peak of Design (2040) Year for Build Scenario 1 (2 Lanes and Transit, Alternative 3). All intersections during Design (2040) Year's PM peak of Build Scenario 1 (2 Lanes and Transit, Alternative 3), except SW 8th Street at SW 5th Avenue and SW 4th Avenue operate at unacceptable LOS E or F.
- SW 8th Street at SW 1st Avenue; and SW 7th Street at SR 5/Brickell Avenue, S. Miami Avenue, SW 2nd Avenue, and SW 3rd Avenue operate acceptable LOS during the AM peak of Opening (2020) Year for Build Scenario 2 (2-Way, Alternative 3). All intersections during Opening (2020) Year's PM peak of Build Scenario 2 (2-Way, Alternative 3), except SW 7th Street at S. Miami Avenue operate at unacceptable LOS E or F.
- Only SW 7th Street at S. Miami Avenue, SW 2nd Avenue, and SW 3rd Avenue operate acceptable LOS during the AM peak of Design (2040) Year for Build Scenario 2 (2-Way, Alternative 3). All intersections during Design (2040) Year's PM peak of Build Scenario 2 (2-Way, Alternative 3), except SW 7th Street at S. Miami Avenue operate at unacceptable LOS E or F.
- Only SW 8th Street at SW 5th Avenue and SW 4th Avenue operate acceptable LOS during the AM and PM peak of Opening (2020) Year for Build Scenario 3 (3 Lanes Reversed, Alternative 3).
- Only SW 8th Street at SW 5th Avenue and SW 4th Avenue; and SW 7th Street and 3rd Avenue operate acceptable LOS during the AM peak of Design (2040) Year for Build Scenario 3 (3 Lanes Reversed, Alternative 3). Similarly, only SW 8th Street at SW 5th Avenue and SW 4th Avenue operate acceptable LOS during the PM peak of Design (2040) Year for Build Scenario 3 (3 Lanes Reversed, Alternative 3).
- SW 8th Street and SW 3rd Avenue, SW 1st Avenue, S. Miami Avenue, and SR 5/Brickell Avenue; and SW 7th Street with S. Miami Avenue, and SW 1st Avenue operate at unacceptable LOS E or F during the AM peak of Opening (2020) Year for Build Scenario 4 (3 Lanes, Alternative 4). Similarly, SW 8th Street with S. Miami Avenue and SR 5/Brickell Avenue; and SW 7th Street with SR 5/Brickell Avenue, S. Miami Avenue, SW 1st Avenue, and SW 2nd Avenue operate at unacceptable LOS E or F during the PM peak of Opening (2020) Year for Build Scenario 4 (3 Lanes, Alternative 4).
- Only SW 7th Street and SW 2nd Avenue operate at acceptable LOS during the AM peak of Design (2040) Year for Build Scenario 4 (3 Lanes, Alternative 4). Similarly, SW 8th Street with SW 5th Avenue and SW 4th Avenue; and SW 7th Street with SW 3rd Avenue and SW 4th Avenue operate at acceptable LOS during the PM peak of Design (2040) Year for Build Scenario 4 (3 Lanes, Alternative 4).

Based on network-wide vehicle average delay and latent demand, microsimulation shows that No-Build Scenario ranked 3rd among all scenarios during the AM peak of Opening (2020) Year and Design (2040) Year. However, the No-Build scenario ranked last during the PM peak period of Opening (2020) Year and 3rd during PM peak period of Design (2040) Year.

Build Scenario 1 (2 Lanes and Transit Alternative 3) averaged the best results during the AM peak period of Opening (2020) Year and Design (2040) Year. Build Scenario 4 (3 Lanes and Alternative 4) averaged the best results during the PM peak period of Opening (2020) Year and Design (2040) Year. In general, Build Scenario 4 (3 Lanes and Alternative 4) evaluations processed more vehicles (less amount of vehicles denied entry) and had lower average delay per vehicle when compared to the other build scenarios. Still, many intersections have failing traffic operations (LOS E or F) for every evaluation scenario due to extremely high traffic volumes. The high traffic volumes cause excessive delays and vehicle queuing throughout the network. Table 5-13 shows a summary of VISSIM's microsimulation results in terms of average delay time (in seconds) per vehicle and latent demand (i.e. vehicles denied entry).

For corridor recommendations, please refer to Technical Memorandum No. 5.

Table 5-1: Comparison of Intersection LOS for No-Build and Build Scenarios on SR 90/SW 8th Street

		No-Build		Build Scenario 1 (2 Lanes and Transit, Alternative 3)		Build Scenario 2 (2 Way, Alternative 3)		Build Scenario 3 (3 Lanes Reversed, Alternative 3)		Build Scenario 4 (3 Lanes, Alternative 4)	
Intersection	**Peak**	**2020**	**2040**	**2020**	**2040**	**2020**	**2040**	**2020**	**2040**	**2020**	**2040**
SR 9/SW 27th Ave.	AM	F	F	F	F	D	F	F	F	F	F
	PM	D	F	F	F	E	F	F	F	E	F
SW 24th Ave.	AM	A	B	B	C	B	B	B	C	A	B
	PM	B	B	C	D	B	B	C	C	B	B
SW 22nd Ave.	AM	D	E	C	D	C	D	C	E	D	E
	PM	D	D	E	F	C	D	D	E	D	D
SW 21st Ave.	AM	B	C	A	A	A	A	A	A	B	C
	PM	C	C	A	A	A	A	A	A	C	D
SW 19th Ave.	AM	C	D	B	B	B	B	B	C	C	D
	PM	D	D	B	C	B	B	B	C	D	D
SW 17th Ave.	AM	D	E	C	C	C	D	C	C	D	E
	PM	C	D	C	D	C	D	C	C	C	D
SR 933/SW 12th Ave.	AM	F	F	C	D	C	E	E	F	F	F
	PM	F	F	D	E	C	E	D	F	F	F
SW 11th Ave.	AM	C	D	A	A	A	B	A	A	B	A
	PM	C	C	A	A	A	A	A	A	A	A
SR 7/SW 8th Ave.	AM	D	E	C	D	B	C	C	F	D	E
	PM	D	D	D	E	B	B	D	F	D	D
SW 5th Ave.	AM	F	F	F	F	D	D	F	F	F	F
	PM	F	F	F	F	D	D	F	F	F	F
SW 4th Ave.	AM	F	F	D	F	E	F	C	D	C	F
	PM	F	F	C	D	C	F	C	F	B	F
SW 3rd Ave.	AM	E	F	E	F	D	F	B	F	F	F
	PM	D	F	E	F	F	F	C	F	F	F
SW 2nd Ave.	AM	F	F	E	F	E	F	E	F	F	F
	PM	F	F	F	F	F	F	F	F	F	F
SW 1st Ave.	AM	F	F	F	F	E	F	F	F	F	F
	PM	F	F	F	F	F	F	F	F	F	F
S. Miami Ave.	AM	F	F	F	F	C	F	F	F	F	F
	PM	F	F	F	F	C	F	F	F	F	F
SR 5/Brickell Ave.	AM	F	F	F	F	F	F	F	F	F	F
	PM	F	F	F	F	F	F	F	F	F	F

Table 5-2: Comparison of Intersection LOS for No-Build and Build Scenarios on SR 90/SW 7th Street

		No-Build		Build Scenario 1 (2 Lanes and Transit, Alternative 3)		Build Scenario 2 (2 Way, Alternative 3)		Build Scenario 3 (3 Lanes Reversed, Alternative 3)		Build Scenario 4 (3 Lanes, Alternative 4)	
Intersection	**Peak**	**2020**	**2040**	**2020**	**2040**	**2020**	**2040**	**2020**	**2040**	**2020**	**2040**
SR 5/Brickell Ave.	AM	C	B	F	F	D	F	F	F	C	B
	PM	D	F	F	F	F	F	F	F	F	F
S. Miami Ave.	AM	F	C	F	F	C	D	F	F	F	C
	PM	E	F	F	F	F	F	F	F	F	F
SW 1st Ave.	AM	C	D	E	F	F	F	E	F	C	D
	PM	F	F	F	F	F	F	F	F	F	F
SW 2nd Ave.	AM	C	D	F	F	B	D	F(	F	C	E
	PM	F	F	F	F	B	D	F	F	F	F
SW 3rd Ave.	AM	F	F	F	F	B	F	F	F	F	F
	PM	F	F	F	F	E	F	F	F	F	F
SW 4th Ave.	AM	F	F	F	F	F	F	F	F	D	D
	PM	F	F	F	F	F	F	F	F	E	F
SR 7/SW 8th Ave.	AM	C	C	E	F	F	F	E	F	C	C
	PM	C	C	D	F	D	F	D	F	B	C
SR 933/SW 12th Ave.	AM	F	F	D	F	F	F	D	F	F	F
	PM	F	F	E	F	F	F	E	F	F	F
SW 16th Ave.	AM	C	D	C	D	A	A	C	D	C	D
	PM	D	E	D	F	A	A	D	D	D	E
SW 17th Ave.	AM	C	D	D	F	B	C	D	F	C	D
	PM	E	F	E	F	C	D	D	F	D	E
SW 19th Ave.	AM	B	C	C	D	B	B	B	D	C	C
	PM	C	C	C	F	B	B	D	D	C	C
SW 22nd Ave.	AM	C	C	D	F	C	C	E	F	C	C
	PM	C	D	E	F	C	D	D	F	C	D
Beacom Blvd.	AM	B	C	C	C	E	F	C	E	C	C
	PM	B	D	C	E	F	F	C	D	B	D
SR 9/SW 27th Ave.	AM	C	C	E	F	F	F	F	F	E	E
	PM	D	E	B	F	E	F	D	F	D	E

Table 5-3: Comparison of Urban Street Segment LOS for the Automobile Mode for No-Build and Build Scenarios (SW 8th Street)

Segment		No-Build		Build Scenario 1 (2 Lanes and Transit, Alternative 3)		Build Scenario 2 (2 Way, Alternative 3)		Build Scenario 3 (3 Lanes Reversed, Alternative 3)		Build Scenario 4 (3 Lanes, Alternative 4)	
From	To	2020	2040	2020	2040	2020	2040	2020	2040	2020	2040
SR 9/SW 27th Ave.	SW 24th Ave.	B	C	B	B	B	C	A	B	B	C
SW 24th Ave.	SW 22nd Ave.	D	F	E	F	E	F	D	D	D	F
SW 22nd Ave.	SW 19th Ave.	B	C	C	C	B	B	A	B	B	A
SW 19th Ave.	SW 17th Ave.	F	F	E	F	E	F	C	E	F	F
SW 17th Ave.	SR 933/SW 12th Ave.	F	F	C	E	C	E	B	B	F	F
SR 933/SW 12th Ave.	SR 7/SW 8th Ave.	C	F	B	C	B	C	B	C	C	F
SR 7/SW 8th Ave.	SW 5th Ave.	C	F	B	C	C	D	B	B	C	F
SW 5th Ave.	SW 4th Ave.	F	F	E	F	E	F	F	F	E	F
SW 4th Ave.	SW 3rd Ave.	F	F	D	D	F	F	D	D	F	F
SW 3rd Ave.	SW 2nd Ave.	F	F	F	F	F	F	F	F	F	F
SW 2nd Ave.	SW 1st Ave.	E	F	F	F	F	F	F	F	F	F
SW 1st Ave.	S. Miami Ave.	F	F	F	F	F	F	F	F	F	F
S. Miami Ave.	SR 5/Brickell Ave.	F	F	F	F	F	F	F	F	F	F
	Facility	**F**	**F**	**F**	**F**	**F**	**F**	**F**	**F**	**F**	**F**

Table 5-4: Comparison of Urban Street Segment LOS for the Automobile Mode for No-Build and Build Scenarios (SW 7th Street)

Segment		No-Build		Build Scenario 1 (2 Lanes and Transit, Alternative 3)		Build Scenario 2 (2 Way, Alternative 3)		Build Scenario 3 (3 Lanes Reversed, Alternative 3)		Build Scenario 4 (3 Lanes, Alternative 4)	
From	To	2020	2040	2020	2040	2020	2040	2020	2040	2020	2040
SR 5/Brickell Ave.	S. Miami Ave.	D	D	F	C	F	F	C	D	A	D
S. Miami Ave.	SW 1st Ave.	F	F	F	F	F	F	F	F	F	F
SW 1st Ave.	SW 2nd Ave.	F	F	C	D	F	F	E	F	F	F
SW 2nd Ave.	SW 3rd Ave.	F	F	D	F	F	F	F	F	D	E
SW 3rd Ave.	SW 4th Ave.	F	F	E	F	F	F	F	F	E	F
SW 4th Ave.	SR 7/SW 8th Ave.	B	F	D	F	B	B	E	F	B	B
SR 7/SW 8th Ave.	SR 933/SW 12th Ave.	F	F	F	F	F	E	F	F	C	E
SR 933/SW 12th Ave.	SW 16th Ave.	B	B	B	E	D	D	B	B	A	A
SW 16th Ave.	SW 17th Ave.	F	F	F	F	F	F	F	F	F	F
SW 17th Ave.	SW 19th Ave.	D	B	C	F	C	C	C	F	B	B
SW 19th Ave.	SW 22nd Ave.	F	E	F	F	F	F	F	F	D	F
SW 22nd Ave.	Beacom Blvd.	C	C	F	F	F	F	F	F	B	C
Beacom Blvd.	SR 9/SW 27th Ave.	F	F	F	F	F	F	F	F	F	F
	Facility	**F**	**F**	**F**	**F**	**F**	**F**	**F**	**F**	**F**	**F**

Table 5-5: Comparison of Urban Street Segment LOS for the Bicycle Mode for No-Build and Build Scenarios (SW 8th Street)

Segment		No-Build		Build Scenario 1 (2 Lanes and Transit, Alternative 3)		Build Scenario 2 (2 Way, Alternative 3)		Build Scenario 3 (3 Lanes Reversed, Alternative 3)		Build Scenario 4 (3 Lanes, Alternative 4)	
From	To	2020	2040	2020	2040	2020	2040	2020	2040	2020	2040
SR 9/SW 27th Ave.	SW 24th Ave.	D	D	A	A	A	A	C	C	D	D
SW 24th Ave.	SW 22nd Ave.	D	D	A	A	A	A	C	C	D	D
SW 22nd Ave.	SW 19th Ave.	D	D	A	A	A	A	C	C	D	D
SW 19th Ave.	SW 17th Ave.	D	D	A	A	A	A	C	C	D	D
SW 17th Ave.	SR 933/SW 12th Ave.	D	D	A	A	A	A	C	C	D	D
SR 933/SW 12th Ave.	SR 7/SW 8th Ave.	D	D	A	A	A	A	C	C	D	D
SR 7/SW 8th Ave.	SW 5th Ave.	D	D	A	A	A	A	C	C	D	D
SW 5th Ave.	SW 4th Ave.	D	D	A	A	A	A	C	C	D	D
SW 4th Ave.	SW 3rd Ave.	D	D	A	A	A	A	C	C	D	D
SW 3rd Ave.	SW 2nd Ave.	D	D	A	A	A	A	D	D	D	D
SW 2nd Ave.	SW 1st Ave.	D	D	A	A	A	A	D	D	D	D
SW 1st Ave.	S. Miami Ave.	D	D	A	A	A	A	D	D	D	D
S. Miami Ave.	SR 5/Brickell Ave.	D	D	A	F	A	A	D	D	D	D
	Facility	**D**	**D**	**A**	**F**	**A**	**A**	**C**	**C**	**D**	**D**

Table 5-6: Comparison of Urban Street Segment LOS for the Bicycle Mode for No-Build and Build Scenarios (SW 7th Street)

Segment		No-Build		Build Scenario 1 (2 Lanes and Transit, Alternative 3)		Build Scenario 2 (2 Way, Alternative 3)		Build Scenario 3 (3 Lanes Reversed, Alternative 3)		Build Scenario 4 (3 Lanes, Alternative 4)	
From	To	2020	2040	2020	2040	2020	2040	2020	2040	2020	2040
SR 5/Brickell Ave.	S. Miami Ave.	D	D	B	B	E	E	D	E	D	E
S. Miami Ave.	SW 1st Ave.	E	E	A	B	E	E	D	D	D	E
SW 1st Ave.	SW 2nd Ave.	E	E	A	B	E	E	D	E	D	E
SW 2nd Ave.	SW 3rd Ave.	E	E	A	B	E	E	E	E	D	D
SW 3rd Ave.	SW 4th Ave.	D	D	A	B	E	E	E	E	D	D
SW 4th Ave.	SR 7/SW 8th Ave.	D	D	B	C	D	D	E	E	D	E
SR 7/SW 8th Ave.	SR 933/SW 12th Ave.	E	E	B	C	E	E	E	E	D	E
SR 933/SW 12th Ave.	SW 16th Ave.	E	E	B	C	E	E	E	E	D	E
SW 16th Ave.	SW 17th Ave.	D	D	B	B	D	E	D	D	D	D
SW 17th Ave.	SW 19th Ave.	E	E	B	C	E	E	E	E	D	E
SW 19th Ave.	SW 22nd Ave.	E	E	B	C	E	E	E	E	D	E
SW 22nd Ave.	Beacom Blvd.	D	D	B	C	E	E	E	E	D	D
Beacom Blvd.	SR 9/SW 27th Ave.	D	D	B	F	D	D	F	F	D	D
	Facility	**D**	**D**	**B**	**F**	**E**	**E**	**F**	**F**	**D**	**E**

Table 5-7: Comparison of Urban Street Segment LOS for the Pedestrian Mode for No-Build and Build Scenarios (SW 8th Street)

Segment		No-Build		Build Scenario 1 (2 Lanes and Transit, Alternative 3)		Build Scenario 2 (2 Way, Alternative 3)		Build Scenario 3 (3 Lanes Reversed, Alternative 3)		Build Scenario 4 (3 Lanes, Alternative 4)	
From	To	2020	2040	2020	2040	2020	2040	2020	2040	2020	2040
SR 9/SW 27th Ave.	SW 24th Ave.	C	C	B	C	B	C	B	B	C	C
SW 24th Ave.	SW 22nd Ave.	C	C	B	C	C	C	B	B	C	C
SW 22nd Ave.	SW 19th Ave.	C	D	B	C	C	C	B	B	C	D
SW 19th Ave.	SW 17th Ave.	C	C	B	C	C	C	B	B	C	C
SW 17th Ave.	SR 933/SW 12th Ave.	C	D	B	C	C	C	B	B	C	D
SR 933/SW 12th Ave.	SR 7/SW 8th Ave.	C	D	B	C	C	C	B	B	C	D
SR 7/SW 8th Ave.	SW 5th Ave.	C	D	B	C	C	C	B	B	C	D
SW 5th Ave.	SW 4th Ave.	C	D	B	C	B	C	B	B	C	D
SW 4th Ave.	SW 3rd Ave.	E	F	B	B	C	E	A	B	C	D
SW 3rd Ave.	SW 2nd Ave.	D	E	D	E	D	E	D	E	D	E
SW 2nd Ave.	SW 1st Ave.	C	E	D	E	D	D	C	E	C	E
SW 1st Ave.	S. Miami Ave.	D	E	C	D	D	D	C	D	D	E
S. Miami Ave.	SR 5/Brickell Ave.	C	D	F	F	D	D	C	D	C	D
	Facility	**C**	**D**	**C**	**F**	**C**	**C**	**B**	**C**	**C**	**D**

Table 5-8: Comparison of Urban Street Segment LOS for the Pedestrian Mode for No-Build and Build Scenarios (SW 7th Street)

Segment		No-Build		Build Scenario 1 (2 Lanes and Transit, Alternative 3)		Build Scenario 2 (2 Way, Alternative 3)		Build Scenario 3 (3 Lanes Reversed, Alternative 3)		Build Scenario 4 (3 Lanes, Alternative 4)	
From	To	2020	2040	2020	2040	2020	2040	2020	2040	2020	2040
SR 5/Brickell Ave.	S. Miami Ave.	C	C	C	D	E	F	C	D	C	D
S. Miami Ave.	SW 1st Ave.	D	D	A	B	E	F	C	D	C	D
SW 1st Ave.	SW 2nd Ave.	D	D	B	C	D	D	D	E	D	E
SW 2nd Ave.	SW 3rd Ave.	E	E	B	D	E	E	D	E	C	D
SW 3rd Ave.	SW 4th Ave.	D	D	B	E	E	E	E	F	C	C
SW 4th Ave.	SR 7/SW 8th Ave.	C	C	C	E	C	C	D	E	C	C
SR 7/SW 8th Ave.	SR 933/SW 12th Ave.	D	D	D	E	D	D	D	E	C	C
SR 933/SW 12th Ave.	SW 16th Ave.	D	D	D	E	D	D	D	E	C	C
SW 16th Ave.	SW 17th Ave.	C	C	D	E	E	E	D	E	C	C
SW 17th Ave.	SW 19th Ave.	D	D	D	E	D	D	D	D	C	D
SW 19th Ave.	SW 22nd Ave.	D	D	D	E	E	E	D	D	C	D
SW 22nd Ave.	Beacom Blvd.	C	C	D	E	D	D	D	D	C	C
Beacom Blvd.	SR 9/SW 27th Ave.	E	E	E	F	C	C	F	F	E	F
	Facility	**D**	**D**	**C**	**F**	**D**	**D**	**F**	**F**	**C**	**D**

Table 5-9: Comparison of Urban Street Segment LOS for the Transit Mode for No-Build and Build Scenarios (SW 8th Street)

Segment		No-Build		Build Scenario 1 (2 Lanes and Transit, Alternative 3)		Build Scenario 2 (2 Way, Alternative 3)		Build Scenario 3 (3 Lanes Reversed, Alternative 3)		Build Scenario 4 (3 Lanes, Alternative 4)	
From	To	2020	2040	2020	2040	2020	2040	2020	2040	2020	2040
SR 9/SW 27th Ave.	SW 24th Ave.	B	B	A	B	B	B	B	B	B	B
SW 24th Ave.	SW 22nd Ave.	B	A	A	A	A	A	B	B	B	A
SW 22nd Ave.	SW 19th Ave.	B	B	A	A	A	A	B	B	B	B
SW 19th Ave.	SW 17th Ave.	B	A	A	A	A	A	B	B	B	A
SW 17th Ave.	SR 933/SW 12th Ave.	A	A	A	A	A	A	B	B	A	A
SR 933/SW 12th Ave.	SR 7/SW 8th Ave.	A	A	A	A	A	A	B	B	A	A
SR 7/SW 8th Ave.	SW 5th Ave.	B	A	B	A	A	A	B	B	B	A
SW 5th Ave.	SW 4th Ave.	A	A	A	A	B	A	B	B	B	B
SW 4th Ave.	SW 3rd Ave.	A	C	B	B	A	A	B	B	A	A
SW 3rd Ave.	SW 2nd Ave.	A	A	A	A	A	A	A	A	A	A
SW 2nd Ave.	SW 1st Ave.	B	A	A	A	A	A	A	A	A	A
SW 1st Ave.	S. Miami Ave.	B	A	A	A	A	A	A	A	B	A
S. Miami Ave.	SR 5/Brickell Ave.	B	B	B	F	A	A	A	A	B	B
	Facility	**A**	**A**	**A**	**A**	**A**	**A**	**B**	**B**	**A**	**A**

Table 5-10: Comparison of Urban Street Segment LOS for the Transit Mode for No-Build and Build Scenarios (SW 7th Street)

Segment		No-Build		Build Scenario 1 (2 Lanes and Transit, Alternative 3)		Build Scenario 2 (2 Way, Alternative 3)		Build Scenario 3 (3 Lanes Reversed, Alternative 3)		Build Scenario 4 (3 Lanes, Alternative 4)	
From	To	2020	2040	2020	2040	2020	2040	2020	2040	2020	2040
SR 5/Brickell Ave.	S. Miami Ave.	C	B	F	B	A	C	B	B	B	B
S. Miami Ave.	SW 1st Ave.	A	A	F	A	A	C	A	A	A	B
SW 1st Ave.	SW 2nd Ave.	A	A	B	B	B	B	B	A	B	A
SW 2nd Ave.	SW 3rd Ave.	A	B	B	A	B	A	A	A	B	B
SW 3rd Ave.	SW 4th Ave.	B	B	B	A	A	A	A	C	B	B
SW 4th Ave.	SR 7/SW 8th Ave.	B	A	A	A	B	B	A	A	A	A
SR 7/SW 8th Ave.	SR 933/SW 12th Ave.	A	A	A	A	A	A	A	A	A	A
SR 933/SW 12th Ave.	SW 16th Ave.	B	B	A	A	A	A	B	B	A	A
SW 16th Ave.	SW 17th Ave.	A	A	A	A	A	A	A	A	B	A
SW 17th Ave.	SW 19th Ave.	B	B	B	A	B	B	B	A	B	B
SW 19th Ave.	SW 22nd Ave.	B	B	A	A	A	A	A	A	A	A
SW 22nd Ave.	Beacom Blvd.	B	B	A	A	A	A	A	A	A	A
Beacom Blvd.	SR 9/SW 27th Ave.	A	A	C	F	A	A	F	F	A	C
	Facility	**B**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**B**	**A**

Table 5-11: Comparison of Intersection VISSIM LOS for No-Build and Build Scenarios on SR 90/SW 8th Street

Intersections	Peak	No-Build		Build Scenario 1 (2 Lanes and Transit, Alternative 3)		Build Scenario 2 (2 Way, Alternative 3)		Build Scenario 3 (3 Lanes Reversed, Alternative 3)		Build Scenario 4 (3 Lanes, Alternative 4)	
		2020	2040	2020	2040	2020	2040	2020	2040	2020	2040
SW 8th St. and SW 5th Ave.	AM	F	F	C	C	E	F	C	C	D	F
	PM	E	E	C	D	E	E	C	C	C	D
SW 8th St. and SW 4th Ave.	AM	E	E	B	A	F	F	C	B	D	F
	PM	E	E	B	A	F	F	B	C	C	D
SW 8th St. and SW 3rd Ave.	AM	B	D	C	E	E	E	F	E	E	F
	PM	F	E	F	F	F	F	F	F	D	E
SW 8th St. and SW 2nd Ave.	AM	C	E	D	F	E	F	F	F	D	F
	PM	F	E	F	F	F	F	F	F	D	E
SW 8th St. and SW 1st Ave.	AM	D	E	C	D	D	E	E	E	E	F
	PM	F	D	F	F	F	E	F	F	C	E
SW 8th St. and S. Miami Ave.	AM	F	F	C	E	E	F	F	F	F	F
	PM	F	F	F	F	F	F	F	F	F	F
SW 8th St. and SR 5/Brickell Ave.	AM	E	F	F	F	F	F	F	E	F	F
	PM	F	F	F	F	F	F	F	F	F	F

Table 5-12: Comparison of Intersection VISSIM LOS for No-Build and Build Scenarios on SR 90/SW 7th Street

Intersections	Peak	No-Build		Build Scenario 1 (2 Lanes and Transit, Alternative 3)		Build Scenario 2 (2 Way, Alternative 3)		Build Scenario 3 (3 Lanes Reversed, Alternative 3)		Build Scenario 4 (3 Lanes, Alternative 4)	
		2020	2040	2020	2040	2020	2040	2020	2040	2020	2040
SW 7th St. and SR 5/Brickell Ave.	AM	D	F	F	F	D	E	F	F	D	F
	PM	F	E	F	F	F	F	F	F	E	E
SW 7th St. and S. Miami Ave.	AM	F	F	D	D	C	D	F	F	F	F
	PM	F	F	F	F	C	C	F	F	E	E
SW 7th St. and SW 1st Ave.	AM	F	F	E	E	E	E	F	F	F	F
	PM	F	F	F	F	E	E	F	F	F	F
SW 7th St. and SW 2nd Ave.	AM	C	E	C	C	C	D	F	E	C	D
	PM	D	F	F	F	F	F	F	F	F	F
SW 7th St. and SW 3rd Ave.	AM	C	B	C	C	D	D	F	D	B	E
	PM	D	E	E	E	E	E	F	F	B	B
SW 7th St. and SW 4th Ave.	AM	F	F	E	F	F	F	F	F	D	F
	PM	F	F	F	F	F	F	F	F	D	D

Table 5-13: Summary of VISSIM Analysis

Scenarios	2020		2040	
	Average Vehicle Delay/Vehicle Denied Entry			
	AM	PM	AM	PM
No-Build	202/4,026	734/13,359	303/10,054	445/14,501
Build Scenario 1 (2 Lanes and Transit, Alternative 3)	130/2,288	430/9,591	177/6,697	636/18,620
Build Scenario 2 (2-Way, Alternative 3)	182/3,152	336/6,020	270/9,014	347/11,922
Build Scenario 3 (3 Lanes Reversed, Alternative 3)	365/8,565	601/13,177	343/13,502	518/17,348
Build Scenario 4 (3 Lanes, Alternative 4)	261/4,946	225/4,594	385/10,630	240/9,077

Appendix A

TREND ANALYSIS TOOL OUTPUT REPORTS

Traffic Trends - V2.0

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PIN#	973215-1
Location	1

County:	Miami (87)
Station #:	2545
Highway:	0

Year	Traffic (ADT/AADT) Count*	Trend**
2000	21500	20100
2001	21000	21000
2002	22000	21500
2003	20500	21900
2004	21000	22100
2005	24500	22400
2006	19500	22600
2007	21000	22700
2008	19500	22900
2009	21000	23000
2010	30500	23200
2011	23000	23300
2012	25000	23400
2015 Opening Year Trend		
2015	N/A	23600
2025 Mid-Year Trend		
2025	N/A	24300
2035 Design Year Trend		
2035	N/A	24700
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

Trend R-squared:	10.79%
Compounded Annual Historic Growth Rate:	1.27%
Compounded Growth Rate (2012 to Design Year):	0.24%
Printed:	27-Dec-13

Decaying Exponential Growth Option

Traffic Trends - V2.0

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PIN#	973215-1
Location	1

County:	Miami (87)
Station #:	2545
Highway:	0

Year	Traffic (ADT/AADT) Count*	Trend**
2000	21500	20400
2001	21000	20700
2002	22000	21000
2003	20500	21300
2004	21000	21600
2005	24500	21900
2006	19500	22100
2007	21000	22400
2008	19500	22700
2009	21000	23100
2010	30500	23400
2011	23000	23700
2012	25000	24000
2015 Opening Year Trend		
2015	N/A	25000
2025 Mid-Year Trend		
2025	N/A	28600
2035 Design Year Trend		
2035	N/A	32700
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

Trend R-squared:	18.19%
Compounded Annual Historic Growth Rate:	1.36%
Compounded Growth Rate (2012 to Design Year):	1.35%
Printed:	27-Dec-13

Exponential Growth Option

Traffic Trends - V2.0

--

PIN#	973215-1
Location	1

County:	Miami (87)
Station #:	2545
Highway:	0

Year	Traffic (ADT/AADT) Count*	Trend**
2000	21500	20300
2001	21000	20700
2002	22000	21000
2003	20500	21300
2004	21000	21600
2005	24500	22000
2006	19500	22300
2007	21000	22600
2008	19500	23000
2009	21000	23300
2010	30500	23600
2011	23000	24000
2012	25000	24300
2015 Opening Year Trend		
2015	N/A	25300
2025 Mid-Year Trend		
2025	N/A	28600
2035 Design Year Trend		
2035	N/A	31900
TRANPLAN Forecasts/Trends		

** Annual Trend Increase:	330
Trend R-squared:	18.61%
Trend Annual Historic Growth Rate:	1.64%
Trend Growth Rate (2012 to Design Year):	1.36%
Printed:	27-Dec-13

Straight Line Growth Option

*Axle-Adjusted

Traffic Trends - V2.0

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PIN#	973215-1
Location	1

County:	Miami (87)
Station #:	5090
Highway:	0

Year	Traffic (ADT/AADT) Count*	Trend**
1997	11000	12400
1998	13000	12500
1999	13500	12600
2000	14500	12700
2001	13500	12700
2002	13000	12700
2003	14500	12800
2004	11000	12800
2005	11500	12800
2006	11000	12800
2007	12000	12800
2008	12000	12800
2009	13000	12900
2010	11000	12900
2011	12500	12900
2012	17000	12900
2015 Opening Year Trend		
2015	N/A	12900
2025 Mid-Year Trend		
2025	N/A	13000
2035 Design Year Trend		
2035	N/A	13000
TRANPLAN Forecasts/Trends		

Trend R-squared:	0.62%
Compounded Annual Historic Growth Rate:	0.26%
Compounded Growth Rate (2012 to Design Year):	0.03%
Printed:	27-Dec-13

Decaying Exponential Growth Option

*Axle-Adjusted

Traffic Trends - V2.0

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PIN#	973215-1
Location	1

County:	Miami (87)
Station #:	5090
Highway:	0

Year	Traffic (ADT/AADT) Count*	Trend**
1997	11000	12500
1998	13000	12600
1999	13500	12600
2000	14500	12600
2001	13500	12600
2002	13000	12600
2003	14500	12600
2004	11000	12600
2005	11500	12700
2006	11000	12700
2007	12000	12700
2008	12000	12700
2009	13000	12700
2010	11000	12700
2011	12500	12800
2012	17000	12800
2015 Opening Year Trend		
2015	N/A	12800
2025 Mid-Year Trend		
2025	N/A	13000
2035 Design Year Trend		
2035	N/A	13100
TRANPLAN Forecasts/Trends		

Trend R-squared:	0.19%
Compounded Annual Historic Growth Rate:	0.16%
Compounded Growth Rate (2012 to Design Year):	0.10%
Printed:	27-Dec-13

Exponential Growth Option

*Axle-Adjusted

Traffic Trends - V2.0

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PIN#	973215-1
Location	1

County:	Miami (87)
Station #:	5090
Highway:	0

Year	Traffic (ADT/AADT) Count*	Trend**
1997	11000	12600
1998	13000	12600
1999	13500	12600
2000	14500	12600
2001	13500	12700
2002	13000	12700
2003	14500	12700
2004	11000	12700
2005	11500	12800
2006	11000	12800
2007	12000	12800
2008	12000	12800
2009	13000	12900
2010	11000	12900
2011	12500	12900
2012	17000	12900
2015 Opening Year Trend		
2015	N/A	13000
2025 Mid-Year Trend		
2025	N/A	13300
2035 Design Year Trend		
2035	N/A	13500
TRANPLAN Forecasts/Trends		

** Annual Trend Increase:	25
Trend R-squared:	0.52%
Trend Annual Historic Growth Rate:	0.16%
Trend Growth Rate (2012 to Design Year):	0.20%
Printed:	27-Dec-13

Straight Line Growth Option

*Axle-Adjusted

Traffic Trends - V2.0

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PIN#	973215-1
Location	1

County:	Miami (87)
Station #:	5091
Highway:	0

Year	Traffic (ADT/AADT) Count*	Trend**
1997	8500	7800
1998	8900	9000
1999	9900	9700
2000	10000	10200
2001	10500	10500
2002	9900	10900
2003	10000	11100
2004	11500	11400
2005	11500	11600
2006	11000	11700
2007	11500	11900
2008	13000	12100
2009	12000	12200
2010	12000	12300
2011	13000	12400
2012	14000	12600
2015 Opening Year Trend		
2015	N/A	12900
2025 Mid-Year Trend		
2025	N/A	13600
2035 Design Year Trend		
2035	N/A	14100
TRANPLAN Forecasts/Trends		

Trend R-squared:	80.02%
Compounded Annual Historic Growth Rate:	3.25%
Compounded Growth Rate (2012 to Design Year):	0.49%
Printed:	27-Dec-13

Decaying Exponential Growth Option

*Axle-Adjusted

Traffic Trends - V2.0

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PIN#	973215-1
Location	1

County:	Miami (87)
Station #:	5091
Highway:	0

Year	Traffic (ADT/AADT) Count*	Trend**
1997	8500	8900
1998	8900	9200
1999	9900	9400
2000	10000	9700
2001	10500	10000
2002	9900	10200
2003	10000	10500
2004	11500	10800
2005	11500	11100
2006	11000	11400
2007	11500	11800
2008	13000	12100
2009	12000	12400
2010	12000	12800
2011	13000	13100
2012	14000	13500
2015 Opening Year Trend		
2015	N/A	14600
2025 Mid-Year Trend		
2025	N/A	19300
2035 Design Year Trend		
2035	N/A	25400
TRANPLAN Forecasts/Trends		

Trend R-squared:	88.99%
Compounded Annual Historic Growth Rate:	2.82%
Compounded Growth Rate (2012 to Design Year):	2.79%
Printed:	27-Dec-13

Exponential Growth Option

*Axle-Adjusted

Traffic Trends - V2.0

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PIN#	973215-1
Location	1

County:	Miami (87)
Station #:	5091
Highway:	0

Year	Traffic (ADT/AADT) Count*	Trend**
1997	8500	8800
1998	8900	9100
1999	9900	9400
2000	10000	9700
2001	10500	10000
2002	9900	10300
2003	10000	10600
2004	11500	10900
2005	11500	11200
2006	11000	11500
2007	11500	11800
2008	13000	12100
2009	12000	12400
2010	12000	12700
2011	13000	13000
2012	14000	13300
2015 Opening Year Trend		
2015	N/A	14200
2025 Mid-Year Trend		
2025	N/A	17300
2035 Design Year Trend		
2035	N/A	20300
TRANPLAN Forecasts/Trends		

** Annual Trend Increase:	302
Trend R-squared:	88.66%
Trend Annual Historic Growth Rate:	3.41%
Trend Growth Rate (2012 to Design Year):	2.29%
Printed:	27-Dec-13

Straight Line Growth Option

*Axle-Adjusted

Traffic Trends - V2.0

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PIN#	973215-1
Location	1

County:	Miami (87)
Station #:	5095
Highway:	0

Year	Traffic (ADT/AADT) Count*	Trend**
1997	17000	16800
1998	17500	18000
1999	17500	18600
2000	19500	19100
2001	20500	19400
2002	19500	19700
2003	20500	20000
2004	22500	20200
2005	19000	20400
2006	18500	20500
2007	22000	20700
2008	23000	20800
2009	17000	20900
2010	21500	21100
2011	21000	21200
2012	22000	21300
2015 Opening Year Trend		
2015	N/A	21500
2025 Mid-Year Trend		
2025	N/A	22200
2035 Design Year Trend		
2035	N/A	22700
TRANPLAN Forecasts/Trends		

Trend R-squared:	38.89%
Compounded Annual Historic Growth Rate:	1.59%
Compounded Growth Rate (2012 to Design Year):	0.28%
Printed:	27-Dec-13

Decaying Exponential Growth Option

*Axle-Adjusted

Traffic Trends - V2.0

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PIN#	973215-1
Location	1

County:	Miami (87)
Station #:	5095
Highway:	0

Year	Traffic (ADT/AADT) Count*	Trend**
1997	17000	18100
1998	17500	18300
1999	17500	18500
2000	19500	18800
2001	20500	19000
2002	19500	19200
2003	20500	19500
2004	22500	19700
2005	19000	19900
2006	18500	20200
2007	22000	20400
2008	23000	20700
2009	17000	20900
2010	21500	21200
2011	21000	21400
2012	22000	21700
2015 Opening Year Trend		
2015	N/A	22500
2025 Mid-Year Trend		
2025	N/A	25400
2035 Design Year Trend		
2035	N/A	28600
TRANPLAN Forecasts/Trends		

Trend R-squared:	31.40%
Compounded Annual Historic Growth Rate:	1.22%
Compounded Growth Rate (2012 to Design Year):	1.21%
Printed:	27-Dec-13

Exponential Growth Option

*Axle-Adjusted

Traffic Trends - V2.0

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PIN#	973215-1
Location	1

County:	Miami (87)
Station #:	5095
Highway:	0

Year	Traffic (ADT/AADT) Count*	Trend**
1997	17000	18100
1998	17500	18400
1999	17500	18600
2000	19500	18800
2001	20500	19100
2002	19500	19300
2003	20500	19500
2004	22500	19800
2005	19000	20000
2006	18500	20300
2007	22000	20500
2008	23000	20700
2009	17000	21000
2010	21500	21200
2011	21000	21500
2012	22000	21700
2015 Opening Year Trend		
2015	N/A	22400
2025 Mid-Year Trend		
2025	N/A	24800
2035 Design Year Trend		
2035	N/A	27200
TRANPLAN Forecasts/Trends		

** Annual Trend Increase:	239
Trend R-squared:	31.77%
Trend Annual Historic Growth Rate:	1.33%
Trend Growth Rate (2012 to Design Year):	1.10%
Printed:	27-Dec-13

Straight Line Growth Option

*Axle-Adjusted

Traffic Trends - V2.0

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PIN#	973215-1
Location	1

County:	Miami (87)
Station #:	5098
Highway:	0

Year	Traffic (ADT/AADT) Count*	Trend**
1997	20000	22700
1998	23000	23300
1999	23000	23600
2000	27000	23800
2001	26000	24000
2002	28000	24100
2003	25000	24200
2004	24000	24300
2005	23000	24400
2006	21500	24500
2007	25500	24600
2008	25500	24600
2009	23000	24700
2010	26000	24700
2011	20500	24800
2012	26000	24800
2015 Opening Year Trend		
2015	N/A	25000
2025 Mid-Year Trend		
2025	N/A	25300
2035 Design Year Trend		
2035	N/A	25500
TRANPLAN Forecasts/Trends		

Trend R-squared:	6.71%
Compounded Annual Historic Growth Rate:	0.59%
Compounded Growth Rate (2012 to Design Year):	0.12%
Printed:	27-Dec-13

Decaying Exponential Growth Option

*Axle-Adjusted

Traffic Trends - V2.0

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PIN#	973215-1
Location	1

County:	Miami (87)
Station #:	5098
Highway:	0

Year	Traffic (ADT/AADT) Count*	Trend**
1997	20000	23800
1998	23000	23800
1999	23000	23800
2000	27000	23900
2001	26000	23900
2002	28000	24000
2003	25000	24000
2004	24000	24100
2005	23000	24100
2006	21500	24100
2007	25500	24200
2008	25500	24200
2009	23000	24300
2010	26000	24300
2011	20500	24400
2012	26000	24400
2015 Opening Year Trend		
2015	N/A	24500
2025 Mid-Year Trend		
2025	N/A	25000
2035 Design Year Trend		
2035	N/A	25500
TRANPLAN Forecasts/Trends		

Trend R-squared:	0.80%
Compounded Annual Historic Growth Rate:	0.17%
Compounded Growth Rate (2012 to Design Year):	0.19%
Printed:	27-Dec-13

Exponential Growth Option

*Axle-Adjusted

Traffic Trends - V2.0

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PIN#	973215-1
Location	1

County:	Miami (87)
Station #:	5098
Highway:	0

Year	Traffic (ADT/AADT) Count*	Trend**
1997	20000	23900
1998	23000	23900
1999	23000	24000
2000	27000	24000
2001	26000	24000
2002	28000	24100
2003	25000	24100
2004	24000	24200
2005	23000	24200
2006	21500	24200
2007	25500	24300
2008	25500	24300
2009	23000	24400
2010	26000	24400
2011	20500	24400
2012	26000	24500
2015 Opening Year Trend		
2015	N/A	24600
2025 Mid-Year Trend		
2025	N/A	25000
2035 Design Year Trend		
2035	N/A	25400
TRANPLAN Forecasts/Trends		

** Annual Trend Increase:	40
Trend R-squared:	0.67%
Trend Annual Historic Growth Rate:	0.17%
Trend Growth Rate (2012 to Design Year):	0.16%
Printed:	27-Dec-13

Straight Line Growth Option

*Axle-Adjusted

Traffic Trends - V2.0

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PIN#	973215-1
Location	1

County:	Miami (87)
Station #:	5103
Highway:	0

Year	Traffic (ADT/AADT) Count*	Trend**
1997	17500	17800
1998	19500	18500
1999	17000	18800
2000	17000	19100
2001	20000	19300
2002	22000	19500
2003	21000	19600
2004	21000	19700
2005	20500	19800
2006	19500	19900
2007	19500	20000
2008	18500	20100
2009	20000	20200
2010	21500	20300
2011	19500	20300
2012	19500	20400
2015 Opening Year Trend		
2015	N/A	20500
2025 Mid-Year Trend		
2025	N/A	20900
2035 Design Year Trend		
2035	N/A	21200
TRANPLAN Forecasts/Trends		

Trend R-squared:	23.05%
Compounded Annual Historic Growth Rate:	0.91%
Compounded Growth Rate (2012 to Design Year):	0.17%
Printed:	27-Dec-13

Decaying Exponential Growth Option

*Axle-Adjusted

Traffic Trends - V2.0

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PIN#	973215-1
Location	1

County:	Miami (87)
Station #:	5103
Highway:	0

Year	Traffic (ADT/AADT) Count*	Trend**
1997	17500	18600
1998	19500	18800
1999	17000	18900
2000	17000	19000
2001	20000	19100
2002	22000	19200
2003	21000	19400
2004	21000	19500
2005	20500	19600
2006	19500	19700
2007	19500	19800
2008	18500	20000
2009	20000	20100
2010	21500	20200
2011	19500	20400
2012	19500	20500
2015 Opening Year Trend		
2015	N/A	20900
2025 Mid-Year Trend		
2025	N/A	22200
2035 Design Year Trend		
2035	N/A	23700
TRANPLAN Forecasts/Trends		

Trend R-squared:	14.77%
Compounded Annual Historic Growth Rate:	0.65%
Compounded Growth Rate (2012 to Design Year):	0.63%
Printed:	27-Dec-13

Exponential Growth Option

*Axle-Adjusted

Traffic Trends - V2.0

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PIN#	973215-1
Location	1

County:	Miami (87)
Station #:	5103
Highway:	0

Year	Traffic (ADT/AADT) Count*	Trend**
1997	17500	18700
1998	19500	18800
1999	17000	19000
2000	17000	19100
2001	20000	19200
2002	22000	19300
2003	21000	19400
2004	21000	19500
2005	20500	19700
2006	19500	19800
2007	19500	19900
2008	18500	20000
2009	20000	20100
2010	21500	20200
2011	19500	20300
2012	19500	20500
2015 Opening Year Trend		
2015	N/A	20800
2025 Mid-Year Trend		
2025	N/A	22000
2035 Design Year Trend		
2035	N/A	23100
TRANPLAN Forecasts/Trends		

** Annual Trend Increase:	115
Trend R-squared:	13.48%
Trend Annual Historic Growth Rate:	0.64%
Trend Growth Rate (2012 to Design Year):	0.55%
Printed:	27-Dec-13

Straight Line Growth Option

*Axle-Adjusted

Traffic Trends - V2.0

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PIN#	973215-1
Location	1

County:	Miami (87)
Station #:	5096
Highway:	0

Year	Traffic (ADT/AADT) Count*	Trend**
1997	13500	15300
1998	16000	15600
1999	15000	15800
2000	18000	15900
2001	13500	16000
2002	16500	16100
2003	18500	16100
2004	19500	16200
2005	17000	16200
2006	22500	16300
2007	17000	16300
2008	9500	16400
2009	12500	16400
2010	15000	16400
2011	17000	16500
2012	17000	16500
2015 Opening Year Trend		
2015	N/A	16600
2025 Mid-Year Trend		
2025	N/A	16800
2035 Design Year Trend		
2035	N/A	16900
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

Trend R-squared:	1.33%
Compounded Annual Historic Growth Rate:	0.50%
Compounded Growth Rate (2012 to Design Year):	0.10%
Printed:	27-Dec-13

Decaying Exponential Growth Option

Traffic Trends - V2.0

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PIN#	973215-1
Location	1

County:	Miami (87)
Station #:	5096
Highway:	0

Year	Traffic (ADT/AADT) Count*	Trend**
1997	13500	16000
1998	16000	16000
1999	15000	16000
2000	18000	15900
2001	13500	15900
2002	16500	15900
2003	18500	15900
2004	19500	15800
2005	17000	15800
2006	22500	15800
2007	17000	15800
2008	9500	15800
2009	12500	15700
2010	15000	15700
2011	17000	15700
2012	17000	15700
2015 Opening Year Trend		
2015	N/A	15600
2025 Mid-Year Trend		
2025	N/A	15400
2035 Design Year Trend		
2035	N/A	15200
TRANPLAN Forecasts/Trends		

Trend R-squared:	0.10%
Compounded Annual Historic Growth Rate:	-0.13%
Compounded Growth Rate (2012 to Design Year):	-0.14%
Printed:	27-Dec-13

Exponential Growth Option

*Axle-Adjusted

Traffic Trends - V2.0

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PIN#	973215-1
Location	1

County:	Miami (87)
Station #:	5096
Highway:	0

Year	Traffic (ADT/AADT) Count*	Trend**
1997	13500	16100
1998	16000	16100
1999	15000	16100
2000	18000	16100
2001	13500	16100
2002	16500	16100
2003	18500	16100
2004	19500	16100
2005	17000	16100
2006	22500	16100
2007	17000	16100
2008	9500	16100
2009	12500	16100
2010	15000	16100
2011	17000	16100
2012	17000	16100
2015 Opening Year Trend		
2015	N/A	16100
2025 Mid-Year Trend		
2025	N/A	16100
2035 Design Year Trend		
2035	N/A	16100
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

** Annual Trend Increase:	0
Trend R-squared:	0.00%
Trend Annual Historic Growth Rate:	0.00%
Trend Growth Rate (2012 to Design Year):	0.00%
Printed:	27-Dec-13

Straight Line Growth Option

Traffic Trends - V2.0

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PIN#	973215-1
Location	1

County:	Miami (87)
Station #:	5097
Highway:	0

Year	Traffic (ADT/AADT) Count*	Trend**
1997	15500	16300
1998	17500	16900
1999	16500	17300
2000	18000	17500
2001	18500	17700
2002	20000	17800
2003	18500	18000
2004	18000	18100
2005	17500	18200
2006	17000	18300
2007	17000	18300
2008	17000	18400
2009	20000	18500
2010	17500	18500
2011	17000	18600
2012	21500	18700
2015 Opening Year Trend		
2015	N/A	18800
2025 Mid-Year Trend		
2025	N/A	19100
2035 Design Year Trend		
2035	N/A	19400
TRANPLAN Forecasts/Trends		

Trend R-squared:	19.22%
Compounded Annual Historic Growth Rate:	0.92%
Compounded Growth Rate (2012 to Design Year):	0.16%
Printed:	27-Dec-13

Decaying Exponential Growth Option

*Axle-Adjusted

Traffic Trends - V2.0

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PIN#	973215-1
Location	1

County:	Miami (87)
Station #:	5097
Highway:	0

Year	Traffic (ADT/AADT) Count*	Trend**
1997	15500	17000
1998	17500	17100
1999	16500	17200
2000	18000	17400
2001	18500	17500
2002	20000	17600
2003	18500	17700
2004	18000	17800
2005	17500	17900
2006	17000	18100
2007	17000	18200
2008	17000	18300
2009	20000	18400
2010	17500	18500
2011	17000	18700
2012	21500	18800
2015 Opening Year Trend		
2015	N/A	19100
2025 Mid-Year Trend		
2025	N/A	20400
2035 Design Year Trend		
2035	N/A	21800
TRANPLAN Forecasts/Trends		

Trend R-squared:	14.51%
Compounded Annual Historic Growth Rate:	0.67%
Compounded Growth Rate (2012 to Design Year):	0.65%
Printed:	27-Dec-13

Exponential Growth Option

*Axle-Adjusted

Traffic Trends - V2.0

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PIN#	973215-1
Location	1

County:	Miami (87)
Station #:	5097
Highway:	0

Year	Traffic (ADT/AADT) Count*	Trend**
1997	15500	17000
1998	17500	17200
1999	16500	17300
2000	18000	17400
2001	18500	17500
2002	20000	17600
2003	18500	17800
2004	18000	17900
2005	17500	18000
2006	17000	18100
2007	17000	18200
2008	17000	18400
2009	20000	18500
2010	17500	18600
2011	17000	18700
2012	21500	18800
2015 Opening Year Trend		
2015	N/A	19200
2025 Mid-Year Trend		
2025	N/A	20400
2035 Design Year Trend		
2035	N/A	21600
TRANPLAN Forecasts/Trends		

** Annual Trend Increase:	121
Trend R-squared:	14.57%
Trend Annual Historic Growth Rate:	0.71%
Trend Growth Rate (2012 to Design Year):	0.65%
Printed:	27-Dec-13

Straight Line Growth Option

*Axle-Adjusted

Traffic Trends - V2.0

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PIN#	973215-1
Location	1

County:	Miami (87)
Station #:	5105
Highway:	0

Year	Traffic (ADT/AADT) Count*	Trend**
1997	13500	13300
1998	15500	14300
1999	14000	14900
2000	13500	15300
2001	15000	15600
2002	16000	15800
2003	16500	16000
2004	18000	16200
2005	16000	16400
2006	14000	16500
2007	18500	16700
2008	18500	16800
2009	17500	16900
2010	18000	17000
2011	15000	17100
2012	16500	17200
2015 Opening Year Trend		
2015	N/A	17400
2025 Mid-Year Trend		
2025	N/A	18000
2035 Design Year Trend		
2035	N/A	18400
TRANPLAN Forecasts/Trends		

Trend R-squared:	38.84%
Compounded Annual Historic Growth Rate:	1.73%
Compounded Growth Rate (2012 to Design Year):	0.29%
Printed:	27-Dec-13

Decaying Exponential Growth Option

*Axle-Adjusted

Traffic Trends - V2.0

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PIN#	973215-1
Location	1

County:	Miami (87)
Station #:	5105
Highway:	0

Year	Traffic (ADT/AADT) Count*	Trend**
1997	13500	14400
1998	15500	14600
1999	14000	14800
2000	13500	15000
2001	15000	15200
2002	16000	15400
2003	16500	15600
2004	18000	15800
2005	16000	16000
2006	14000	16200
2007	18500	16500
2008	18500	16700
2009	17500	16900
2010	18000	17100
2011	15000	17400
2012	16500	17600
2015 Opening Year Trend		
2015	N/A	18400
2025 Mid-Year Trend		
2025	N/A	21000
2035 Design Year Trend		
2035	N/A	24100
TRANPLAN Forecasts/Trends		

Trend R-squared:	34.69%
Compounded Annual Historic Growth Rate:	1.35%
Compounded Growth Rate (2012 to Design Year):	1.38%
Printed:	27-Dec-13

Exponential Growth Option

*Axle-Adjusted

Traffic Trends - V2.0

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PIN#	973215-1
Location	1

County:	Miami (87)
Station #:	5105
Highway:	0

Year	Traffic (ADT/AADT) Count*	Trend**
1997	13500	14400
1998	15500	14600
1999	14000	14800
2000	13500	15000
2001	15000	15200
2002	16000	15500
2003	16500	15700
2004	18000	15900
2005	16000	16100
2006	14000	16300
2007	18500	16500
2008	18500	16800
2009	17500	17000
2010	18000	17200
2011	15000	17400
2012	16500	17600
2015 Opening Year Trend		
2015	N/A	18300
2025 Mid-Year Trend		
2025	N/A	20400
2035 Design Year Trend		
2035	N/A	22500
TRANPLAN Forecasts/Trends		

** Annual Trend Increase:	215
Trend R-squared:	34.07%
Trend Annual Historic Growth Rate:	1.48%
Trend Growth Rate (2012 to Design Year):	1.21%
Printed:	27-Dec-13

Straight Line Growth Option

*Axle-Adjusted

Traffic Trends - V2.0

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PIN#	973215-1
Location	1

County:	Miami (87)
Station #:	5389
Highway:	0

Year	Traffic (ADT/AADT) Count*	Trend**
2011	20400	20400
2012	18600	18600
2015 Opening Year Trend		
2015	N/A	16200
2025 Mid-Year Trend		
2025	N/A	13400
2035 Design Year Trend		
2035	N/A	12000
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

Trend R-squared:	100.00%
Compounded Annual Historic Growth Rate:	-8.82%
Compounded Growth Rate (2012 to Design Year):	-1.89%
Printed:	27-Dec-13

Decaying Exponential Growth Option

Traffic Trends - V2.0

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PIN#	973215-1
Location	1

County:	Miami (87)
Station #:	5389
Highway:	0

Year	Traffic (ADT/AADT) Count*	Trend**
2011	20400	20400
2012	18600	18600
2015 Opening Year Trend		
2015	N/A	14100
2025 Mid-Year Trend		
2025	N/A	5600
2035 Design Year Trend		
2035	N/A	2200
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

Trend R-squared:	100.00%
Compounded Annual Historic Growth Rate:	-8.82%
Compounded Growth Rate (2012 to Design Year):	-8.86%
Printed:	27-Dec-13

Exponential Growth Option

Traffic Trends - V2.0

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PIN#	973215-1
Location	1

County:	Miami (87)
Station #:	5389
Highway:	0

Year	Traffic (ADT/AADT) Count*	Trend**
2011	20400	20400
2012	18600	18600
2015 Opening Year Trend		
2015	N/A	13200
2025 Mid-Year Trend		
2025	N/A	-4800
2035 Design Year Trend		
2035	N/A	-22800
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

** Annual Trend Increase:	-1,800
Trend R-squared:	100.00%
Trend Annual Historic Growth Rate:	-8.82%
Trend Growth Rate (2012 to Design Year):	-9.68%
Printed:	27-Dec-13

Straight Line Growth Option

Traffic Trends - V2.0

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PIN#	973215-1
Location	1

County:	Miami (87)
Station #:	6301
Highway:	0

Year	Traffic (ADT/AADT) Count*	Trend**
2003	2600	2700
2004	2700	2700
2005	2700	2700
2006	2600	2700
2007	2600	2700
2008	2600	2700
2009	3000	2700
2010	3000	2700
2011	2400	2700
2012	2400	2700
2015 Opening Year Trend		
2015	N/A	2700
2025 Mid-Year Trend		
2025	N/A	2700
2035 Design Year Trend		
2035	N/A	2700
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

Trend R-squared:	0.02%
Compounded Annual Historic Growth Rate:	0.00%
Compounded Growth Rate (2012 to Design Year):	0.00%
Printed:	27-Dec-13

Decaying Exponential Growth Option

Traffic Trends - V2.0

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PIN#	973215-1
Location	1

County:	Miami (87)
Station #:	6301
Highway:	0

Year	Traffic (ADT/AADT) Count*	Trend**
2003	2600	2700
2004	2700	2700
2005	2700	2700
2006	2600	2700
2007	2600	2700
2008	2600	2600
2009	3000	2600
2010	3000	2600
2011	2400	2600
2012	2400	2600
2015 Opening Year Trend		
2015	N/A	2600
2025 Mid-Year Trend		
2025	N/A	2500
2035 Design Year Trend		
2035	N/A	2400
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

Trend R-squared:	2.00%
Compounded Annual Historic Growth Rate:	-0.42%
Compounded Growth Rate (2012 to Design Year):	-0.35%
Printed:	27-Dec-13

Exponential Growth Option

Traffic Trends - V2.0

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PIN#	973215-1
Location	1

County:	Miami (87)
Station #:	6301
Highway:	0

Year	Traffic (ADT/AADT) Count*	Trend**
2003	2600	2700
2004	2700	2700
2005	2700	2700
2006	2600	2700
2007	2600	2700
2008	2600	2700
2009	3000	2600
2010	3000	2600
2011	2400	2600
2012	2400	2600
2015 Opening Year Trend		
2015	N/A	2600
2025 Mid-Year Trend		
2025	N/A	2500
2035 Design Year Trend		
2035	N/A	2500
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

** Annual Trend Increase:	-7
Trend R-squared:	1.14%
Trend Annual Historic Growth Rate:	-0.41%
Trend Growth Rate (2012 to Design Year):	-0.17%
Printed:	27-Dec-13

Straight Line Growth Option

Traffic Trends - V2.0

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PIN#	973215-1
Location	1

County:	Miami (87)
Station #:	6302
Highway:	0

Year	Traffic (ADT/AADT) Count*	Trend**
2003	3700	3600
2004	3800	3800
2005	3800	4000
2006	4100	4100
2007	4100	4100
2008	4000	4200
2009	4400	4300
2010	4400	4300
2011	4400	4300
2012	4400	4400
2015 Opening Year Trend		
2015	N/A	4500
2025 Mid-Year Trend		
2025	N/A	4700
2035 Design Year Trend		
2035	N/A	4800
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

Trend R-squared:	83.28%
Compounded Annual Historic Growth Rate:	2.25%
Compounded Growth Rate (2012 to Design Year):	0.38%
Printed:	27-Dec-13

Decaying Exponential Growth Option

Traffic Trends - V2.0

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PIN#	973215-1
Location	1

County:	Miami (87)
Station #:	6302
Highway:	0

Year	Traffic (ADT/AADT) Count*	Trend**
2003	3700	3700
2004	3800	3800
2005	3800	3900
2006	4100	4000
2007	4100	4100
2008	4000	4100
2009	4400	4200
2010	4400	4300
2011	4400	4400
2012	4400	4500
2015 Opening Year Trend		
2015	N/A	4800
2025 Mid-Year Trend		
2025	N/A	5900
2035 Design Year Trend		
2035	N/A	7400
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

Trend R-squared:	87.34%
Compounded Annual Historic Growth Rate:	2.20%
Compounded Growth Rate (2012 to Design Year):	2.19%
Printed:	27-Dec-13

Exponential Growth Option

Traffic Trends - V2.0

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PIN#	973215-1
Location	1

County:	Miami (87)
Station #:	6302
Highway:	0

Year	Traffic (ADT/AADT) Count*	Trend**
2003	3700	3700
2004	3800	3800
2005	3800	3900
2006	4100	4000
2007	4100	4100
2008	4000	4200
2009	4400	4200
2010	4400	4300
2011	4400	4400
2012	4400	4500
2015 Opening Year Trend		
2015	N/A	4800
2025 Mid-Year Trend		
2025	N/A	5600
2035 Design Year Trend		
2035	N/A	6500
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

** Annual Trend Increase:	87
Trend R-squared:	87.40%
Trend Annual Historic Growth Rate:	2.40%
Trend Growth Rate (2012 to Design Year):	1.93%
Printed:	27-Dec-13

Straight Line Growth Option

Traffic Trends - V2.0

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PIN#	973215-1
Location	1

County:	Miami (87)
Station #:	6303
Highway:	0

Year	Traffic (ADT/AADT) Count*	Trend**
2003	11500	11200
2004	11500	11900
2005	11500	12300
2006	13500	12600
2007	13500	12800
2008	13500	13000
2009	12000	13100
2010	12000	13300
2011	14000	13400
2012	14000	13500
2015 Opening Year Trend		
2015	N/A	13700
2025 Mid-Year Trend		
2025	N/A	14300
2035 Design Year Trend		
2035	N/A	14600
TRANPLAN Forecasts/Trends		

Trend R-squared:	43.31%
Compounded Annual Historic Growth Rate:	2.10%
Compounded Growth Rate (2012 to Design Year):	0.34%
Printed:	27-Dec-13

Decaying Exponential Growth Option

*Axle-Adjusted

Traffic Trends - V2.0

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PIN#	973215-1
Location	1

County:	Miami (87)
Station #:	6303
Highway:	0

Year	Traffic (ADT/AADT) Count*	Trend**
2003	11500	11700
2004	11500	11900
2005	11500	12100
2006	13500	12300
2007	13500	12500
2008	13500	12800
2009	12000	13000
2010	12000	13200
2011	14000	13500
2012	14000	13700
2015 Opening Year Trend		
2015	N/A	14500
2025 Mid-Year Trend		
2025	N/A	17400
2035 Design Year Trend		
2035	N/A	20900
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

Trend R-squared:	41.47%
Compounded Annual Historic Growth Rate:	1.77%
Compounded Growth Rate (2012 to Design Year):	1.85%
Printed:	27-Dec-13

Exponential Growth Option

Traffic Trends - V2.0

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PIN#	973215-1
Location	1

County:	Miami (87)
Station #:	6303
Highway:	0

Year	Traffic (ADT/AADT) Count*	Trend**
2003	11500	11700
2004	11500	11900
2005	11500	12100
2006	13500	12400
2007	13500	12600
2008	13500	12800
2009	12000	13000
2010	12000	13300
2011	14000	13500
2012	14000	13700
2015 Opening Year Trend		
2015	N/A	14400
2025 Mid-Year Trend		
2025	N/A	16700
2035 Design Year Trend		
2035	N/A	19000
TRANPLAN Forecasts/Trends		

** Annual Trend Increase:	230
Trend R-squared:	41.28%
Trend Annual Historic Growth Rate:	1.90%
Trend Growth Rate (2012 to Design Year):	1.68%
Printed:	27-Dec-13

Straight Line Growth Option

*Axle-Adjusted

Traffic Trends - V2.0

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PIN#	973215-1
Location	1

County:	Miami (87)
Station #:	6356
Highway:	0

Year	Traffic (ADT/AADT) Count*	Trend**
2003	6800	7000
2004	6900	7200
2005	6900	7400
2006	8100	7500
2007	8100	7600
2008	8000	7600
2009	8600	7700
2010	8600	7800
2011	6700	7800
2012	6700	7800
2015 Opening Year Trend		
2015	N/A	7900
2025 Mid-Year Trend		
2025	N/A	8200
2035 Design Year Trend		
2035	N/A	8300
TRANPLAN Forecasts/Trends		

Trend R-squared:	11.97%
Compounded Annual Historic Growth Rate:	1.21%
Compounded Growth Rate (2012 to Design Year):	0.27%
Printed:	27-Dec-13

Decaying Exponential Growth Option

*Axle-Adjusted

Traffic Trends - V2.0

--

PIN#	973215-1
Location	1

County:	Miami (87)
Station #:	6356
Highway:	0

Year	Traffic (ADT/AADT) Count*	Trend**
2003	6800	7300
2004	6900	7400
2005	6900	7400
2006	8100	7400
2007	8100	7500
2008	8000	7500
2009	8600	7600
2010	8600	7600
2011	6700	7700
2012	6700	7700
2015 Opening Year Trend		
2015	N/A	7800
2025 Mid-Year Trend		
2025	N/A	8300
2035 Design Year Trend		
2035	N/A	8800
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

Trend R-squared:	2.55%
Compounded Annual Historic Growth Rate:	0.59%
Compounded Growth Rate (2012 to Design Year):	0.58%
Printed:	27-Dec-13

Exponential Growth Option

Traffic Trends - V2.0

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PIN#	973215-1
Location	1

County:	Miami (87)
Station #:	6356
Highway:	0

Year	Traffic (ADT/AADT) Count*	Trend**
2003	6800	7300
2004	6900	7400
2005	6900	7400
2006	8100	7500
2007	8100	7500
2008	8000	7600
2009	8600	7600
2010	8600	7700
2011	6700	7700
2012	6700	7700
2015 Opening Year Trend		
2015	N/A	7900
2025 Mid-Year Trend		
2025	N/A	8300
2035 Design Year Trend		
2035	N/A	8800
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

** Annual Trend Increase:	46
Trend R-squared:	2.98%
Trend Annual Historic Growth Rate:	0.61%
Trend Growth Rate (2012 to Design Year):	0.62%
Printed:	27-Dec-13

Straight Line Growth Option

Traffic Trends - V2.0

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PIN#	973215-1
Location	1

County:	Miami (87)
Station #:	5126
Highway:	0

Year	Traffic (ADT/AADT) Count*	Trend**
1997	38000	46300
1998	40500	44800
1999	40000	43900
2000	52000	43200
2001	52000	42700
2002	46000	42300
2003	47500	42000
2004	50000	41700
2005	58500	41400
2006	34500	41200
2007	36500	41000
2008	36000	40800
2009	36500	40600
2010	34000	40500
2011	34000	40300
2012	37000	40200
2015 Opening Year Trend		
2015	N/A	39800
2025 Mid-Year Trend		
2025	N/A	38900
2035 Design Year Trend		
2035	N/A	38200
TRANPLAN Forecasts/Trends		

Trend R-squared:	4.97%
Compounded Annual Historic Growth Rate:	-0.94%
Compounded Growth Rate (2012 to Design Year):	-0.22%
Printed:	27-Dec-13

Decaying Exponential Growth Option

*Axle-Adjusted

Traffic Trends - V2.0

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PIN#	973215-1
Location	1

County:	Miami (87)
Station #:	5126
Highway:	0

Year	Traffic (ADT/AADT) Count*	Trend**
1997	38000	47400
1998	40500	46500
1999	40000	45700
2000	52000	44900
2001	52000	44100
2002	46000	43300
2003	47500	42600
2004	50000	41800
2005	58500	41100
2006	34500	40300
2007	36500	39600
2008	36000	38900
2009	36500	38200
2010	34000	37500
2011	34000	36900
2012	37000	36200
2015 Opening Year Trend		
2015	N/A	34300
2025 Mid-Year Trend		
2025	N/A	28700
2035 Design Year Trend		
2035	N/A	24000
TRANPLAN Forecasts/Trends		

Trend R-squared:	23.07%
Compounded Annual Historic Growth Rate:	-1.78%
Compounded Growth Rate (2012 to Design Year):	-1.77%
Printed:	27-Dec-13

Exponential Growth Option

*Axle-Adjusted

Traffic Trends - V2.0

--

PIN#	973215-1
Location	1

County:	Miami (87)
Station #:	5126
Highway:	0

Year	Traffic (ADT/AADT) Count*	Trend**
1997	38000	47500
1998	40500	46800
1999	40000	46100
2000	52000	45300
2001	52000	44600
2002	46000	43900
2003	47500	43200
2004	50000	42400
2005	58500	41700
2006	34500	41000
2007	36500	40200
2008	36000	39500
2009	36500	38800
2010	34000	38100
2011	34000	37300
2012	37000	36600
2015 Opening Year Trend		
2015	N/A	34400
2025 Mid-Year Trend		
2025	N/A	27100
2035 Design Year Trend		
2035	N/A	19900
TRANPLAN Forecasts/Trends		

** Annual Trend Increase:	-728
Trend R-squared:	19.79%
Trend Annual Historic Growth Rate:	-1.53%
Trend Growth Rate (2012 to Design Year):	-1.98%
Printed:	27-Dec-13

Straight Line Growth Option

*Axle-Adjusted

Traffic Trends - V2.0

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PIN#	973215-1
Location	1

County:	Miami (87)
Station #:	5011
Highway:	0

Year	Traffic (ADT/AADT) Count*	Trend**
1997	14900	15300
1998	16600	15400
1999	14700	15400
2000	14600	15400
2001	14400	15400
2002	15900	15400
2003	16000	15500
2004	15300	15500
2005	16000	15500
2006	17900	15500
2007	15200	15500
2008	15100	15500
2009	15800	15500
2010	15200	15500
2011	15600	15500
2012	14100	15500
2015 Opening Year Trend		
2015	N/A	15500
2025 Mid-Year Trend		
2025	N/A	15600
2035 Design Year Trend		
2035	N/A	15600
TRANPLAN Forecasts/Trends		

Trend R-squared:	0.47%
Compounded Annual Historic Growth Rate:	0.09%
Compounded Growth Rate (2012 to Design Year):	0.03%
Printed:	27-Dec-13

Decaying Exponential Growth Option

*Axle-Adjusted

Traffic Trends - V2.0

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PIN#	973215-1
Location	1

County:	Miami (87)
Station #:	5011
Highway:	0

Year	Traffic (ADT/AADT) Count*	Trend**
1997	14900	15400
1998	16600	15400
1999	14700	15400
2000	14600	15400
2001	14400	15400
2002	15900	15400
2003	16000	15400
2004	15300	15400
2005	16000	15400
2006	17900	15400
2007	15200	15400
2008	15100	15400
2009	15800	15400
2010	15200	15400
2011	15600	15400
2012	14100	15400
2015 Opening Year Trend		
2015	N/A	15400
2025 Mid-Year Trend		
2025	N/A	15400
2035 Design Year Trend		
2035	N/A	15400
TRANPLAN Forecasts/Trends		

Trend R-squared:	0.01%
Compounded Annual Historic Growth Rate:	0.00%
Compounded Growth Rate (2012 to Design Year):	0.00%
Printed:	27-Dec-13

Exponential Growth Option

*Axle-Adjusted

Traffic Trends - V2.0

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PIN#	973215-1
Location	1

County:	Miami (87)
Station #:	5011
Highway:	0

Year	Traffic (ADT/AADT) Count*	Trend**
1997	14900	15500
1998	16600	15500
1999	14700	15500
2000	14600	15500
2001	14400	15500
2002	15900	15500
2003	16000	15500
2004	15300	15500
2005	16000	15500
2006	17900	15500
2007	15200	15500
2008	15100	15500
2009	15800	15500
2010	15200	15400
2011	15600	15400
2012	14100	15400
2015 Opening Year Trend		
2015	N/A	15400
2025 Mid-Year Trend		
2025	N/A	15400
2035 Design Year Trend		
2035	N/A	15400
TRANPLAN Forecasts/Trends		

** Annual Trend Increase:	-1
Trend R-squared:	0.00%
Trend Annual Historic Growth Rate:	-0.04%
Trend Growth Rate (2012 to Design Year):	0.00%
Printed:	27-Dec-13

Straight Line Growth Option

*Axle-Adjusted

Traffic Trends - V2.0

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PIN#	973215-1
Location	1

County:	Miami (87)
Station #:	5000
Highway:	0

Year	Traffic (ADT/AADT) Count*	Trend**
1997	6300	6300
1998	6700	6500
1999	6200	6600
2000	6600	6700
2001	6400	6700
2002	7600	6800
2003	7500	6800
2004	7400	6900
2005	6200	6900
2006	6300	6900
2007	6600	7000
2008	6800	7000
2009	6500	7000
2010	7000	7000
2011	7100	7000
2012	8000	7100
2015 Opening Year Trend		
2015	N/A	7100
2025 Mid-Year Trend		
2025	N/A	7200
2035 Design Year Trend		
2035	N/A	7300
TRANPLAN Forecasts/Trends		

Trend R-squared:	15.40%
Compounded Annual Historic Growth Rate:	0.80%
Compounded Growth Rate (2012 to Design Year):	0.12%
Printed:	27-Dec-13

Decaying Exponential Growth Option

*Axle-Adjusted

Traffic Trends - V2.0

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PIN#	973215-1
Location	1

County:	Miami (87)
Station #:	5000
Highway:	0

Year	Traffic (ADT/AADT) Count*	Trend**
1997	6300	6500
1998	6700	6500
1999	6200	6600
2000	6600	6600
2001	6400	6600
2002	7600	6700
2003	7500	6700
2004	7400	6800
2005	6200	6800
2006	6300	6900
2007	6600	6900
2008	6800	7000
2009	6500	7000
2010	7000	7100
2011	7100	7100
2012	8000	7200
2015 Opening Year Trend		
2015	N/A	7300
2025 Mid-Year Trend		
2025	N/A	7800
2035 Design Year Trend		
2035	N/A	8300
TRANPLAN Forecasts/Trends		

Trend R-squared:	16.11%
Compounded Annual Historic Growth Rate:	0.68%
Compounded Growth Rate (2012 to Design Year):	0.62%
Printed:	27-Dec-13

Exponential Growth Option

*Axle-Adjusted

Traffic Trends - V2.0

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PIN#	973215-1
Location	1

County:	Miami (87)
Station #:	5000
Highway:	0

Year	Traffic (ADT/AADT) Count*	Trend**
1997	6300	6500
1998	6700	6500
1999	6200	6600
2000	6600	6600
2001	6400	6700
2002	7600	6700
2003	7500	6800
2004	7400	6800
2005	6200	6800
2006	6300	6900
2007	6600	6900
2008	6800	7000
2009	6500	7000
2010	7000	7100
2011	7100	7100
2012	8000	7200
2015 Opening Year Trend		
2015	N/A	7300
2025 Mid-Year Trend		
2025	N/A	7800
2035 Design Year Trend		
2035	N/A	8200
TRANPLAN Forecasts/Trends		

** Annual Trend Increase:	46
Trend R-squared:	15.93%
Trend Annual Historic Growth Rate:	0.72%
Trend Growth Rate (2012 to Design Year):	0.60%
Printed:	27-Dec-13

Straight Line Growth Option

*Axle-Adjusted

Traffic Trends - V2.0

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PIN#	973215-1
Location	1

County:	Miami (87)
Station #:	7061
Highway:	0

Year	Traffic (ADT/AADT) Count*	Trend**
2009	13100	13400
2010	13400	13000
2011	13200	12700
2012	12000	12600
2015 Opening Year Trend		
2015	N/A	12200
2025 Mid-Year Trend		
2025	N/A	11700
2035 Design Year Trend		
2035	N/A	11400
TRANPLAN Forecasts/Trends		

Trend R-squared:	32.91%
Compounded Annual Historic Growth Rate:	-2.03%
Compounded Growth Rate (2012 to Design Year):	-0.43%
Printed:	27-Dec-13

Decaying Exponential Growth Option

*Axle-Adjusted

Traffic Trends - V2.0

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PIN#	973215-1
Location	1

County:	Miami (87)
Station #:	7061
Highway:	0

Year	Traffic (ADT/AADT) Count*	Trend**
2009	13100	13500
2010	13400	13100
2011	13200	12700
2012	12000	12400
2015 Opening Year Trend		
2015	N/A	11400
2025 Mid-Year Trend		
2025	N/A	8600
2035 Design Year Trend		
2035	N/A	6500
TRANPLAN Forecasts/Trends		

Trend R-squared:	52.01%
Compounded Annual Historic Growth Rate:	-2.79%
Compounded Growth Rate (2012 to Design Year):	-2.77%
Printed:	27-Dec-13

Exponential Growth Option

*Axle-Adjusted

Traffic Trends - V2.0

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PIN#	973215-1
Location	1

County:	Miami (87)
Station #:	7061
Highway:	0

Year	Traffic (ADT/AADT) Count*	Trend**
2009	13100	13500
2010	13400	13100
2011	13200	12800
2012	12000	12400
2015 Opening Year Trend		
2015	N/A	11400
2025 Mid-Year Trend		
2025	N/A	7900
2035 Design Year Trend		
2035	N/A	4400
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

** Annual Trend Increase:	-350
Trend R-squared:	51.58%
Trend Annual Historic Growth Rate:	-2.72%
Trend Growth Rate (2012 to Design Year):	-2.81%
Printed:	27-Dec-13

Straight Line Growth Option

Traffic Trends - V2.0

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PIN#	973215-1
Location	1

County:	Miami (87)
Station #:	0550
Highway:	0

Year	Traffic (ADT/AADT) Count*	Trend**
1997	27500	33300
1998	39000	33400
1999	32500	33500
2000	39000	33500
2001	36000	33600
2002	35000	33600
2003	31000	33600
2004	34000	33700
2005	34000	33700
2006	28500	33700
2007	31500	33700
2008	31500	33700
2009	31500	33700
2010	36500	33700
2011	36500	33800
2012	34000	33800
2015 Opening Year Trend		
2015	N/A	33800
2025 Mid-Year Trend		
2025	N/A	33900
2035 Design Year Trend		
2035	N/A	33900
TRANPLAN Forecasts/Trends		

Trend R-squared:	0.15%
Compounded Annual Historic Growth Rate:	0.10%
Compounded Growth Rate (2012 to Design Year):	0.01%
Printed:	27-Dec-13

Decaying Exponential Growth Option

*Axle-Adjusted

Traffic Trends - V2.0

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PIN#	973215-1
Location	1

County:	Miami (87)
Station #:	0550
Highway:	0

Year	Traffic (ADT/AADT) Count*	Trend**
1997	27500	33500
1998	39000	33500
1999	32500	33500
2000	39000	33500
2001	36000	33500
2002	35000	33500
2003	31000	33500
2004	34000	33500
2005	34000	33500
2006	28500	33500
2007	31500	33500
2008	31500	33500
2009	31500	33500
2010	36500	33500
2011	36500	33500
2012	34000	33500
2015 Opening Year Trend		
2015	N/A	33400
2025 Mid-Year Trend		
2025	N/A	33400
2035 Design Year Trend		
2035	N/A	33400
TRANPLAN Forecasts/Trends		

Trend R-squared:	0.00%
Compounded Annual Historic Growth Rate:	0.00%
Compounded Growth Rate (2012 to Design Year):	-0.01%
Printed:	27-Dec-13

Exponential Growth Option

*Axle-Adjusted

Traffic Trends - V2.0

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PIN#	973215-1
Location	1

County:	Miami (87)
Station #:	0550
Highway:	0

Year	Traffic (ADT/AADT) Count*	Trend**
1997	27500	33800
1998	39000	33800
1999	32500	33700
2000	39000	33700
2001	36000	33700
2002	35000	33700
2003	31000	33700
2004	34000	33600
2005	34000	33600
2006	28500	33600
2007	31500	33600
2008	31500	33500
2009	31500	33500
2010	36500	33500
2011	36500	33500
2012	34000	33500
2015 Opening Year Trend		
2015	N/A	33400
2025 Mid-Year Trend		
2025	N/A	33200
2035 Design Year Trend		
2035	N/A	33000
TRANPLAN Forecasts/Trends		

** Annual Trend Increase:	-22
Trend R-squared:	0.10%
Trend Annual Historic Growth Rate:	-0.06%
Trend Growth Rate (2012 to Design Year):	-0.06%
Printed:	27-Dec-13

Straight Line Growth Option

*Axle-Adjusted

Traffic Trends - V2.0

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PIN#	973215-1
Location	1

County:	Miami (87)
Station #:	5042
Highway:	0

Year	Traffic (ADT/AADT) Count*	Trend**
1997	27500	30600
1998	32500	30900
1999	29000	31000
2000	32000	31100
2001	32500	31200
2002	33000	31300
2003	31000	31300
2004	35500	31400
2005	32500	31400
2006	34500	31400
2007	31000	31500
2008	30500	31500
2009	32500	31500
2010	33000	31600
2011	28000	31600
2012	26000	31600
2015 Opening Year Trend		
2015	N/A	31700
2025 Mid-Year Trend		
2025	N/A	31800
2035 Design Year Trend		
2035	N/A	31900
TRANPLAN Forecasts/Trends		

Trend R-squared:	1.14%
Compounded Annual Historic Growth Rate:	0.21%
Compounded Growth Rate (2012 to Design Year):	0.04%
Printed:	27-Dec-13

Decaying Exponential Growth Option

*Axle-Adjusted

Traffic Trends - V2.0

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PIN#	973215-1
Location	1

County:	Miami (87)
Station #:	5042
Highway:	0

Year	Traffic (ADT/AADT) Count*	Trend**
1997	27500	31800
1998	32500	31700
1999	29000	31700
2000	32000	31600
2001	32500	31500
2002	33000	31400
2003	31000	31300
2004	35500	31200
2005	32500	31200
2006	34500	31100
2007	31000	31000
2008	30500	30900
2009	32500	30900
2010	33000	30800
2011	28000	30700
2012	26000	30600
2015 Opening Year Trend		
2015	N/A	30400
2025 Mid-Year Trend		
2025	N/A	29600
2035 Design Year Trend		
2035	N/A	28900
TRANPLAN Forecasts/Trends		

Trend R-squared:	2.08%
Compounded Annual Historic Growth Rate:	-0.26%
Compounded Growth Rate (2012 to Design Year):	-0.25%
Printed:	27-Dec-13

Exponential Growth Option

*Axle-Adjusted

Traffic Trends - V2.0

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PIN#	973215-1
Location	1

County:	Miami (87)
Station #:	5042
Highway:	0

Year	Traffic (ADT/AADT) Count*	Trend**
1997	27500	31900
1998	32500	31800
1999	29000	31700
2000	32000	31600
2001	32500	31600
2002	33000	31500
2003	31000	31400
2004	35500	31300
2005	32500	31300
2006	34500	31200
2007	31000	31100
2008	30500	31100
2009	32500	31000
2010	33000	30900
2011	28000	30800
2012	26000	30800
2015 Opening Year Trend		
2015	N/A	30600
2025 Mid-Year Trend		
2025	N/A	29800
2035 Design Year Trend		
2035	N/A	29100
TRANPLAN Forecasts/Trends		

** Annual Trend Increase:	-72
Trend R-squared:	1.78%
Trend Annual Historic Growth Rate:	-0.23%
Trend Growth Rate (2012 to Design Year):	-0.24%
Printed:	27-Dec-13

Straight Line Growth Option

*Axle-Adjusted

Traffic Trends - V2.0

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PIN#	973215-1
Location	1

County:	Miami (87)
Station #:	5104
Highway:	0

Year	Traffic (ADT/AADT) Count*	Trend**
1997	28500	26900
1998	32000	29000
1999	20700	30200
2000	32000	31000
2001	33500	31700
2002	29500	32200
2003	37000	32700
2004	34000	33100
2005	33500	33400
2006	35500	33800
2007	33500	34000
2008	31500	34300
2009	34500	34500
2010	36000	34800
2011	36000	35000
2012	34000	35200
2015 Opening Year Trend		
2015	N/A	35700
2025 Mid-Year Trend		
2025	N/A	36900
2035 Design Year Trend		
2035	N/A	37800
TRANPLAN Forecasts/Trends		

Trend R-squared:	36.02%
Compounded Annual Historic Growth Rate:	1.81%
Compounded Growth Rate (2012 to Design Year):	0.31%
Printed:	30-Dec-13

Decaying Exponential Growth Option

*Axle-Adjusted

Traffic Trends - V2.0

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PIN#	973215-1
Location	1

County:	Miami (87)
Station #:	5104
Highway:	0

Year	Traffic (ADT/AADT) Count*	Trend**
1997	28500	28600
1998	32000	29100
1999	20700	29600
2000	32000	30100
2001	33500	30600
2002	29500	31100
2003	37000	31600
2004	34000	32100
2005	33500	32600
2006	35500	33100
2007	33500	33700
2008	31500	34200
2009	34500	34800
2010	36000	35400
2011	36000	35900
2012	34000	36500
2015 Opening Year Trend		
2015	N/A	38300
2025 Mid-Year Trend		
2025	N/A	45100
2035 Design Year Trend		
2035	N/A	53000
TRANPLAN Forecasts/Trends		

Trend R-squared:	31.03%
Compounded Annual Historic Growth Rate:	1.64%
Compounded Growth Rate (2012 to Design Year):	1.63%
Printed:	30-Dec-13

Exponential Growth Option

*Axle-Adjusted

Traffic Trends - V2.0

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PIN#	973215-1
Location	1

County:	Miami (87)
Station #:	5104
Highway:	0

Year	Traffic (ADT/AADT) Count*	Trend**
1997	28500	29000
1998	32000	29500
1999	20700	30000
2000	32000	30400
2001	33500	30900
2002	29500	31400
2003	37000	31900
2004	34000	32400
2005	33500	32800
2006	35500	33300
2007	33500	33800
2008	31500	34300
2009	34500	34800
2010	36000	35200
2011	36000	35700
2012	34000	36200
2015 Opening Year Trend		
2015	N/A	37600
2025 Mid-Year Trend		
2025	N/A	42400
2035 Design Year Trend		
2035	N/A	47200
TRANPLAN Forecasts/Trends		

** Annual Trend Increase:	480
Trend R-squared:	33.92%
Trend Annual Historic Growth Rate:	1.66%
Trend Growth Rate (2012 to Design Year):	1.32%
Printed:	30-Dec-13

Straight Line Growth Option

*Axle-Adjusted

Appendix B

SERPM VOLUME PLOTS

Year 2005

Build Highway - Base Two way – One lane in each direction Alternative 3 at interchange

AADT

Year 2005

Build Highway - Base Two way – One lane in each direction Alternative 3 at interchange

AADT

Year 2005

Build Highway - Base Two way – One lane in each direction Alternative 3 at interchange

AADT

cube

Licensed to Cornell Flowing

Year 2035

Build Highway – 2035 Two way - One lane in each direction Alternative 3 at interchange

AADT

Year 2035

Build Highway – 2035 Two way - One lane in each direction Alternative 3 at interchange

AADT

Year 2035

Build Highway – 2035 Two way - One lane in each direction Alternative 3 at interchange

AADT

010

Year 2005
No Build
AADT

(Licensed to Gannett Fleming Inc.)

Year 2005
No Build
AADT

(Licensed to Gannett Fleming Inc.)

Year 2005
No Build
AADT

cube

(Licensed to Gannett Fleming Inc.)

Year 2035 No Build AADT Volumes
With 2005 Toll Policies on Dolphin Expressway

cube
(Licensed to Gannett Fleming Inc.)

Year 2035 No Build AADT Volumes
With 2005 Toll Policies on Dolphin Expressway

NW 2ND ST
NW 1ST ST
W FLAGLER ST
SW 1ST ST
SW 2ND ST
SW 3RD ST
SW 4TH ST
SW 5TH ST
SW 6TH ST
SW 7TH ST
SW 8TH ST
SW 9TH ST
SW 10TH ST
SW 11TH ST
SW 12TH ST
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SW 2ND AVE
SW 2ND CT
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SW 9TH CT
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Year 2035 No Build AADT Volumes
With 2005 Toll Policies on Dolphin Expressway

cube

(Licensed to Gannett Fleming Inc.)

Year 2005

Build Highway – Base Reverse (3 LANES IN EACH DIRECTION) Alternative 3 at interchange

AADT

cube

Year 2005

Build Highway – Base Reverse (3 LANES IN EACH DIRECTION) Alternative 3 at interchange

AADT

cube

Year 2005

Build Highway – Base Reverse (3 LANES IN EACH DIRECTION) Alternative 3 at interchange

AADT

cube

(Licensed to Gannett Fleming Inc

Year 2035
Build Highway – 2035 Reverse (3 LANES IN EACH DIRECTION) Alternative 3 at interchange
AADT

cube

(Licensed to Gannett Fleming Inc.)

Year 2035

Build Highway – 2035 Reverse (3 LANES IN EACH DIRECTION) Alternative 3 at interchange

AADT

cube

(Licensed to Gannett Fleming Inc.)

Year 2035

Build Highway – 2035 Reverse (3 LANES IN EACH DIRECTION) Alternative 3 at interchange

AADT

(Licensed to Gannett Fleming Inc.)

Year 2005

Build Highway – Base (3 LANES IN EACH DIRECTION) Alternative 4 at interchange

AADT

(Licensed to Gannett Fleming Inc.

Year 2005

Build Highway – Base (3 LANES IN EACH DIRECTION) Alternative 4 at interchange

AADT

Year 2005

Build Highway – Base (3 LANES IN EACH DIRECTION) Alternative 4 at interchange

AADT

cube

(Licensed to Gannett Fleming Inc

Year 2035

Build Highway – 2035 (3 LANES IN EACH DIRECTION) Alternative 4 at interchange

AADT

old

cube

(Licensed to Gannett Fleming Inc.

Year 2035

Build Highway – 2035 (3 LANES IN EACH DIRECTION) Alternative 4 at interchange

AADT

cube

Year 2035
Build Highway – 2035 (3 LANES IN EACH DIRECTION) Alternative 4 at interchange
AADT

(Licensed to Gannett Fleming Inc.)

Year 2009

Build Transit – Base Reverse (2 LANES IN EACH DIRECTION) Alternative 3 at interchange

AADT

(Licensed to Gannett Fleming Inc

Year 2005

Build Transit – Base Reverse (2 LANES IN EACH DIRECTION) Alternative 3 at interchange

AADT

(Licensed to Gannett Fleming Inc.

Year 2005

Build Transit – Base Reverse (2 LANES IN EACH DIRECTION) Alternative 3 at interchange

AADT

cube

(Licensed to Gannett Fleming Inc.

Year 2035
Build Transit – 2035 Reverse (2 LANES IN EACH DIRECTION) Alternative 3 at interchange
AADT

(Licensed to Gannett Fleming Inc.)

Year 2035

Build Transit – 2035 Reverse (2 LANES IN EACH DIRECTION) Alternative 3 at interchange

AADT

Year 2035
Build Transit – 2035 Reverse (2 LANES IN EACH DIRECTION) Alternative 3 at interchange
AADT

(Licensed to Gannett Fleming Inc.)

Appendix C

PART 1: COMMITTED TRIPS

* The traffic volumes at driveways are total project volumes, while traffic volumes at external intersections are net new trips accounting for existing development.

Kimley»Horn

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Figure 7
Peak Hour Project Trip Assignment
Miami River Development SAP
City of Miami, Florida

SITE PLAN DIAGRAM

BRICKELL BAYVIEW CENTER

ADD Inc
ARCHITECTURE + DESIGN
One Biscayne Tower Suite 1670
Two South Biscayne Blvd. Miami, Fl. 33131
T: 305.482.8700
www.addinc.com
LCE: AA26001367
Jesus Jun Carpio
Lic#: AR93191

Kimley-Horn
Kimley-Horn & Associates, Inc.
5200 NW 33rd Avenue, Suite 109
Fort Lauderdale, Florida 33309
T: 954-535-5400
Aaron Buchter P.E.
Lic#: 54666

ZONING SUBMITTAL
10-17-2013

PROJECT #: 13101.00

Kimley-Horn and Associates, Inc.

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Figure 3
Project Assignment
A.M. Peak Hour
Brickell Bayview Center

Figure 4
Project Assigment
P.M. Peak Hour
Brickell Bayview Center

Kimley-Horn and Associates, Inc.

© 2011

Figure 9
Project Trip Assignment
A.M. Peak Hour
Brickell CitiCentre

Figure 10
Project Trip Assignment
P.M. Peak Hour
Brickell CitiCentre

Kimley-Horn and Associates, Inc.

© 2011

Figure 3
Project Trip Assignment
PM Peak Hour
Walgreens 250 & 286 SW 7th St
City of Miami , Florida

Kimley-Horn and Associates, Inc.

© 2013

LEGAL DESCRIPTION:

PARCEL A:
Lots 5, 6, 7 and 8, Block 31 South CITY OF MIAMI, according to the plat thereof recorded in Plat Book B, Page 41, of the Public Records of Miami-Dade County, Florida.

PARCEL B:
Lots 9 and 10, Block 31 South CITY OF MIAMI, according to the plat thereof recorded in Plat Book B, Page 41 of the public records of Miami-Dade County, LESS the 15.00 feet under or said Lot 10 conveyed to the State of Florida by Deed recorded in Official Records Book [illegible], Page 917, of the Public Records of Miami-Dade County, FL, the more particularly described as follows:
Begin at the N.W. corner of said Lot 10, thence run N 87°59'28" E along the northerly boundary of said Lot 10, for a distance of 30.54 feet to the point of beginning of a circular curve concave to the Southeast and having for its elements a radius of 24.00 feet and a tangent bearing of S 67°07'01" W, thence run Southwesterly, Southerly and Southeasterly along the arc of said circular curve to the left, through a central angle 87°52'27" for a distance of 36.81 feet to the point of tangency and a point on the Westerly boundary of said Lot 10, thence run N 00° 01'47" W along said boundary for a distance of 31.64 feet to the Point of Beginning.

ZONING LEGEND			
	REQUIRED	PROVIDED	MIAMI 21 CODE (April 2012)
Zoning	T6-24-O Urban Core Zone	T6-24-O Urban Core Zone	
Land Area		44,316 SF	
Building Area Ground Level Roof Level - Elev. Lobby Total		15,193 SF 162 SF 15,355 SF	
Parking Required	3 spaces/1000 SF = 47	49	As per Art. 4, Table 4
Bicycle Rack Space	1 space/20 parking spaces = 3	3	As per Art. 4, Table 4
Drive Thru and Drive-up Stacking Spaces	(3 at window (3) before service window and (1) after service window	(3 at window (3) before service window and (1) after service window	As per Art. 4, Table 13
Loading Berth Dimensions	420 SF =13 ft x 35 ft x 15 ft	641 SF =19.67 ft x 35 ft	As per Art. 4, Table 1

LOT OCCUPATION			
	REQUIRED	PROVIDED	MIAMI 21 CODE (April 2012)
Lot Area	5,000 SF Min.; 100,000 SF Max.	44,316 SF 1.02 acres	As per Art. 3.6
Lot Width	50 ft. Min.	300.29 ft	As per Art. 3.6
Lot Coverage *1-5 Stories	50% Max. of 44,316 SF = 22,158 SF	22,370 SF	As per Art. 3.6
Frontage at Front Setback (Principal Front)	70% Min. of 300.29 ft = 210.20 ft	194 ft	As per Art. 3.6 with a waiver to reduce 10% of the length of the facade
Frontage at Secondary Front		110 ft	
Storefronts and Glazed at Facades Principal Front Secondary Front	70% Min. of 194 ft = 136 ft 70% Min. of 110 ft = 77 ft	140'-10" 81'-6"	As per Art. 3.6 b.1
Total Open Space	10% Lot Area Min. of 44,316 SF = 4,432 SF	5,187 SF	As per Art. 3.6
Open Space and Landscape Separate by Layers Open Space in 1st Layer Landscape in 1st Layer Open Space in 2nd Layer Landscape in 2nd Layer Open Space in 3rd Layer Landscape in 3rd Layer	10% of 1077 SF = 108 SF 10% of 1,341 SF = 134 SF	1,369 SF 549 SF 1,077 SF 712 SF 1,341 SF 1,163 SF	As per Art. 3.6 b.b
Density	N/A		

BUILDING SETBACK			
	REQUIRED	PROVIDED	MIAMI 21 CODE (April 2012)
Principal Front	10 ft Min.; 360 ft Max. above 8th story	18 ft	As per Art. 3.6
Secondary Front	10 ft Min.; 360 ft Max. above 8th story	18 ft	As per Art. 3.6
Side	0ft Min.; 360 ft Max. above 8th story	79'-0" ft	As per Art. 3.6
Rear	0ft Min.; 360 ft Max. above 8th story	29'-0" ft	As per Art. 3.6
Abutting Side or Rear T3	N/A		

BUILDING HEIGHT			
	REQUIRED	PROVIDED	MIAMI 21 CODE (April 2012)
Min. Height	2 Stories	2 Stories	As per Art. 3.6
Max. Height	24 Stories	2 Stories	As per Art. 3.6
Max. Bonuses Height	N/A		

LEGEND	
———	PROPERTY LINE
——OH——	OVERHEAD UTILITY WIRE
	HEAVY-DUTY
L.P.	LIGHT POLE
C.B.	CATCH BASIN
U.T.P.	UTILITY CONCRETE POLE
W.M.	WATER METER
U.P.	UTILITY POLE
	VISIBILITY TRIANGLE

SIGNAGE AND STRIPING NOTES:

1. ALL STRIPING SHALL MEET THE REQUIREMENTS OF CITY OF MIAMI PUBLIC WORKS DEPARTMENT
2. ALL SIGNAGE SHALL BE IN ACCORDANCE WITH "THE MANUAL ON UNIFORM TRAFFIC DEVICES"

DEMANDT ARCHITECTURE, P.A.
[illegible]
305-665-2250
A.A. 26001329

NO.	DATE	BY	DESCRIPTION

PROJECT SITE PLAN - GROUND LEVEL
STORE NUMBER: 15925
WALGREENS
298 SW 7th STREET
CITY OF MIAMI, FLORIDA
CADD PLOT:
DRAWN BY:
DATE: 06/21/2013
REVIEWED:
A-020

PROJECT SITE PLAN
GROUND LEVEL

SCALE 1" = 20'-0"

FIGURE 4

TRIP DISTRIBUTION AND ASSIGNMENT

1101 Brickell Avenue

Kimley-Horn and Associates, Inc.

Figure 4: PM Peak Site Traffic

3:55:38 PM 9/17/2005
u:\ora\0505183\proj\trips.dgn

	PROJECT:	TITLE:	EXHIBIT No.
dpa	BRICKELL STATION MUSP	PROJECT PM PEAK HOUR VEHICULAR VOLUMES	13

Site Traffic

The peak hour trips from Table 8 have been assigned to the adjacent intersections. Figure 5 depict the site traffic assignments to the surrounding intersections, respectively.

Figure 5: PM Peak Site Traffic

	IN	OUT
AM	18	13
PM	31	31

% Distribution

50%

PLEASE REFER TO SHEET LI-2 FOR IRRIGATION NOTE, DETAILS, AND SCHEDULES.

LEGAL DESCRIPTION

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE COUNTY OF MIAMI-DADE, STATE OF FLORIDA, AND IS DESCRIBED AS FOLLOWS

PARCEL 1
THE WEST 65 FEET OF LOT 1, IN BLOCK 1 OF FIRST WESTMORELAND ADDITION TO CITY OF MIAMI, ACCORDING TO THE PLAT THEREOF AS RECORDED IN PLAT BOOK 3, AT PAGE 33, OF THE PUBLIC RECORDS OF MIAMI-DADE COUNTY, FLORIDA.

PARCEL 2
THE EAST 45 FEET OF LOT 1 IN BLOCK 1 OF FIRST WESTMORELAND ADDITION TO CITY OF MIAMI, ACCORDING TO THE PLAT THEREOF AS RECORDED IN PLAT BOOK 3, AT PAGE 33, OF THE PUBLIC RECORDS OF MIAMI-DADE COUNTY, FLORIDA.

PARCEL 3
LOTS 2 AND 3 LESS THE EAST 13.5 FEET IN BLOCK 1, OF FIRST WESTMORELAND ADDITION TO CITY OF MIAMI, ACCORDING TO THE PLAT THEREOF AS RECORDED IN PLAT BOOK 3 AT PAGE 33 OF THE PUBLIC RECORDS OF MIAMI-DADE COUNTY FLORIDA.

PARCEL 4
LOT 4 LESS THE EAST 10.5 FEET IN BLOCK 1 OF FIRST WESTMORELAND ADDITION TO CITY OF MIAMI, ACCORDING TO THE PLAT THEREOF AS RECORDED IN PLAT BOOK 3, AT PAGE 33 OF THE PUBLIC RECORDS OF MIAMI-DADE COUNTY, FLORIDA.

IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI
	Rain Bird 1806-PRS 15 Strip Series Turf Spray 6" popup with pressure regulator	45	30
	Rain Bird 1806-PRS 5 Series MPR Turf Spray 6" popup with pressure regulator	22	30
	Rain Bird 1806-PRS 8 Series MPR Turf Spray 6" popup with pressure regulator	6	30
	Rain Bird 1806-PRS 10 Series MPR Turf Spray 6" popup with pressure regulator	6	30
	Rain Bird 1806-PRS 15 Series MPR Turf Spray 6" popup with pressure regulator	1	30
	Rain Bird 1806-PRS ADJ Turf Spray 6" popup with pressure regulator	2	30
	Rain Bird 1804-1400 Fixed Fixed Bubbler 4" popup	30	40

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI	GPM	RADIUS
	Rain Bird 3500-S Shrub Rotor adjustable and full circle	3	25	0.54	15'
	Rain Bird 3500-S Shrub Rotor adjustable and full circle	3	25	0.77	20'

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	Rain Bird XCZ-100-PRF-BF Drip Control Kit, 1" (25mm) DV valve, 1" (25mm) pressure regulating back flush filter	2
	Rain Bird MDCFCAP Dripline Flush Valve cap in compression fitting coupler	2
	Rain Bird AR Valve Kit 1" Air Relief Valve kit with 6" drip valve box	2
	Area to Receive Dripline Rain Bird XFCV-06-12 (14) XFCV On-Surface Landscape Dripline with a Heavy-Duty 3.8 psi Check Valve. 0.6GPH emitters at 12.0" O.C. Dripline laterals spaced at 14.0" apart, with emitters offset for triangular pattern. Grout for elevation change	2,154 s.f.

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	Rain Bird PEB Electric Remote Control Valve	7
	Febco 765 1" Pressure Vacuum Breaker, brass with ball valve SOV. Install 12" (305MM) above highest downstream outlet and the highest point in the downstream piping	1
C	Rain Bird LXM-OTC-PR IQ Satellite Controller	1
R	Rain Bird RSD-BEx Rain Sensor, with bracket, extension wire	1
M	Water Meter 1" Existing 3/4" Meter	1
	Irrigation Lateral Line: Polyethylene and PVC Class 160 Polyethylene SDR 9 up to 1-1/4" then PVC Class 160 SDR 26 for 1-1/2" and larger. Only lateral transition pipe sizes 1 1/4" and above are indicated on the plan, with all others being 1" in size	1,862 l.f.
	Irrigation Mainline: Polyethylene and PVC Class 200	[illegible]
	Pipe Sleeve: PVC Schedule 80 Typical pipe sleeve for irrigation pipe. Pipe sleeve size shall allow for irrigation piping and their related couplings to easily slide through sleeving material. Extend sleeves 18 inches beyond edges of paving or construction	[illegible]

Valve Callout
- Valve Number
- Valve Flow
- Valve Size

BOHLER ENGINEERING

CORPORATE OFFICE
1680 SE 17TH ST, SUITE 200
FT. LAUDERDALE, FL 33316
(954) 522-7900

CIVIL & CONSULTING ENGINEERS
PLANNERS
PROJECT MANAGERS
ENVIRONMENTAL CONSULTANTS
LANDSCAPE ARCHITECTS

REVISIONS			
REV.	DATE	COMMENT	BY
1	09-09-2013	PUBLIC WORKS COMMENTS	MBG

PROJECT No. P160175
DRAWN BY: AAM
CHECKED BY: JMG
DATE:
SCALE: AS NOTED
CAD I.D. P160175-IRRIGATION PLAN

PROPOSED TD BANK
S.W. 8th & 12th AVE.
MIAMI

FOR

Bank

S.W. 8th. ST & S.W. 12th. AVE
CITY OF MIAMI
MIAMI-DADE COUNTY, FLORIDA

BOHLER ENGINEERING

RADICE
1680 CORPORATE DRIVE, SUITE 250
FORT LAUDERDALE, FL 33334
PH (954) 522-7900
FX (954) [illegible]
www.BohlerEngineering.com

MICHAEL D. GROSSWIRTH
PROFESSIONAL LANDSCAPE ARCHITECT
License: 2013
FLORIDA LICENSE No. 6666671
FLORIDA BUSINESS CERT OF AUTH No. 26626

SHEET TITLE
IRRIGATION PLAN

SHEET NUMBER
LI-1

TRIP GENERATION

DAILY TRIP GENERATION

	ITE TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		GROSS VOLUMES			INTERNAL CAPTURE		EXTERNAL TRIPS			PASS-BY CAPTURE		NET NEW EXTERNAL TRIPS		
	Land Use	ITE Edition	ITE Code	Scale	ITE Units	Percent In	Percent Out	In	Out	Total	Percent	IC Trips	In	Out	Total	Percent	PB Trips	In	Out	Total
1	Drive-In Bank	9	912	2.583	ksf	50%	50%	191	191	382	0.0%	0	191	191	382	47.0%	180	101	101	202
2																				
3																				
4																				
5																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				
13																				
14																				
15																				
							Total:	191	191	382			191	191	382	47.1%	180	101	101	202

LUC
912

RATE/EQUATION
Y=148.15(X)

AM PEAK HOUR TRIP GENERATION

	ITE TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		GROSS VOLUMES			INTERNAL CAPTURE		EXTERNAL TRIPS			PASS-BY CAPTURE		NET NEW EXTERNAL TRIPS		
	Land Use	ITE Edition	ITE Code	Scale	ITE Units	Percent In	Percent Out	In	Out	Total	Percent	IC Trips	In	Out	Total	Percent	PB Trips	In	Out	Total
1	Drive-In Bank	9	912	2.583	ksf	57%	43%	18	13	31	0.0%	0	18	13	31	47.0%	14	11	6	17
2																				
3																				
4																				
5																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				
13																				
14																				
15																				
							Total:	18	13	31			18	13	31	45.2%	14	11	6	17

LUC
912

RATE/EQUATION
Y=12.08(X)

PM PEAK HOUR TRIP GENERATION

	ITE TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		DRIVEWAY VOLUMES			INTERNAL CAPTURE		EXTERNAL TRIPS			PASS-BY CAPTURE		NET NEW EXTERNAL TRIPS		
	Land Use	ITE Edition	ITE Code	Scale	ITE Units	Percent In	Percent Out	In	Out	Total	Percent	IC Trips	In	Out	Total	Percent	PB Trips	In	Out	Total
1	Drive-In Bank	9	912	2.583	ksf	50%	50%	31	31	62	0.0%	0	31	31	62	47.0%	30	16	16	32
2																				
3																				
4																				
5																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				
13																				
14																				
15																				
							Total:	31	31	62			31	31	62	48.4%	30	16	16	32

LUC
912

RATE/EQUATION
Y=24.3(X)

K:\FTL_TPTO\042701379-TD Bank- 14395 S Dixie Hwy\calcs\trip gen\Proposed TRIP GEN 9 rev1.xlsx: PRINT DAY-with 2 PEAKS
2/6/2014,1:43 PM

PM
30 in 32 out

% Distribution

PEREZ ENGINEERING
& DEVELOPMENT, INC

RECEIVED
PERMITS OFFICE
JUL 17 2013
DEPT OF TRANSPORTATION
MIAMI, FLORIDA

June 27, 2012

Florida Department of Transportation
District Six Permits Office
1000 NW 111th Ave., Room 6207
Miami, FL 33172-5800

RE: LDS-Riverside
Trip Generation Analysis

To Whom It May Concern:

The Institute of Transportation Engineers (ITE) Trip Generation Manual, 8th Edition contains vehicle trip generation information for various land uses. The ITE manual provides trip generation information for a church (land use code 560) per KSF[2] (Units of 1,000 SF). The rates provided by the ITE land use code 560 per KSF[2] for the weekday daily traffic rate are 9.11 and a PM peak period rate of 0.55

Using the rates provided by ITE 8th edition the latest FDOT trip generation worksheets, a trip generation rate of 62 vehicle trips was calculated based off of the proposed structure size and intended use.

If you have any questions or need additional information, please do not hesitate to contact us.

TAZ = 756 | 757

Sincerely,

Allen E. Perez, P.E.
President
7/3/13
#51468

Key West Office:
1010 Kennedy Dr. Suite 201 • Key West, Florida 33040
Tel: (305) 293-9440 Fax: (305)296-0243

Church = 62% is 38% out AM
48% 52% out PM

RECEIVED
PERMITS OFFICE
JUL 17 2013
DEPT OF TRANSPORTATION
MIAMI, FLORIDA

50' 0 50'

SCALE 1"=50'

BAR IS TWO INCHES ON ORIGINAL DRAWINGS IF NOT TWO INCHES ON THIS SHEET ADJUST SCALES ACCORDINGLY

SIGHT DISTANCE DESIGN PARAMETERS

- DESIGN SPEED: 30 MPH
- VEHICLE: COMBINATION
- D= 510'
- D(l) = 360'
- D(r) = 225' *

*NOT SHOWN DUE TO ONE-WAY CONDITION

FDOT AERIAL SITE PLAN GENERAL NOTES:

1. THE SITE TRIANGLE DESIGN IS BASED OFF OF A DESIGN SPEED OF 30 MPH FOR A COMBINATION VEHICLE PER FDOT INDEX # 546 (3 OF 6). TWO LANE-UNDIVIDED HIGHWAY.
2. ALL WORK DONE IN THE STATE RIGHT-OF-WAY MUST BE IN ACCORDANCE WITH THE FDOT 2013 SPECIFICATIONS AND STANDARDS.

Architect / Engineer

PEREZ ENGINEERING
8 DEVELOPMENT, INC.

License # 51468

Perez Number: 121011

ALLEN E. PEREZ, P.E.
LIC. No.: 51468

Description
LDS - RIVERSIDE
616 SW 12th AVENUE
MIAMI, FL 33135

Project for:
THE CHURCH OF JESUS CHRIST OF LATTER-DAY SAINTS

1	1-18-13	PERMIT SET
2	5-17-13	PERMIT COMMENTS
3	5-17-13	OWNER REVISIONS

Project Number
8375290-11-01-02-01
Plan Series
IMD-170
Property Number
8375290-11-01-02-01

Sheet Title
FDOT AERIAL SITE PLAN

Sheet
C-3.1

AM PEAK HOUR

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: SW 7th Street and SW 1st Avenue
COUNT DATE: March 24, 2013
TIME PERIOD: AM Period
PEAK HOUR FACTOR: 0.96

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements						128	797								621	309
Peak Season Correction Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
EXISTING CONDITIONS						**128**	**797**								**621**	**309**

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Premiere Towers						9	25								58	
Brickell CitiCentre					8	76	63			69					243	16
Brickell CitiCentre North Square						2	11								12	33
TOTAL "VESTED" TRAFFIC					8	87	99			69					313	49
Years To Buildout	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Yearly Growth Rate	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%
BACKGROUND TRAFFIC GROWTH						17	104								81	40
NON-PROJECT TRAFFIC					**8**	**232**	**1,000**			**69**					**1,015**	**398**

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering						25.0%									30.0%	
	Exiting						13.0%	36.0%									

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																
	Net New						11	24								4	
TOTAL PROJECT TRAFFIC						**0**	**11**	**24**			**0**					**4**	**0**
TOTAL TRAFFIC						**8**	**243**	**1,024**			**69**					**1,019**	**398**

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: SW 7th Street and Miami Avenue
COUNT DATE: March 24, 2013
TIME PERIOD: AM Period
PEAK HOUR FACTOR: 0.97

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements							671	76		288	541					
Peak Season Correction Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
EXISTING CONDITIONS							**671**	**76**		**288**	**541**					

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Premiere Towers							9			25	56					
Brickell CitiCentre							122	125		25	33					
Brickell CitiCentre North Square							13				38					
TOTAL "VESTED" TRAFFIC							144	125		50	127					
Years To Buildout	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Yearly Growth Rate	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%
BACKGROUND TRAFFIC GROWTH							88	10		38	71					
NON-PROJECT TRAFFIC							**903**	**211**		**376**	**739**					

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering							17.0%			8.0%						
	Exiting							4.0%			45.0%	30.0%					

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																
	Net New							5			30	19					
TOTAL PROJECT TRAFFIC								**5**	**0**		**30**	**19**					
TOTAL TRAFFIC								**908**	**211**		**406**	**758**					

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: SW 7th Street and Brickell Avenue
COUNT DATE: May 11, 2013
TIME PERIOD: AM Period
PEAK HOUR FACTOR: 0.93

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements						4	41	45		376	1,330	261		209	1,169	169
Peak Season Correction Factor	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020
EXISTING CONDITIONS						**4**	**42**	**46**		**384**	**1,357**	**266**		**213**	**1,192**	**172**

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Premiere Towers											8					9
Brickell CitiCentre										50	20				10	100
Brickell CitiCentre North Square											3				4	13
TOTAL "VESTED" TRAFFIC						0	0	0		50	31	0		0	14	122
Years To Buildout	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Yearly Growth Rate	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%
BACKGROUND TRAFFIC GROWTH						1	5	6		50	178	35		28	156	23
NON-PROJECT TRAFFIC						**5**	**47**	**52**		**484**	**1,566**	**301**		**241**	**1,362**	**317**

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering										4.0%						13.0%
	Exiting										4.0%	13.0%					

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																
	Net New										3	8					2
TOTAL PROJECT TRAFFIC							**0**	**0**	**0**		**3**	**8**	**0**		**0**	**0**	**2**
TOTAL TRAFFIC							**5**	**47**	**52**		**487**	**1,574**	**301**		**241**	**1,362**	**319**

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: SW 8th Street and SW 1st Avenue
COUNT DATE: March 24, 2013
TIME PERIOD: AM Period
PEAK HOUR FACTOR: 0.97

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements			1,835	501										211	472	
Peak Season Correction Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
EXISTING CONDITIONS			**1,835**	**501**										**211**	**472**	

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Premiere Towers				26											67	
Brickell CitiCentre			377											293	26	
Brickell CitiCentre North Square			27											7	7	
TOTAL "VESTED" TRAFFIC			404	26										300	100	
Years To Buildout	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Yearly Growth Rate	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%
BACKGROUND TRAFFIC GROWTH			240	66										28	62	
NON-PROJECT TRAFFIC			**2,479**	**593**										**539**	**634**	

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering			45.0%											55.0%		
	Exiting															13.0%	

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																
	Net New			5											7	8	
TOTAL PROJECT TRAFFIC				**5**	**0**										**7**	**8**	
TOTAL TRAFFIC			**2,484**	**593**										**546**	**642**	

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: SW 8th Street and Miami Avenue
COUNT DATE: March 24, 2013
TIME PERIOD: AM Period
PEAK HOUR FACTOR: 0.97

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements		234	1,666								607	70				
Peak Season Correction Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
EXISTING CONDITIONS		**234**	**1,666**								**607**	**70**				

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Premiere Towers											81	8				
Brickell CitiCentre		33	564								25	42				
Brickell CitiCentre North Square		34									4					
TOTAL "VESTED" TRAFFIC		67	564								110	50				
Years To Buildout	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Yearly Growth Rate	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%
BACKGROUND TRAFFIC GROWTH		31	218								79	9				
NON-PROJECT TRAFFIC		**332**	**2,448**								**796**	**129**				

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering											8.0%					
	Exiting		75.0%	25.0%													

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																
	Net New		48	16								1					
TOTAL PROJECT TRAFFIC			**48**	**16**								**1**	**0**				
TOTAL TRAFFIC			**380**	**2,464**								**797**	**129**				

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: SW 8th Street and Brickell Avenue
COUNT DATE: May 11, 2013
TIME PERIOD: AM Period
PEAK HOUR FACTOR: 0.94

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements		542	717	224		237		556			862	237		351	831	
Peak Season Correction Factor	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020
EXISTING CONDITIONS		**553**	**731**	**228**		**242**		**567**			**879**	**242**		**358**	**848**	

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Premiere Towers		8														
Brickell CitiCentre		20	10					42			8			7	3	
Brickell CitiCentre North Square								2			1			3	1	
TOTAL "VESTED" TRAFFIC		28	10	0		0		44			9	0		10	4	
Years To Buildout	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Yearly Growth Rate	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%
BACKGROUND TRAFFIC GROWTH		72	96	30		32		74			115	32		47	111	
NON-PROJECT TRAFFIC		**653**	**837**	**258**		**274**		**685**			**1,003**	**274**		**415**	**963**	

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering								3.0%			1.0%					
	Exiting		17.0%	3.0%	5.0%												

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																
	Net New		11	2	3				0			0					
TOTAL PROJECT TRAFFIC			**11**	**2**	**3**		**0**		**0**			**0**	**0**		**0**	**0**	
TOTAL TRAFFIC			**664**	**839**	**261**		**274**		**685**			**1,003**	**274**		**415**	**963**	

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: S Miami Avenue and S 9th Street
COUNT DATE: April 26, 2013
TIME PERIOD: AM Period
PEAK HOUR FACTOR: 0.9

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements							16	30		90	600	28				
Peak Season Correction Factor	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010
EXISTING CONDITIONS							**16**	**30**		**91**	**606**	**28**				

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Premiere Towers																
Brickell CitiCentre											67					
Brickell CitiCentre North Square											4					
TOTAL "VESTED" TRAFFIC							0	0		0	71	0				
Years To Buildout	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Yearly Growth Rate	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%
BACKGROUND TRAFFIC GROWTH							2	4		12	79	4				
NON-PROJECT TRAFFIC							**18**	**34**		**103**	**756**	**32**				

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering											8.0%					
	Exiting																

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																
	Net New											1					
TOTAL PROJECT TRAFFIC								**0**	**0**		**0**	**1**	**0**				
TOTAL TRAFFIC								**18**	**34**		**103**	**757**	**32**				

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: SW 9th Street and SW 1st Avenue
COUNT DATE: February 5, 2013
TIME PERIOD: AM Period
PEAK HOUR FACTOR: 0.93

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements						59									940	
Peak Season Correction Factor	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020
EXISTING CONDITIONS						**60**									**959**	

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Premiere Towers																
Brickell CitiCentre															26	
Brickell CitiCentre North Square															7	
TOTAL "VESTED" TRAFFIC						0									33	
Years To Buildout	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Yearly Growth Rate	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%
BACKGROUND TRAFFIC GROWTH						8									125	
NON-PROJECT TRAFFIC						**68**									**1,117**	

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering																
	Exiting															13.0%	

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																
	Net New															8	
TOTAL PROJECT TRAFFIC							**0**									**8**	
TOTAL TRAFFIC							**68**									**1,125**	

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: East Driveway at SW 8th Street (Without Project)
COUNT DATE: October 30, 2013
TIME PERIOD: AM Period
PEAK HOUR FACTOR: 0.97

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT*	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements			1,916	3								1				
Peak Season Correction Factor	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010
EXISTING CONDITIONS			**1,935**	**3**								**1**				

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Premiere Towers																
Brickell CitiCentre			597													
Brickell CitiCentre North Square			34													
TOTAL "VESTED" TRAFFIC			631	0								0				
Years To Buildout	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Yearly Growth Rate	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%
BACKGROUND TRAFFIC GROWTH			253	0								0				
NON-PROJECT TRAFFIC			**2,819**	**3**								**1**				

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering				100.0%												
	Exiting												100.0%				

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																
	Net New				12								64				
TOTAL PROJECT TRAFFIC				**0**	**12**								**64**				
TOTAL TRAFFIC				**2,819**	**15**								**65**				

* Northbound traffic calculated as the average of all traffic approaching from and departing to the adjacent intersections

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: West Driveway at SW 8th Street (Without Project)
COUNT DATE: October 30, 2013
TIME PERIOD: AM Period
PEAK HOUR FACTOR: 0.97

"EXISTING TRAFFIC"	EBU	EBL	EBT*	EBR	WBU	WBL	WBT*	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements			1,913	133								6				
Peak Season Correction Factor	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010
EXISTING CONDITIONS			**1,932**	**134**								**6**				

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Premiere Towers																
Brickell CitiCentre			597													
Brickell CitiCentre North Square			34													
TOTAL "VESTED" TRAFFIC			631	0								0				
Years To Buildout	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Yearly Growth Rate	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%
BACKGROUND TRAFFIC GROWTH			253	18								1				
NON-PROJECT TRAFFIC			**2,816**	**152**								**7**				

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering			100.0%													
	Exiting																

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																
	Net New			12													
TOTAL PROJECT TRAFFIC				**12**	**0**								**0**				
TOTAL TRAFFIC			**2,828**	**152**									**7**				

* Eastbound and westbound traffic calculated as the average of all traffic approaching from and departing to the adjacent intersections

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: East Driveway at SW 8th Street (With Project)
COUNT DATE: October 30, 2013
TIME PERIOD: AM Period
PEAK HOUR FACTOR: 0.97

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT*	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements			1,910	159								14				
Peak Season Correction Factor	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010
EXISTING CONDITIONS			**1,929**	**161**								**14**				

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Premiere Towers																
Brickell CitiCentre			597													
Brickell CitiCentre North Square			34													
TOTAL "VESTED" TRAFFIC			631	0								0				
Years To Buildout	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Yearly Growth Rate	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%
BACKGROUND TRAFFIC GROWTH			252	21								2				
NON-PROJECT TRAFFIC			**2,812**	**182**								**16**				

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering				100.0%												
	Exiting												100.0%				

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																
	Net New				12								64				
TOTAL PROJECT TRAFFIC				**0**	**12**								**64**				
TOTAL TRAFFIC				**2,812**	**194**								**80**				

* Northbound traffic calculated as the average of all traffic approaching from and departing to the adjacent intersections

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: West Driveway at SW 8th Street (With Project)
COUNT DATE: October 30, 2013
TIME PERIOD: AM Period
PEAK HOUR FACTOR: 0.97

"EXISTING TRAFFIC"	EBU	EBL	EBT*	EBR	WBU	WBL	WBT*	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements			2,046													
Peak Season Correction Factor	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010
EXISTING CONDITIONS			**2,066**													

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Premiere Towers																
Brickell CitiCentre			597													
Brickell CitiCentre North Square			34													
TOTAL "VESTED" TRAFFIC			631													
Years To Buildout	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Yearly Growth Rate	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%
BACKGROUND TRAFFIC GROWTH			270													
NON-PROJECT TRAFFIC			**2,967**													

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering			100.0%													
	Exiting																

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																
	Net New			12													
TOTAL PROJECT TRAFFIC				**12**													
TOTAL TRAFFIC			**2,979**														

* Eastbound and westbound traffic calculated as the average of all traffic approaching from and departing to the adjacent intersections

PM PEAK HOUR

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: SW 7th Street and SW 1st Avenue
COUNT DATE: March 24, 2013
TIME PERIOD: PM Period
PEAK HOUR FACTOR: 0.96

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements						207	1,101								658	291
Peak Season Correction Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
EXISTING CONDITIONS						**207**	**1,101**								**658**	**291**

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
600 Brickell						29	263									
1101 Brickell																
The Beacon																
888 Brickell																
Premiere Towers						7	26								49	
Brickell Station							7									6
Millecento							12								22	
Brickell CitiCentre					41	136	509			12					238	12
Brickell CitiCentre North Square						12	58								32	47
TOTAL "VESTED" TRAFFIC					41	184	875			12					341	65
Years To Buildout	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Yearly Growth Rate	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%
BACKGROUND TRAFFIC GROWTH						27	144								86	38
NON-PROJECT TRAFFIC					**41**	**418**	**2,120**			**12**					**1,085**	**394**

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering						25.0%									30.0%	
	Exiting						13.0%	36.0%									

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																
	Net New						12	3								11	
TOTAL PROJECT TRAFFIC						**0**	**12**	**3**			**0**					**11**	**0**
TOTAL TRAFFIC						**41**	**430**	**2,123**			**12**					**1,096**	**394**

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: SW 7th Street and Miami Avenue
COUNT DATE: March 24, 2013
TIME PERIOD: PM Period
PEAK HOUR FACTOR: 0.95

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements							1,028	114		429	518					
Peak Season Correction Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
EXISTING CONDITIONS							**1,028**	**114**		**429**	**518**					

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
600 Brickell							292				76					
1101 Brickell																
The Beacon																
888 Brickell											35					
Premiere Towers							7			26	60					
Brickell Station							7				7					
Millecento										12	12					
Brickell CitiCentre							456	321		230	219					
Brickell CitiCentre North Square							70				156					
TOTAL "VESTED" TRAFFIC							832	321		268	565					
Years To Buildout	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Yearly Growth Rate	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%
BACKGROUND TRAFFIC GROWTH							135	15		56	68					
NON-PROJECT TRAFFIC							**1,995**	**450**		**753**	**1,151**					

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering							17.0%			8.0%						
	Exiting							4.0%			45.0%	30.0%					

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																
	Net New							7			8	4					
TOTAL PROJECT TRAFFIC								**7**	**0**		**8**	**4**					
TOTAL TRAFFIC								**2,002**	**450**		**761**	**1,155**					

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: SW 7th Street and Brickell Avenue
COUNT DATE: May 11, 2013
TIME PERIOD: PM Period
PEAK HOUR FACTOR: 0.94

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements						68	235	102		527	1,215	12		23	1,299	373
Peak Season Correction Factor	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020
EXISTING CONDITIONS						**69**	**240**	**104**		**538**	**1,239**	**12**		**23**	**1,325**	**380**

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
600 Brickell										48	10				117	10
1101 Brickell											53				70	
The Beacon											8					
888 Brickell															9	
Premiere Towers											9					7
Brickell Station											15				3	7
Millecento											2				4	
Brickell CitiCentre										49	142				0	90
Brickell CitiCentre North Square											10				9	70
TOTAL "VESTED" TRAFFIC						0	0	0		97	249	0		0	212	184
Years To Buildout	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Yearly Growth Rate	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%
BACKGROUND TRAFFIC GROWTH						9	31	14		70	162	2		3	173	50
NON-PROJECT TRAFFIC						**78**	**271**	**118**		**705**	**1,650**	**14**		**26**	**1,710**	**614**

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering										4.0%						13.0%
	Exiting										4.0%	13.0%					

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																
	Net New										2	2					5
TOTAL PROJECT TRAFFIC							**0**	**0**	**0**		**2**	**2**	**0**		**0**	**0**	**5**
TOTAL TRAFFIC							**78**	**271**	**118**		**707**	**1,652**	**14**		**26**	**1,710**	**619**

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: SW 8th Street and SW 1st Avenue
COUNT DATE: March 24, 2013
TIME PERIOD: PM Period
PEAK HOUR FACTOR: 0.93

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements			1,062	347										141	725	
Peak Season Correction Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
EXISTING CONDITIONS			**1,062**	**347**										**141**	**725**	

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
600 Brickell			85												29	
1101 Brickell			35													
The Beacon			42													
888 Brickell			6													
Premiere Towers				21											56	
Brickell Station			18													
Millecento				21											22	
Brickell CitiCentre			369											279	95	
Brickell CitiCentre North Square			111											27	17	
TOTAL "VESTED" TRAFFIC			666	42										306	219	
Years To Buildout	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Yearly Growth Rate	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%
BACKGROUND TRAFFIC GROWTH			139	45										18	95	
NON-PROJECT TRAFFIC			**1,867**	**434**										**465**	**1,039**	

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering			45.0%											55.0%		
	Exiting															13.0%	

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																
	Net New			18											21	2	
TOTAL PROJECT TRAFFIC				**18**	**0**										**21**	**2**	
TOTAL TRAFFIC				**1,885**	**434**										**486**	**1,041**	

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: SW 8th Street and Miami Avenue
COUNT DATE: March 24, 2013
TIME PERIOD: PM Period
PEAK HOUR FACTOR: 0.97

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements		291	967								697	51				
Peak Season Correction Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
EXISTING CONDITIONS		**291**	**967**								**697**	**51**				

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
600 Brickell		66	19								10					
1101 Brickell			35													
The Beacon			42									2				
888 Brickell			6								35					
Premiere Towers											86	9				
Brickell Station		7	11													
Millecento											24					
Brickell CitiCentre		424	233								25	41				
Brickell CitiCentre North Square		138									18					
TOTAL "VESTED" TRAFFIC		635	346								198	52				
Years To Buildout	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Yearly Growth Rate	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%
BACKGROUND TRAFFIC GROWTH		38	127								91	7				
NON-PROJECT TRAFFIC		**964**	**1,440**								**986**	**110**				

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering											8.0%					
	Exiting		75.0%	25.0%													

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																
	Net New		9	3								3					
TOTAL PROJECT TRAFFIC			**9**	**3**								**3**	**0**				
TOTAL TRAFFIC			**973**	**1,443**								**989**	**110**				

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: SW 8th Street and Brickell Avenue
COUNT DATE: May 11, 2013
TIME PERIOD: PM Period
PEAK HOUR FACTOR: 0.94

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements		266	456	201		283		527			936	194		318	1,083	
Peak Season Correction Factor	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020
EXISTING CONDITIONS		**271**	**465**	**205**		**289**		**538**			**955**	**198**		**324**	**1,105**	

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
600 Brickell		19									39				117	
1101 Brickell			17	18				16			37			35	35	
The Beacon		8		9												
888 Brickell				6		2					37	6			9	
Premiere Towers		9														
Brickell Station		11									4				3	
Millecento		2													4	
Brickell CitiCentre		142	59	12				41			8			0	0	
Brickell CitiCentre North Square								7			3			7	2	
TOTAL "VESTED" TRAFFIC		191	76	45		2		64			128	6		42	170	
Years To Buildout	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Yearly Growth Rate	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%
BACKGROUND TRAFFIC GROWTH		35	61	27		38		70			125	26		42	145	
NON-PROJECT TRAFFIC		**497**	**602**	**277**		**329**		**672**			**1,208**	**230**		**408**	**1,420**	

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering								3.0%			1.0%					
	Exiting		17.0%	3.0%	5.0%												

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																
	Net New		2	0	1				1			1					
TOTAL PROJECT TRAFFIC			**2**	**0**	**1**		**0**		**1**			**1**	**0**		**0**	**0**	
TOTAL TRAFFIC			**499**	**602**	**278**		**329**		**673**			**1,209**	**230**		**408**	**1,420**	

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: S Miami Avenue and S 9th Street
COUNT DATE: April 26, 2013
TIME PERIOD: PM Period
PEAK HOUR FACTOR: 0.93

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements							33	142		120	648	26				
Peak Season Correction Factor	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010
EXISTING CONDITIONS							**33**	**143**		**121**	**654**	**26**				

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
600 Brickell											10					
1101 Brickell																
The Beacon							12				2					
888 Brickell											35					
Premiere Towers										43						
Brickell Station																
Millecento																
Brickell CitiCentre											66					
Brickell CitiCentre North Square											4					
TOTAL "VESTED" TRAFFIC							12	0		43	117	0				
Years To Buildout	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Yearly Growth Rate	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%
BACKGROUND TRAFFIC GROWTH							4	19		16	86	3				
NON-PROJECT TRAFFIC							**49**	**162**		**180**	**857**	**29**				

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering											8.0%					
	Exiting																

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																
	Net New											3					
TOTAL PROJECT TRAFFIC								**0**	**0**		**0**	**3**	**0**				
TOTAL TRAFFIC								**49**	**162**		**180**	**860**	**29**				

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: SW 9th Street and SW 1st Avenue
COUNT DATE: February 5, 2013
TIME PERIOD: PM Period
PEAK HOUR FACTOR: 0.93

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements						173									904	
Peak Season Correction Factor	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020
EXISTING CONDITIONS						**176**									**922**	

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
600 Brickell																
1101 Brickell																
The Beacon																
888 Brickell																
Premiere Towers																
Brickell Station															45	
Millecento															7	
Brickell CitiCentre																
Brickell CitiCentre North Square																
TOTAL "VESTED" TRAFFIC						0									52	
Years To Buildout	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Yearly Growth Rate	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%
BACKGROUND TRAFFIC GROWTH						23									121	
NON-PROJECT TRAFFIC						**199**									**1,095**	

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering																
	Exiting															13.0%	

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																
	Net New															2	
TOTAL PROJECT TRAFFIC							**0**									**2**	
TOTAL TRAFFIC							**199**									**1,097**	

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: East Driveway at SW 8th Street (Without Project)
COUNT DATE: October 30, 2013
TIME PERIOD: PM Period
PEAK HOUR FACTOR: 0.93

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT*	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements			1,253	5								5				
Peak Season Correction Factor	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010
EXISTING CONDITIONS			**1,266**	**5**								**5**				

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
600 Brickell			85													
1101 Brickell			35													
The Beacon			42													
888 Brickell			6													
Premiere Towers																
Brickell Station			18													
Millecento																
Brickell CitiCentre			657													
Brickell CitiCentre North Square			138													
TOTAL "VESTED" TRAFFIC			981	0								0				
Years To Buildout	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Yearly Growth Rate	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%
BACKGROUND TRAFFIC GROWTH			166	1								1				
NON-PROJECT TRAFFIC			**2,413**	**6**								**6**				

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering				100.0%												
	Exiting												100.0%				

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																
	Net New				39								12				
TOTAL PROJECT TRAFFIC				**0**	**39**								**12**				
TOTAL TRAFFIC			**2,413**	**45**								**18**				

* Northbound traffic calculated as the average of all traffic approaching from and departing to the adjacent intersections

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: West Driveway at SW 8th Street (Without Project)
COUNT DATE: October 30, 2013
TIME PERIOD: PM Period
PEAK HOUR FACTOR: 0.93

"EXISTING TRAFFIC"	EBU	EBL	EBT*	EBR	WBU	WBL	WBT*	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements			1,212	11								46				
Peak Season Correction Factor	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010
EXISTING CONDITIONS			**1,224**	**11**								**46**				

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
600 Brickell			85													
1101 Brickell			35													
The Beacon			42													
888 Brickell			6													
Premiere Towers																
Brickell Station			18													
Millecento																
Brickell CitiCentre			657													
Brickell CitiCentre North Square			138													
TOTAL "VESTED" TRAFFIC			981	0								0				
Years To Buildout	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Yearly Growth Rate	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%
BACKGROUND TRAFFIC GROWTH			160	1								6				
NON-PROJECT TRAFFIC			**2,365**	**12**								**52**				

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering			100.0%													
	Exiting																

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																
	Net New			39													
TOTAL PROJECT TRAFFIC				**39**	**0**								**0**				
TOTAL TRAFFIC			**2,404**	**12**								**52**				

* Eastbound and westbound traffic calculated as the average of all traffic approaching from and departing to the adjacent intersections

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: East Driveway at SW 8th Street (With Project)
COUNT DATE: October 30, 2013
TIME PERIOD: PM Period
PEAK HOUR FACTOR: 0.93

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT*	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements			1,207	18								132				
Peak Season Correction Factor	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010
EXISTING CONDITIONS			**1,219**	**18**								**133**				

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
600 Brickell			85													
1101 Brickell			35													
The Beacon			42													
888 Brickell			6													
Premiere Towers																
Brickell Station			18													
Millecento																
Brickell CitiCentre			657													
Brickell CitiCentre North Square			138													
TOTAL "VESTED" TRAFFIC			981	0								0				
Years To Buildout	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Yearly Growth Rate	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%
BACKGROUND TRAFFIC GROWTH			160	2								17				
NON-PROJECT TRAFFIC			**2,360**	**20**								**150**				

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering				100.0%												
	Exiting												100.0%				

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																
	Net New				39								12				
TOTAL PROJECT TRAFFIC				**0**	**39**								**12**				
TOTAL TRAFFIC			**2,360**	**59**								**162**				

* Northbound traffic calculated as the average of all traffic approaching from and departing to the adjacent intersections

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: West Driveway at SW 8th Street (With Project)
COUNT DATE: October 30, 2013
TIME PERIOD: PM Period
PEAK HOUR FACTOR: 0.93

"EXISTING TRAFFIC"	EBU	EBL	EBT*	EBR	WBU	WBL	WBT*	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements			1,223													
Peak Season Correction Factor	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010
EXISTING CONDITIONS			**1,235**													

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
600 Brickell			85													
1101 Brickell			35													
The Beacon			42													
888 Brickell			6													
Premiere Towers																
Brickell Station			18													
Millecento																
Brickell CitiCentre			657													
Brickell CitiCentre North Square			138													
TOTAL "VESTED" TRAFFIC			981													
Years To Buildout	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Yearly Growth Rate	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%
BACKGROUND TRAFFIC GROWTH			162													
NON-PROJECT TRAFFIC			**2,378**													

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering			100.0%													
	Exiting																

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																
	Net New			39													
TOTAL PROJECT TRAFFIC				**39**													
TOTAL TRAFFIC			**2,417**														

* Eastbound and westbound traffic calculated as the average of all traffic approaching from and departing to the adjacent intersections

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: SW 7th Street and SW 1st Avenue
COUNT DATE: March 24, 2012
TIME PERIOD: AM Period
PEAK HOUR FACTOR: 0.96

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements						124	771								601	299
Peak Season Correction Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
EXISTING CONDITIONS						**124**	**771**								**601**	**299**

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Premiere Towers						9	25								58	
Brickell CitiCentre					8	76	63			69					243	16
TOTAL "VESTED" TRAFFIC					8	85	88			69					301	16
Years To Buildout	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Yearly Growth Rate	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%
BACKGROUND TRAFFIC GROWTH						13	78								61	30
NON-PROJECT TRAFFIC					**8**	**222**	**937**			**69**					**963**	**345**

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering															11.0%	
	Exiting						2.0%	11.0%								5.0%	34.0%

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																
	Net New						2	11								12	33
TOTAL PROJECT TRAFFIC						**0**	**2**	**11**			**0**					**12**	**33**
TOTAL TRAFFIC					**8**	**224**	**948**			**69**					**975**	**378**

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: SW 7th Street and Miami Avenue
COUNT DATE: March 24, 2012
TIME PERIOD: AM Period
PEAK HOUR FACTOR: 0.97

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements							649	73		278	523					
Peak Season Correction Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
EXISTING CONDITIONS							**649**	**73**		**278**	**523**					

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Premiere Towers							9			25	56					
Brickell CitiCentre							122	125		25	33					
TOTAL "VESTED" TRAFFIC							131	125		50	89					
Years To Buildout	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Yearly Growth Rate	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%
BACKGROUND TRAFFIC GROWTH							66	7		28	53					
NON-PROJECT TRAFFIC							**846**	**205**		**356**	**665**					

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering											63.0%					
	Exiting							13.0%									

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																
	Net New							13				38					
TOTAL PROJECT TRAFFIC								**13**	**0**		**0**	**38**					
TOTAL TRAFFIC								**859**	**205**		**356**	**703**					

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: SW 7th Street and Brickell Avenue
COUNT DATE: May 11, 2012
TIME PERIOD: AM Period
PEAK HOUR FACTOR: 0.93

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements						4	39	43		363	1,287	252		202	1,131	163
Peak Season Correction Factor	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020
EXISTING CONDITIONS						**4**	**40**	**44**		**370**	**1,313**	**257**		**206**	**1,154**	**166**

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Premiere Towers											8					9
Brickell CitiCentre										50	20				10	100
						122	759									
TOTAL "VESTED" TRAFFIC						122	759	0		50	28	0		0	10	109
Years To Buildout	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Yearly Growth Rate	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%
BACKGROUND TRAFFIC GROWTH						0	4	4		37	133	26		21	117	17
NON-PROJECT TRAFFIC						**126**	**803**	**48**		**457**	**1,474**	**283**		**227**	**1,281**	**292**

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering											4.0%					
	Exiting															4.0%	13.0%

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																
	Net New											3				4	13
TOTAL PROJECT TRAFFIC							**0**	**0**	**0**		**0**	**3**	**0**		**0**	**4**	**13**
TOTAL TRAFFIC							**126**	**803**	**48**		**457**	**1,477**	**283**		**227**	**1,285**	**305**

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: SE 1st Avenue and SE 5th Street
COUNT DATE: May 11, 2012
TIME PERIOD: AM Period
PEAK HOUR FACTOR: 0.94

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements				10		101	29			21		49				
Peak Season Correction Factor	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020
EXISTING CONDITIONS				**10**		**103**	**30**			**21**		**50**				

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Premiere Towers																
Brickell CitiCentre										16		20				
TOTAL "VESTED" TRAFFIC				0		0	0			16		20				
Years To Buildout	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Yearly Growth Rate	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%
BACKGROUND TRAFFIC GROWTH				1		10	3			2		5				
NON-PROJECT TRAFFIC				**11**		**113**	**33**			**39**		**75**				

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering				12.0%		3.0%	3.0%			6.0%						
	Exiting			23.0%	18.0%						5.0%		5.0%				

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																
	Net New			23	24		2	2			8		4				
TOTAL PROJECT TRAFFIC				**23**	**24**		**2**	**2**			**8**		**4**				
TOTAL TRAFFIC				**23**	**35**		**115**	**35**			**47**		**79**				

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: SE 1st Avenue and SE 6th Street
COUNT DATE: May 11, 2012
TIME PERIOD: AM Period
PEAK HOUR FACTOR: 0.92

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements		62	73				26	8						5		106
Peak Season Correction Factor	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020
EXISTING CONDITIONS		**63**	**74**				**27**	**8**						**5**		**108**

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Premiere Towers																
Brickell CitiCentre		36	10													
TOTAL "VESTED" TRAFFIC		36	10				0	0						0		0
Years To Buildout	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Yearly Growth Rate	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%
BACKGROUND TRAFFIC GROWTH		6	7				3	1						1		11
NON-PROJECT TRAFFIC		**105**	**91**				**30**	**9**						**6**		**119**

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering		6.0%					18.0%									15.0%
	Exiting		10.0%	9.0%													18.0%

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																
	Net New		12	9				11									26
TOTAL PROJECT TRAFFIC			**12**	**9**				**11**	**0**						**0**		**26**
TOTAL TRAFFIC			**117**	**100**				**41**	**9**						**6**		**145**

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: Brickell Avenue and SE 5th Street
COUNT DATE: May 11, 2012
TIME PERIOD: AM Period
PEAK HOUR FACTOR: 0.94

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements		64	6	93		49	8	57		98	984	61		71	1,383	93
Peak Season Correction Factor	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020
EXISTING CONDITIONS		**65**	**6**	**95**		**50**	**8**	**58**		**100**	**1,004**	**62**		**72**	**1,411**	**95**

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Premiere Towers											8				9	
Brickell CitiCentre		20									20				100	
TOTAL "VESTED" TRAFFIC		20	0	0		0	0	0		0	28	0		0	109	0
Years To Buildout	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Yearly Growth Rate	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%
BACKGROUND TRAFFIC GROWTH		7	1	10		5	1	6		10	102	6		7	143	10
NON-PROJECT TRAFFIC		**92***	**7**	**105**		**55**	**9**	**64**		**245***	**1,134**	**68**		**79**	**1,663**	**105**

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering										4.0%					18.0%	2.0%
	Exiting		20.0%		8.0%												

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																
	Net New		19		8						3					11	1
TOTAL PROJECT TRAFFIC			**19**	**0**	**8**		**0**	**0**	**0**		**3**	**0**	**0**		**0**	**11**	**1**
TOTAL TRAFFIC			**111**	**7**	**113**		**55**	**9**	**64**		**248**	**1,134**	**68**		**79**	**1,674**	**106**

Note: * Includes re-routed traffic from SE 6th Street

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: Brickell Avenue and SE 6th Street
COUNT DATE: May 11, 2012
TIME PERIOD: AM Period
PEAK HOUR FACTOR: 0.93

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements				26						121	1,169				1,491	24
Peak Season Correction Factor	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020
EXISTING CONDITIONS				**27**						**123**	**1,192**				**1,521**	**24**

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Premiere Towers											8				9	
Brickell CitiCentre				10							20				100	
TOTAL "VESTED" TRAFFIC				10						0	28				109	0
Years To Buildout	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Yearly Growth Rate	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%
BACKGROUND TRAFFIC GROWTH				3						12	121				154	2
NON-PROJECT TRAFFIC		******		**40**						**0***	**1,476***				**1,784**	**26**

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering											4.0%					18.0%
	Exiting				9.0%											8.0%	

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																
	Net New				9							3				8	11
TOTAL PROJECT TRAFFIC			**0**		**9**						**0**	**3**				**8**	**11**
TOTAL TRAFFIC			**0**		**49**						**0**	**1,479**				**1,792**	**37**

Note: * NBL traffic re-routed through SE 5th Street. Traffic was removed from NBL and added to NBT.
** EBL traffic re-routed through SE 5th Street.

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: SW 8th Street and SW 1st Avenue
COUNT DATE: March 24, 2012
TIME PERIOD: AM Period
PEAK HOUR FACTOR: 0.97

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements			1,775	485										204	456	
Peak Season Correction Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
EXISTING CONDITIONS			**1,775**	**485**										**204**	**456**	

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Premiere Towers				26											67	
Brickell CitiCentre			377											293	26	
TOTAL "VESTED" TRAFFIC			377	26										293	93	
Years To Buildout	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Yearly Growth Rate	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%
BACKGROUND TRAFFIC GROWTH			180	49										21	46	
NON-PROJECT TRAFFIC			**2,332**	**560**										**518**	**595**	

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering			45.0%											11.0%		
	Exiting															7.0%	

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																
	Net New			27											7	7	
TOTAL PROJECT TRAFFIC				**27**	**0**										**7**	**7**	
TOTAL TRAFFIC				**2,359**	**560**										**525**	**602**	

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: SW 8th Street and Miami Avenue
COUNT DATE: March 24, 2012
TIME PERIOD: AM Period
PEAK HOUR FACTOR: 0.97

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements		227	1,612								587	68				
Peak Season Correction Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
EXISTING CONDITIONS		**227**	**1,612**								**587**	**68**				

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Premiere Towers											81	8				
Brickell CitiCentre		33	564								25	42				
TOTAL "VESTED" TRAFFIC		33	564								106	50				
Years To Buildout	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Yearly Growth Rate	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%
BACKGROUND TRAFFIC GROWTH		23	163								59	7				
NON-PROJECT TRAFFIC		**283**	**2,339**								**752**	**125**				

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering		56.0%									7.0%					
	Exiting																

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																
	Net New		34									4					
TOTAL PROJECT TRAFFIC			**34**	**0**								**4**	**0**				
TOTAL TRAFFIC			**317**	**2,339**								**756**	**125**				

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: SW 8th Street and Brickell Plaza
COUNT DATE: April 26, 2012
TIME PERIOD: AM Period
PEAK HOUR FACTOR: 0.97

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements			1,420	265								69		4	4	
Peak Season Correction Factor	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010
EXISTING CONDITIONS			**1,434**	**268**								**70**		**4**	**4**	

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Premiere Towers			8													
Brickell CitiCentre		469	26											4		
TOTAL "VESTED" TRAFFIC		469	34	0								0		4	0	
Years To Buildout	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Yearly Growth Rate	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%
BACKGROUND TRAFFIC GROWTH			145	27								7		0	0	
NON-PROJECT TRAFFIC		**469**	**1,613**	**295**								**77**		**8**	**4**	

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering																
	Exiting																

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																
	Net New																
TOTAL PROJECT TRAFFIC			**0**	**0**	**0**								**0**		**0**	**0**	
TOTAL TRAFFIC			**469**	**1,613**	**295**								**77**		**8**	**4**	

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: SW 8th Street and Brickell Avenue
COUNT DATE: May 11, 2012
TIME PERIOD: AM Period
PEAK HOUR FACTOR: 0.94

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements		525	694	217		229		538			834	229		340	803	
Peak Season Correction Factor	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020
EXISTING CONDITIONS		**536**	**708**	**221**		**234**		**549**			**851**	**234**		**347**	**819**	

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Premiere Towers		8														
Brickell CitiCentre		20	10					42			8			7	3	
TOTAL "VESTED" TRAFFIC		28	10	0		0		42			8	0		7	3	
Years To Buildout	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Yearly Growth Rate	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%
BACKGROUND TRAFFIC GROWTH		54	72	22		24		56			86	24		35	83	
NON-PROJECT TRAFFIC		**618**	**790**	**243**		**258**		**647**			**945**	**258**		**389**	**905**	

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering								3.0%			1.0%					
	Exiting														3.0%	1.0%	

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																
	Net New								2			1			3	1	
TOTAL PROJECT TRAFFIC			**0**	**0**	**0**		**0**		**2**			**1**	**0**		**3**	**1**	
TOTAL TRAFFIC			**618**	**790**	**243**		**258**		**649**			**946**	**258**		**392**	**906**	

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: S Miami Avenue and S 6th Street
COUNT DATE: March 24, 2012
TIME PERIOD: AM Period
PEAK HOUR FACTOR: 0.9

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements		1	1				2	130			473	134				
Peak Season Correction Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
EXISTING CONDITIONS		**1**	**1**				**2**	**130**			**473**	**134**				

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Premiere Towers											56					
Brickell CitiCentre								13			82	8				
TOTAL "VESTED" TRAFFIC		0	0				0	13			138	8				
Years To Buildout	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Yearly Growth Rate	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%
BACKGROUND TRAFFIC GROWTH		0	0				0	13			48	14				
NON-PROJECT TRAFFIC		**1**	**1**				**2**	**156**			**659**	**156**				

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering												63.0%				
	Exiting								24.0%								

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																
	Net New								23				38				
TOTAL PROJECT TRAFFIC			**0**	**0**				**0**	**23**			**0**	**38**				
TOTAL TRAFFIC			**1**	**1**				**2**	**179**			**659**	**194**				

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: SE 5th Street and Residential Driveway
COUNT DATE: May 11, 2012
TIME PERIOD: AM Period
PEAK HOUR FACTOR: 0.94

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements			10				51									
Peak Season Correction Factor	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020
EXISTING CONDITIONS			**10**				**52**									

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Premiere Towers																
Brickell CitiCentre																
TOTAL "VESTED" TRAFFIC			0				0									
Years To Buildout	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Yearly Growth Rate	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%
BACKGROUND TRAFFIC GROWTH			1				5									
NON-PROJECT TRAFFIC			**11**				**57**									

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering			12.0%	1.0%		9.0%										
	Exiting							5.0%			34.0%		41.0%				

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																
	Net New			7	1		5	5			33		40				
TOTAL PROJECT TRAFFIC				**7**	**1**		**5**	**5**			**33**		**40**				
TOTAL TRAFFIC			**18**	**1**		**5**	**62**			**33**		**40**				

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: SE 6th Street and Retail Driveway
COUNT DATE: May 11, 2012
TIME PERIOD: AM Period
PEAK HOUR FACTOR: 0.92

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements			135				132									
Peak Season Correction Factor	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020
EXISTING CONDITIONS			**138**				**135**									

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Premiere Towers																
Brickell CitiCentre																
TOTAL "VESTED" TRAFFIC			0				0									
Years To Buildout	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Yearly Growth Rate	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%
BACKGROUND TRAFFIC GROWTH			14				14									
NON-PROJECT TRAFFIC			**152**				**149**									

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering		57.0%	6.0%					33.0%								
	Exiting							18.0%							19.0%		6.0%

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																
	Net New		35	3				17	20						18		6
TOTAL PROJECT TRAFFIC			**35**	**3**				**17**	**20**						**18**		**6**
TOTAL TRAFFIC			**35**	**155**				**166**	**20**						**18**		**6**

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: SW 7th Street and SW 1st Avenue
COUNT DATE: March 24, 2012
TIME PERIOD: PM Period
PEAK HOUR FACTOR: 0.96

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements						200	1,065								636	281
Peak Season Correction Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
EXISTING CONDITIONS						**200**	**1,065**								**636**	**281**

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
600 Brickell						29	263									
1101 Brickell																
The Beacon																
888 Brickell																
Premiere Towers						7	26								49	
Brickell Station							7									6
Millecento							12								22	
Brickell CitiCentre					41	136	509			12					238	12
TOTAL "VESTED" TRAFFIC					41	172	817			12					309	18
Years To Buildout	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Yearly Growth Rate	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%
BACKGROUND TRAFFIC GROWTH						20	108								64	28
NON-PROJECT TRAFFIC					**41**	**392**	**1,990**			**12**					**1,009**	**327**

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering															11.0%	
	Exiting						5.0%	25.0%								2.0%	20.0%

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																
	Net New						12	58								32	47
TOTAL PROJECT TRAFFIC						**0**	**12**	**58**			**0**					**32**	**47**
TOTAL TRAFFIC					**41**	**404**	**2,048**			**12**					**1,041**	**374**

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: SW 7th Street and Miami Avenue
COUNT DATE: March 24, 2012
TIME PERIOD: PM Period
PEAK HOUR FACTOR: 0.95

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements							995	111		415	501					
Peak Season Correction Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
EXISTING CONDITIONS							**995**	**111**		**415**	**501**					

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
600 Brickell							292				76					
1101 Brickell																
The Beacon																
888 Brickell											35					
Premiere Towers							7			26	60					
Brickell Station							7				7					
Millecento										12	12					
Brickell CitiCentre							456	321		230	219					
TOTAL "VESTED" TRAFFIC							762	321		268	409					
Years To Buildout	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Yearly Growth Rate	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%
BACKGROUND TRAFFIC GROWTH							101	11		42	51					
NON-PROJECT TRAFFIC							**1,858**	**443**		**725**	**961**					

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering											63.0%					
	Exiting							30.0%									

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																
	Net New							70				156					
TOTAL PROJECT TRAFFIC								**70**	**0**		**0**	**156**					
TOTAL TRAFFIC								**1,928**	**443**		**725**	**1,117**					

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: SW 7th Street and Brickell Avenue
COUNT DATE: May 11, 2012
TIME PERIOD: PM Period
PEAK HOUR FACTOR: 0.94

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements						66	227	98		510	1,176	11		23	1,257	360
Peak Season Correction Factor	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020
EXISTING CONDITIONS						**67**	**232**	**100**		**520**	**1,200**	**11**		**23**	**1,282**	**367**

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
600 Brickell										48	10				117	10
1101 Brickell											53				70	
The Beacon											8					
888 Brickell															9	
Premiere Towers											9					7
Brickell Station											15				3	7
Millecento											2				4	
Brickell CitiCentre										49	142				0	90
TOTAL "VESTED" TRAFFIC						0	0	0		97	239	0		0	203	114
Years To Buildout	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Yearly Growth Rate	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%
BACKGROUND TRAFFIC GROWTH						7	23	10		53	121	1		2	130	37
NON-PROJECT TRAFFIC						**74**	**255**	**110**		**670**	**1,560**	**12**		**25**	**1,615**	**518**

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering											4.0%					
	Exiting															4.0%	30.0%

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																
	Net New											10				9	70
TOTAL PROJECT TRAFFIC							**0**	**0**	**0**		**0**	**10**	**0**		**0**	**9**	**70**
TOTAL TRAFFIC							**74**	**255**	**110**		**670**	**1,570**	**12**		**25**	**1,624**	**588**

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: SE 1st Avenue and SE 5th Street
COUNT DATE: May 11, 2012
TIME PERIOD: PM Period
PEAK HOUR FACTOR: 0.86

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements				5		112	19			19		46				
Peak Season Correction Factor	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020
EXISTING CONDITIONS				**5**		**114**	**19**			**19**		**47**				

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
600 Brickell																
1101 Brickell																
The Beacon																
888 Brickell																
Premiere Towers																
Brickell Station												7				
Millecento																
Brickell CitiCentre										25						
TOTAL "VESTED" TRAFFIC				0		0	0			25		7				
Years To Buildout	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Yearly Growth Rate	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%
BACKGROUND TRAFFIC GROWTH				1		12	2			2		5				
NON-PROJECT TRAFFIC				**6**		**126**	**21**			**46**		**59**				

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering				11.0%		3.0%	4.0%			9.0%						
	Exiting			1.0%	1.0%						20.0%		20.0%				

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																
	Net New			2	29		7	10			68		47				
TOTAL PROJECT TRAFFIC				**2**	**29**		**7**	**10**			**68**		**47**				
TOTAL TRAFFIC				**2**	**35**		**133**	**31**			**114**		**106**				

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: SE 1st Avenue and SE 6th Street
COUNT DATE: May 11, 2012
TIME PERIOD: PM Period
PEAK HOUR FACTOR: 0.89

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements		48	56				28	17						2		115
Peak Season Correction Factor	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020
EXISTING CONDITIONS		**49**	**57**				**29**	**17**						**2**		**117**

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
600 Brickell			76													
1101 Brickell																
The Beacon																
888 Brickell																
Premiere Towers																
Brickell Station		7														
Millecento																
Brickell CitiCentre		25					8									
TOTAL "VESTED" TRAFFIC		32	76				8	0						0		0
Years To Buildout	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Yearly Growth Rate	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%
BACKGROUND TRAFFIC GROWTH		5	6				3	2						0		12
NON-PROJECT TRAFFIC		**86**	**139**				**40**	**19**						**2**		**129**

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering		9.0%					17.0%									14.0%
	Exiting		40.0%	33.0%													1.0%

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																
	Net New		115	77				42									37
TOTAL PROJECT TRAFFIC			**115**	**77**				**42**	**0**						**0**		**37**
TOTAL TRAFFIC			**201**	**216**				**82**	**19**						**2**		**166**

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: Brickell Avenue and SE 5th Street
COUNT DATE: May 11, 2012
TIME PERIOD: PM Period
PEAK HOUR FACTOR: 0.86

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements		56	2	77		66	15	48		53	1,090	57		74	1,402	145
Peak Season Correction Factor	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020
EXISTING CONDITIONS		**57**	**2**	**79**		**67**	**15**	**49**		**54**	**1,112**	**58**		**75**	**1,430**	**148**

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
600 Brickell											146				58	
1101 Brickell											53				70	
The Beacon											8					
888 Brickell															9	
Premiere Towers											9				7	
Brickell Station		10		10						15						15
Millecento											2				4	
Brickell CitiCentre		0									142				98	
TOTAL "VESTED" TRAFFIC		10	0	10		0	0	0		15	360	0		0	246	15
Years To Buildout	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Yearly Growth Rate	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%
BACKGROUND TRAFFIC GROWTH		6	0	8		7	2	5		5	113	6		8	145	15
NON-PROJECT TRAFFIC		**228***	**2**	**97**		**74**	**17**	**54**		**206***	**1,585**	**64**		**83**	**1,821**	**178**

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering										4.0%					17.0%	3.0%
	Exiting		20.0%		1.0%												

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																
	Net New		47		2						10					42	7
TOTAL PROJECT TRAFFIC			**47**	**0**	**2**		**0**	**0**	**0**		**10**	**0**	**0**		**0**	**42**	**7**
TOTAL TRAFFIC			**275**	**2**	**99**		**74**	**17**	**54**		**216**	**1,585**	**64**		**83**	**1,863**	**185**

Note: * Includes re-routed traffic from SE 6th Street

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: Brickell Avenue and SE 6th Street
COUNT DATE: May 11, 2012
TIME PERIOD: PM Period
PEAK HOUR FACTOR: 0.89

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements		8		32						109	1,130				1,478	41
Peak Season Correction Factor	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020
EXISTING CONDITIONS		**8**		**33**						**111**	**1,153**				**1,508**	**42**

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
600 Brickell		146		117						10					10	48
1101 Brickell											53				70	
The Beacon											8					
888 Brickell															9	
Premiere Towers											9				7	
Brickell Station											15				10	
Millecento											2				4	
Brickell CitiCentre				0							142				90	8
TOTAL "VESTED" TRAFFIC		146		117						10	229				200	56
Years To Buildout	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Yearly Growth Rate	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%
BACKGROUND TRAFFIC GROWTH		1		3						11	117				153	4
NON-PROJECT TRAFFIC		**0****		**153**						**0***	**1,631***				**1,861**	**102**

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering											4.0%					17.0%
	Exiting				33.0%											1.0%	

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																
	Net New				77							10				2	42
TOTAL PROJECT TRAFFIC			**0**		**77**						**0**	**10**				**2**	**42**
TOTAL TRAFFIC			**0**		**230**						**0**	**1,641**				**1,863**	**144**

Note: * NBL traffic re-routed through SE 5th Street. Traffic was removed from NBL and added to NBT.
** EBL traffic re-routed through SE 5th Street.

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: SW 8th Street and SW 1st Avenue
COUNT DATE: March 24, 2012
TIME PERIOD: PM Period
PEAK HOUR FACTOR: 0.93

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements			1,027	335										136	701	
Peak Season Correction Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
EXISTING CONDITIONS			**1,027**	**335**										**136**	**701**	

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
600 Brickell			85												29	
1101 Brickell			35													
The Beacon			42													
888 Brickell			6													
Premiere Towers				21											56	
Brickell Station			18													
Millecento				21											22	
Brickell CitiCentre			369											279	95	
TOTAL "VESTED" TRAFFIC			555	42										279	202	
Years To Buildout	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Yearly Growth Rate	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%
BACKGROUND TRAFFIC GROWTH			104	34										14	71	
NON-PROJECT TRAFFIC			**1,686**	**411**										**429**	**974**	

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering			45.0%											11.0%		
	Exiting															7.0%	

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																
	Net New			111											27	16	
TOTAL PROJECT TRAFFIC				**111**	**0**										**27**	**16**	
TOTAL TRAFFIC				**1,797**	**411**										**456**	**990**	

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: SW 8th Street and Miami Avenue
COUNT DATE: March 24, 2012
TIME PERIOD: PM Period
PEAK HOUR FACTOR: 0.97

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements		281	936								675	50				
Peak Season Correction Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
EXISTING CONDITIONS		**281**	**936**								**675**	**50**				

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
600 Brickell		66	19								10					
1101 Brickell			35													
The Beacon			42									2				
888 Brickell			6								35					
Premiere Towers											86	9				
Brickell Station		7	11													
Millecento											24					
Brickell CitiCentre		424	233								25	41				
TOTAL "VESTED" TRAFFIC		497	346								180	52				
Years To Buildout	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Yearly Growth Rate	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%
BACKGROUND TRAFFIC GROWTH		28	95								68	5				
NON-PROJECT TRAFFIC		**806**	**1,377**								**923**	**107**				

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering		56.0%									7.0%					
	Exiting																

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																
	Net New		138									18					
TOTAL PROJECT TRAFFIC			**138**	**0**								**18**	**0**				
TOTAL TRAFFIC			**944**	**1,377**								**941**	**107**				

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: SW 8th Street and Brickell Plaza
COUNT DATE: April 26, 2012
TIME PERIOD: PM Period
PEAK HOUR FACTOR: 0.85

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements			743	188								97		1	37	
Peak Season Correction Factor	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010
EXISTING CONDITIONS			**750**	**190**								**98**		**1**	**37**	

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
600 Brickell			19													
1101 Brickell			35													
The Beacon			17	13												
888 Brickell			6													
Premiere Towers			9													
Brickell Station			11													
Millecento												2				
Brickell CitiCentre		74	95											118		
TOTAL "VESTED" TRAFFIC		74	192	13								2		118	0	
Years To Buildout	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Yearly Growth Rate	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%
BACKGROUND TRAFFIC GROWTH			76	19								10		0	4	
NON-PROJECT TRAFFIC		**74**	**1,018**	**222**								**110**		**119**	**41**	

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering																
	Exiting																

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																
	Net New																
TOTAL PROJECT TRAFFIC			**0**	**0**	**0**								**0**		**0**	**0**	
TOTAL TRAFFIC			**74**	**1,018**	**222**								**110**		**119**	**41**	

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: SW 8th Street and Brickell Avenue
COUNT DATE: May 11, 2012
TIME PERIOD: PM Period
PEAK HOUR FACTOR: 0.94

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements		257	441	194		274		510			906	188		308	1,048	
Peak Season Correction Factor	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020
EXISTING CONDITIONS		**262**	**450**	**198**		**279**		**520**			**924**	**192**		**314**	**1,069**	

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
600 Brickell		19									39				117	
1101 Brickell			17	18				16			37			35	35	
The Beacon		8		9												
888 Brickell				6		2					37	6			9	
Premiere Towers		9														
Brickell Station		11									4				3	
Millecento		2													4	
Brickell CitiCentre		142	59	12				41			8			0	0	
TOTAL "VESTED" TRAFFIC		191	76	45		2		57			125	6		35	168	
Years To Buildout	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Yearly Growth Rate	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%
BACKGROUND TRAFFIC GROWTH		27	46	20		28		53			94	19		32	108	
NON-PROJECT TRAFFIC		**480**	**572**	**263**		**309**		**630**			**1,143**	**217**		**381**	**1,345**	

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering								3.0%			1.0%					
	Exiting														3.0%	1.0%	

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																
	Net New								7			3			7	2	
TOTAL PROJECT TRAFFIC			**0**	**0**	**0**		**0**		**7**			**3**	**0**		**7**	**2**	
TOTAL TRAFFIC			**480**	**572**	**263**		**309**		**637**			**1,146**	**217**		**388**	**1,347**	

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: S Miami Avenue and S 6th Street
COUNT DATE: March 24, 2012
TIME PERIOD: PM Period
PEAK HOUR FACTOR: 0.89

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements		3	0				2	141		1	564	104				
Peak Season Correction Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
EXISTING CONDITIONS		**3**	**0**				**2**	**141**		**1**	**564**	**104**				

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
600 Brickell								29				76				
1101 Brickell																
The Beacon																
888 Brickell											35					
Premiere Towers											60					
Brickell Station												7				
Millecento											12					
Brickell CitiCentre								0			343	25				
TOTAL "VESTED" TRAFFIC		0	0				0	29		0	450	108				
Years To Buildout	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Yearly Growth Rate	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%
BACKGROUND TRAFFIC GROWTH		0	0				0	14		0	57	11				
NON-PROJECT TRAFFIC		**3**	**0**				**2**	**184**		**1**	**1,071**	**223**				

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering												63.0%				
	Exiting								24.0%								

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																
	Net New								56				156				
TOTAL PROJECT TRAFFIC			**0**	**0**				**0**	**56**		**0**	**0**	**156**				
TOTAL TRAFFIC			**3**	**0**				**2**	**240**		**1**	**1,071**	**379**				

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: SE 5th Street and Residential Driveway
COUNT DATE: May 11, 2012
TIME PERIOD: PM Period
PEAK HOUR FACTOR: 0.86

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements			5				39									
Peak Season Correction Factor	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020
EXISTING CONDITIONS			**5**				**40**									

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
600 Brickell																
1101 Brickell																
The Beacon																
888 Brickell																
Premiere Towers																
Brickell Station																
Millecento																
Brickell CitiCentre							25									
TOTAL "VESTED" TRAFFIC			0				25									
Years To Buildout	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Yearly Growth Rate	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%
BACKGROUND TRAFFIC GROWTH			1				4									
NON-PROJECT TRAFFIC			**6**				**69**									

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering			11.0%	2.0%		13.0%										
	Exiting							20.0%			2.0%		2.0%				

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																
	Net New			27	5		31	47			5		4				
TOTAL PROJECT TRAFFIC				**27**	**5**		**31**	**47**			**5**		**4**				
TOTAL TRAFFIC			**33**	**5**		**31**	**116**			**5**		**4**				

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: SE 6th Street and Retail Driveway
COUNT DATE: May 11, 2012
TIME PERIOD: PM Period
PEAK HOUR FACTOR: 0.89

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements			104				143									
Peak Season Correction Factor	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020
EXISTING CONDITIONS			**106**				**146**									

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
600 Brickell			76													
1101 Brickell																
The Beacon																
888 Brickell																
Premiere Towers																
Brickell Station			7													
Millecento																
Brickell CitiCentre			25													
TOTAL "VESTED" TRAFFIC			108				0									
Years To Buildout	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Yearly Growth Rate	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%	1.62%
BACKGROUND TRAFFIC GROWTH			11				15									
NON-PROJECT TRAFFIC			**225**				**161**									

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering		54.0%	9.0%					31.0%								
	Exiting							1.0%							73.0%		23.0%

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																
	Net New		134	22				2	77						170		54
TOTAL PROJECT TRAFFIC			**134**	**22**				**2**	**77**						**170**		**54**
TOTAL TRAFFIC			**134**	**247**				**163**	**77**						**170**		**54**

Appendix C

PART 2: INTERSECTION VOLUME DEVELOPMENT SHEETS

INTERSECTION ANALYSIS SHEET

SW 7th St @ SW 2nd Ave

"No-Build" - Opening Year

	N-S	E-W
Growth Rate =	0.88%	1.9%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	252	632	0	0	214	85	0	0	0	96	655	106
Peak Season Volume	252	632	0	0	214	85	0	0	0	96	655	106
	29%	71%	0%	0%	72%	28%				11%	76%	12%
Committed Trips	*19*	*39*	*0*	*0*	*0*	*37*	*0*	*0*	*0*	*11*	*294*	*11*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	5	33	5
Premiere Towers	0	0	0	0	0	0	0	0	0	3	19	3
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village												
Miami River Development SAP	18	39				37					74	
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	3	18	3
Brickell CitiCentre											148	
Walgreens												
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	1	0	0	0	0	0	0	0	0	0	1	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	287	711	0	0	228	127	0	0	0	120	1,040	132
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**287**	**711**	**0**	**0**	**228**	**127**	**0**	**0**	**0**	**120**	**1,040**	**132**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	253	458	0	0	264	179	0	0	0	86	1148	84
Peak Season Volume	253	458	0	0	264	179	0	0	0	86	1,148	84
	36%	64%	0%	0%	60%	40%				7%	87%	6%
Committed Trips	*30*	*77*	*0*	*0*	*0*	*80*	*0*	*0*	*0*	*31*	*1,072*	*27*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	7	91	6
Premiere Towers	0	0	0	0	0	0	0	0	0	2	23	2
600 Brickell	0	0	0	0	0	0	0	0	0	18	229	16
The Pointe at Brickell Village											28	
Miami River Development SAP	25	55				52					102	
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	0	3	0
Brickell CitiCentre											533	
Walgreens	3	22				26					14	
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	2	23	2
The Beacon	0	0	0	0	0	0	0	0	0	0	1	0
Brickell Station	0	0	0	0	0	0	0	0	0	1	7	0
888 Brickell	0	0	0	0	0	0	0	0	0	1	9	1
TD Bank	1	0	0	0	0	1	0	0	0	0	5	0
Church of Jesus Christ LDS	1	0	0	0	0	1	0	0	0	0	5	0
Background	299	564	0	0	281	270	0	0	0	129	2,380	123
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**299**	**564**	**0**	**0**	**281**	**270**	**0**	**0**	**0**	**129**	**2,380**	**123**

INTERSECTION ANALYSIS SHEET

SW 7th St @ SW 8th Ave

"No-Build" - Opening Year

	N-S	E-W
Growth Rate =	0.88%	1.0%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	65	286	0	0	256	88	0	0	0	47	563	62
Peak Season Volume	65	286	0	0	256	88	0	0	0	47	563	62
	19%	81%	0%	0%	74%	26%				7%	84%	9%
										7%	84%	9%
Committed Trips	*0*	*0*	*0*	*0*	*0*	*1*	*0*	*0*	*0*	*9*	*107*	*11*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	1	12	1
Premiere Towers	0	0	0	0	0	0	0	0	0	1	7	1
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	0	0
Miami River Development SAP	0	0	0	0	0	0	0	0	0	4	44	5
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	1	6	1
Brickell CitiCentre	0	0	0	0	0	0	0	0	0	3	34	4
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	0	0	0	1	0	0	0	0	4	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	69	304	0	0	272	95	0	0	0	59	712	78
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**69**	**304**	**0**	**0**	**272**	**95**	**0**	**0**	**0**	**59**	**712**	**78**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	92	193	0	0	173	66	0	0	0	64	1261	63
Peak Season Volume	92	193	0	0	173	66	0	0	0	64	1,261	63
	32%	68%	0%	0%	72%	28%				5%	91%	5%
Committed Trips	*2*	*0*	*0*	*0*	*0*	*2*	*0*	*0*	*0*	*23*	*475*	*20*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	2	43	2
Premiere Towers	0	0	0	0	0	0	0	0	0	2	11	0
600 Brickell	0	0	0	0	0	0	0	0	0	2	108	5
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	2	13	1
Miami River Development SAP	0	0	0	0	0	0	0	0	0	4	66	3
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	2	1	0
Brickell CitiCentre	0	0	0	0	0	0	0	0	0	2	168	7
Walgreens	0	0	0	0	0	0	0	0	0	2	20	1
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	1	11	0
The Beacon	0	0	0	0	0	0	0	0	0	1	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	1	3	0
888 Brickell	0	0	0	0	0	0	0	0	0	1	4	0
TD Bank	1	0	0	0	0	1	0	0	0	0	14	0
Church of Jesus Christ LDS	1	0	0	0	0	1	0	0	0	0	13	0
Background	100	205	0	0	184	72	0	0	0	92	1,830	88
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**100**	**205**	**0**	**0**	**184**	**72**	**0**	**0**	**0**	**92**	**1,830**	**88**

INTERSECTION ANALYSIS SHEET

SW 7th St @ SW 1st Ave

"No-Build" - Opening Year

	N-S	E-W
Growth Rate =	0.88%	1.9%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	0	0	0	0	611	304	0	0	0	126	783	0
Peak Season Volume	0	0	0	0	611	304	0	0	0	126	783	0
				0%	67%	33%				14%	86%	0%
Committed Trips	*0*	*0*	*0*	*0*	*317*	*70*	*0*	*0*	*0*	*89*	*246*	*0*
Brickell CitiCentre North 2					12	33				2	11	
Premiere Towers					58						25	
600 Brickell												
The Pointe at Brickell Village												
Miami River Development SAP	0	0	0	0	0	21	0	0	0	0	53	0
Brickell Bayview Center					4					11	24	
Brickell CitiCentre					243	16				76	132	
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	0	0	0	0	0	0	0	0	1	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	0	0	0	0	967	393	0	0	0	233	1,138	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**0**	**0**	**0**	**967**	**393**	**0**	**0**	**0**	**233**	**1,138**	**0**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	0	0	0	0	646	286	0	0	0	203	1178	0
Peak Season Volume	0	0	0	0	646	286	0	0	0	203	1,178	0
				0%	69%	31%				15%	85%	0%
Committed Trips	*0*	*0*	*0*	*0*	*360*	*84*	*0*	*0*	*0*	*197*	*1,045*	*0*
Brickell CitiCentre North 2					32	47				12	58	
Premiere Towers					49						26	
600 Brickell										29	263	
The Pointe at Brickell Village					30						28	
Miami River Development SAP	0	0	0	0	0	20	0	0	0	0	82	0
Brickell Bayview Center					11					12	3	
Brickell CitiCentre					238	12				136	521	
Walgreens	0	0	0	0	0	3	0	0	0	0	11	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	5	26	0
The Beacon	0	0	0	0	0	0	0	0	0	0	1	0
Brickell Station	0	0	0	0	0	0	0	0	0	1	8	0
888 Brickell	0	0	0	0	0	0	0	0	0	2	10	0
TD Bank	0	0	0	0	0	1	0	0	0	0	4	0
Church of Jesus Christ LDS	0	0	0	0	0	1	0	0	0	0	4	0
Background	0	0	0	0	1,047	388	0	0	0	428	2,387	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**0**	**0**	**0**	**1,047**	**388**	**0**	**0**	**0**	**428**	**2,387**	**0**

2013 Node: 4130

INTERSECTION ANALYSIS SHEET

SW 8th St @ Brickell Ave

"No-Build" - Opening Year

	N-S	E-W
Growth Rate =	0.88%	1.9%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	0	848	233	346	816	0	534	705	221	233	0	589
Peak Season Volume	0	848	233	346	816	0	534	705	221	233	0	589
	0%	78%	22%	30%	70%	0%	37%	48%	15%	28%	0%	72%
Committed Trips	*0*	*17*	*0*	*10*	*13*	*0*	*50*	*37*	*11*	*0*	*0*	*44*
Brickell CitiCentre North 2		1		3	1							2
Premiere Towers		8			9							
600 Brickell												
The Pointe at Brickell Village												
Miami River Development SAP	0	0	0	0	0	0	19	25	8	0	0	0
Brickell Bayview Center							11	2	3			
Brickell CitiCentre		8		7	3		20	10				42
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue												
The Beacon												
Brickell Station												
888 Brickell												
TD Bank	0	0	0	0	0	0	0	0	0	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	0	919	248	378	881	0	658	840	263	265	0	715
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**919**	**248**	**378**	**881**	**0**	**658**	**840**	**263**	**265**	**0**	**715**

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PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	0	921	191	313	1065	0	261	448	197	278	0	518
Peak Season Volume	0	921	191	313	1,065	0	261	448	197	278	0	518
	0%	83%	17%	23%	77%	0%	29%	49%	22%	35%	0%	65%
Committed Trips	*0*	*145*	*11*	*44*	*182*	*0*	*196*	*121*	*58*	*2*	*0*	*65*
Brickell CitiCentre North 2		3		7	2							7
Premiere Towers		9			7							
600 Brickell		38			117		19					
The Pointe at Brickell Village					6		6					
Miami River Development SAP	0	0	0	0	0	0	18	31	14	0	0	0
Brickell Bayview Center		1					2		1			1
Brickell CitiCentre		8					142	59	12			41
Walgreens	0	0	0	0	0	0	2	4	2	0	0	0
1101 Brickell Avenue		37		35	35			17	18			16
The Beacon							5	8	4			
Brickell Station		22	5	2	6							
888 Brickell		27	6		9				6	2		
TD Bank	0	0	0	0	0	0	0	1	0	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	1	1	1	0	0	0
Background	0	1,124	214	377	1,314	0	493	631	282	319	0	655
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**1,124**	**214**	**377**	**1,314**	**0**	**493**	**631**	**282**	**319**	**0**	**655**

2013 Node: 4130

INTERSECTION ANALYSIS SHEET

SW 8th St @ Miami Ave

"No-Build" - Opening Year

	N-S	E-W
Growth Rate =	0.88%	1.9%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	0	597	69	0	0	0	231	1638	0	0	0	0
Peak Season Volume	0	597	69	0	0	0	231	1,638	0	0	0	0
	0%	90%	10%				12%	88%	0%			
Committed Trips	*0*	*81*	*42*	*0*	*0*	*0*	*122*	*658*	*0*	*0*	*0*	*0*
Brickell CitiCentre North 2		4					34					
Premiere Towers		51						26				
600 Brickell												
The Pointe at Brickell Village												
Miami River Development SAP	0	0	0	0	0	0	7	51	0	0	0	0
Brickell Bayview Center		1					48	16				
Brickell CitiCentre		25	42				33	564				
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue												
The Beacon												
Brickell Station												
888 Brickell												
TD Bank	0	0	0	0	0	0	0	1	0	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	0	716	115	0	0	0	385	2,524	0	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**716**	**115**	**0**	**0**	**0**	**385**	**2,524**	**0**	**0**	**0**	**0**

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PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	0	686	51	0	0	0	286	951	0	0	0	0
Peak Season Volume	0	686	51	0	0	0	286	951	0	0	0	0
	0%	93%	7%				23%	77%	0%			
Committed Trips	*0*	*192*	*43*	*0*	*0*	*0*	*667*	*434*	*0*	*0*	*0*	*0*
Brickell CitiCentre North 2		18					138					
Premiere Towers		43						21				
600 Brickell		10					67	19				
The Pointe at Brickell Village		58										
Miami River Development SAP	0	0	0	0	0	0	19	63	0	0	0	0
Brickell Bayview Center		3					9	3				
Brickell CitiCentre		25	41				424	233				
Walgreens	0	0	0	0	0	0	2	8	0	0	0	0
1101 Brickell Avenue								35				
The Beacon			2					42				
Brickell Station							7					
888 Brickell		35						6				
TD Bank	0	0	0	0	0	0	0	1	0	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	1	3	0	0	0	0
Background	0	921	97	0	0	0	993	1,517	0	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**921**	**97**	**0**	**0**	**0**	**993**	**1,517**	**0**	**0**	**0**	**0**

2013 Node: 4130

INTERSECTION ANALYSIS SHEET

SW 8th St @ SW 1st Ave

"No-Build" - Opening Year

	N-S	E-W
Growth Rate =	0.88%	1.9%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	0	0	0	207	463	0	0	1554	493	0	0	0
Peak Season Volume	0	0	0	207	463	0	0	1,554	493	0	0	0
				31%	69%	0%	0%	76%	24%			
Committed Trips	*0*	*0*	*0*	*307*	*99*	*0*	*0*	*494*	*19*	*0*	*0*	*0*
Brickell CitiCentre North 2				7	7			27				
Premiere Towers					58			26				
600 Brickell												
The Pointe at Brickell Village												
Miami River Development SAP	0	0	0	0	0	0	0	59	18	0	0	0
Brickell Bayview Center				7	8			5				
Brickell CitiCentre				293	26			377				
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	0	0	0	0	0	1	0	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	0	0	0	527	591	0	0	2,264	581	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**0**	**0**	**527**	**591**	**0**	**0**	**2,264**	**581**	**0**	**0**	**0**

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PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	0	0	0	138	712	0	0	1044	340	0	0	0
Peak Season Volume	0	0	0	138	712	0	0	1,044	340	0	0	0
				16%	84%	0%	0%	75%	25%			
Committed Trips	*0*	*0*	*0*	*338*	*222*	*0*	*0*	*782*	*60*	*0*	*0*	*0*
Brickell CitiCentre North 2				27	17			111				
Premiere Towers					49			21				
600 Brickell					29			86				
The Pointe at Brickell Village					30				28			
Miami River Development SAP	0	0	0	0	0	0	0	82	27	0	0	0
Brickell Bayview Center				21	2			18				
Brickell CitiCentre				279	95			369				
Walgreens	0	0	0	0	0	0	0	11	4	0	0	0
1101 Brickell Avenue	0	0	0	4	0	0	0	31	0	0	0	0
The Beacon	0	0	0	5	0	0	0	37	0	0	0	0
Brickell Station	0	0	0	1	0	0	0	6	0	0	0	0
888 Brickell	0	0	0	1	0	0	0	5	0	0	0	0
TD Bank	0	0	0	0	0	0	0	1	0	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	4	1	0	0	0
Background	0	0	0	485	979	0	0	1,971	447	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**0**	**0**	**485**	**979**	**0**	**0**	**1,971**	**447**	**0**	**0**	**0**

INTERSECTION ANALYSIS SHEET

SW 8th St @ SW 2nd Ave

"No-Build" - Opening Year

	N-S	E-W
Growth Rate =	0.88%	1.9%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	0	896	81	129	216	0	386	1651	248	0	0	0
Peak Season Volume	0	896	81	129	216	0	386	1,651	248	0	0	0
	0%	92%	8%	37%	63%	0%	17%	72%	11%			
Committed Trips	*0*	*18*	*2*	*4*	*0*	*0*	*39*	*507*	*20*	*0*	*0*	*0*
Brickell CitiCentre North 2	0	0	1	2	0	0	0	24	0	0	0	0
Premiere Towers	0	0	1	2	0	0	0	23	0	0	0	0
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village												
Miami River Development SAP		18					39	77	20			
Brickell Bayview Center	0	0	0	0	0	0	0	4	0	0	0	0
Brickell CitiCentre								377				
Walgreens												
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	0	0	0	0	0	1	0	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	0	971	88	141	230	0	479	2,388	303	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**971**	**88**	**141**	**230**	**0**	**479**	**2,388**	**303**	**0**	**0**	**0**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	0	869	82	146	351	0	316	1130	375	0	0	0
Peak Season Volume	0	869	82	146	351	0	316	1,130	375	0	0	0
	0%	91%	9%	29%	71%	0%	17%	62%	21%			
Committed Trips	*0*	*28*	*19*	*35*	*0*	*0*	*79*	*789*	*33*	*0*	*0*	*0*
Brickell CitiCentre North 2	0	0	7	12	0	0	0	92	0	0	0	0
Premiere Towers	0	0	1	2	0	0	0	17	0	0	0	0
600 Brickell	0	0	5	9	0	0	0	71	0	0	0	0
The Pointe at Brickell Village								28				
Miami River Development SAP		25					55	109	28			
Brickell Bayview Center	0	0	1	2	0	0	0	15	0	0	0	0
Brickell CitiCentre								369				
Walgreens		3					22	14	3			
1101 Brickell Avenue	0	0	2	3	0	0	0	26	0	0	0	0
The Beacon	0	0	2	4	0	0	0	31	0	0	0	0
Brickell Station	0	0	0	1	0	0	0	5	0	0	0	0
888 Brickell	0	0	0	1	0	0	0	4	0	0	0	0
TD Bank	0	0	0	0	0	0	0	2	1	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	1	5	2	0	0	0
Background	0	952	106	190	373	0	439	2,076	460	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**952**	**106**	**190**	**373**	**0**	**439**	**2,076**	**460**	**0**	**0**	**0**

INTERSECTION ANALYSIS SHEET

SW 8th St @ SW 8th Ave

"No-Build" - Opening Year

	N-S	E-W
Growth Rate =	0.88%	1.0%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	0	146	49	164	115	0	148	1556	52	0	0	0
Peak Season Volume	0	146	49	164	115	0	148	1,556	52	0	0	0
	0%	75%	25%	59%	41%	0%	8%	89%	3%			
Committed Trips	*0*	*0*	*7*	*20*	*0*	*0*	*0*	*196*	*0*	*0*	*0*	*0*
Brickell CitiCentre North 2	0	0	0	1	0	0	0	8	0	0	0	0
Premiere Towers	0	0	0	1	0	0	0	8	0	0	0	0
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	0	0
Miami River Development SAP	0	0	1	4	0	0	0	37	0	0	0	0
Brickell Bayview Center	0	0	0	0	0	0	0	1	0	0	0	0
Brickell CitiCentre	0	0	5	14	0	0	0	139	0	0	0	0
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	0	0	0	0	0	4	0	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	0	155	59	194	122	0	159	1,868	56	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**155**	**59**	**194**	**122**	**0**	**159**	**1,868**	**56**	**0**	**0**	**0**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	0	128	35	100	142	0	168	1563	51	0	0	0
Peak Season Volume	0	128	35	100	142	0	168	1,563	51	0	0	0
	0%	79%	21%	41%	59%	0%	9%	88%	3%			
Committed Trips	*0*	*0*	*6*	*18*	*0*	*0*	*3*	*311*	*1*	*0*	*0*	*0*
Brickell CitiCentre North 2	0	0	1	2	0	0	0	28	0	0	0	0
Premiere Towers	0	0	0	0	0	0	0	5	0	0	0	0
600 Brickell	0	0	0	1	0	0	0	22	0	0	0	0
The Pointe at Brickell Village	0	0	0	1	0	0	0	9	0	0	0	0
Miami River Development SAP	0	0	1	3	0	0	0	50	0	0	0	0
Brickell Bayview Center	0	0	0	0	0	0	0	5	0	0	0	0
Brickell CitiCentre	0	0	3	8	0	0	0	130	0	0	0	0
Walgreens	0	0	0	1	0	0	0	11	0	0	0	0
1101 Brickell Avenue	0	0	0	1	0	0	0	8	0	0	0	0
The Beacon	0	0	0	1	0	0	0	9	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	2	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	1	0	0	0	0
TD Bank	0	0	0	0	0	0	1	8	0	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	2	23	1	0	0	0
Background	0	136	43	124	151	0	183	1,990	56	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**136**	**43**	**124**	**151**	**0**	**183**	**1,990**	**56**	**0**	**0**	**0**

INTERSECTION ANALYSIS SHEET

SW 8th St @ SW 12th Ave

"No-Build" - Opening Year

	N-S	E-W
Growth Rate =	0.88%	1.0%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	0	452	88	124	333	0	193	1831	97	0	0	0
Peak Season Volume	0	452	88	124	333	0	193	1,831	97	0	0	0
	0%	84%	16%	27%	73%	0%	9%	86%	5%			
			4%	6%				90%				
Committed Trips	*0*	*7*	*12*	*12*	*5*	*0*	*0*	*173*	*9*	*0*	*0*	*0*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	7	0	0	0	0
Premiere Towers	0	0	0	0	0	0	0	7	0	0	0	0
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	0	0
Miami River Development SAP	0	0	1	2	0	0	0	33	0	0	0	0
Brickell Bayview Center	0	0	0	0	0	0	0	1	0	0	0	0
Brickell CitiCentre	0	0	6	8	0	0	0	125	0	0	0	0
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank		7	4		5				9			
Church of Jesus Christ LDS												
Background	0	488	106	144	359	0	207	2,140	113	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**488**	**106**	**144**	**359**	**0**	**207**	**2,140**	**113**	**0**	**0**	**0**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	0	452	87	163	516	0	174	1403	78	0	0	0
Peak Season Volume	0	452	87	163	516	0	174	1,403	78	0	0	0
	0%	84%	16%	24%	76%	0%	11%	85%	5%			
			4%	8%				69%				
Committed Trips	*0*	*16*	*23*	*28*	*9*	*0*	*9*	*264*	*16*	*0*	*0*	*0*
Brickell CitiCentre North 2	0	0	1	3	0	0	0	24	0	0	0	0
Premiere Towers	0	0	0	1	0	0	0	5	0	0	0	0
600 Brickell	0	0	1	2	0	0	0	19	0	0	0	0
The Pointe at Brickell Village	0	0	0	1	0	0	0	7	0	0	0	0
Miami River Development SAP	0	0	3	5	0	0	0	43	0	0	0	0
Brickell Bayview Center	0	0	0	0	0	0	0	4	0	0	0	0
Brickell CitiCentre	0	0	6	13	0	0	0	110	0	0	0	0
Walgreens	0	0	1	1	0	0	0	9	0	0	0	0
1101 Brickell Avenue	0	0	0	1	0	0	0	7	0	0	0	0
The Beacon	0	0	0	1	0	0	0	8	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	1	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	1	0	0	0	0
TD Bank		16	9		9				16			
Church of Jesus Christ LDS							9	26				
Background	0	497	116	201	558	0	196	1,771	100	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**497**	**116**	**201**	**558**	**0**	**196**	**1,771**	**100**	**0**	**0**	**0**

INTERSECTION ANALYSIS SHEET

SW 8th St @ SW 17th Ave

"No-Build" - Opening Year

	N-S	E-W
Growth Rate =	0.88%	1.0%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	0	698	189	217	978	0	187	1523	78	0	0	0
Peak Season Volume	0	698	189	217	978	0	187	1,523	78	0	0	0
	0%	79%	21%	18%	82%	0%	10%	85%	4%			
			10%	11%				79%				
Committed Trips	*0*	*0*	*18*	*20*	*0*	*0*	*0*	*144*	*0*	*0*	*0*	*0*
Brickell CitiCentre North 2	0	0	1	1	0	0	0	6	0	0	0	0
Premiere Towers	0	0	1	1	0	0	0	5	0	0	0	0
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	0	0
Miami River Development SAP	0	0	3	4	0	0	0	26	0	0	0	0
Brickell Bayview Center	0	0	0	0	0	0	0	1	0	0	0	0
Brickell CitiCentre	0	0	12	14	0	0	0	99	0	0	0	0
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	1	1	0	0	0	7	0	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	0	742	219	251	1,040	0	201	1,780	84	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**742**	**219**	**251**	**1,040**	**0**	**201**	**1,780**	**84**	**0**	**0**	**0**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	0	602	140	194	703	0	126	1487	104	0	0	0
Peak Season Volume	0	602	140	194	703	0	126	1,487	104	0	0	0
	0%	81%	19%	22%	78%	0%	7%	87%	6%			
			7%	10%				77%				
Committed Trips	*0*	*0*	*20*	*32*	*0*	*0*	*0*	*237*	*0*	*0*	*0*	*0*
Brickell CitiCentre North 2	0	0	2	3	0	0	0	20	0	0	0	0
Premiere Towers	0	0	0	1	0	0	0	4	0	0	0	0
600 Brickell	0	0	1	2	0	0	0	15	0	0	0	0
The Pointe at Brickell Village	0	0	1	1	0	0	0	6	0	0	0	0
Miami River Development SAP	0	0	3	5	0	0	0	35	0	0	0	0
Brickell Bayview Center	0	0	0	0	0	0	0	3	0	0	0	0
Brickell CitiCentre	0	0	8	12	0	0	0	90	0	0	0	0
Walgreens	0	0	1	1	0	0	0	7	0	0	0	0
1101 Brickell Avenue	0	0	0	1	0	0	0	6	0	0	0	0
The Beacon	0	0	1	1	0	0	0	7	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	1	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	1	0	0	0	0
TD Bank	0	0	1	2	0	0	0	13	0	0	0	0
Church of Jesus Christ LDS	0	0	2	4	0	0	0	29	0	0	0	0
Background	0	640	169	238	747	0	135	1,835	112	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**640**	**169**	**238**	**747**	**0**	**135**	**1,835**	**112**	**0**	**0**	**0**

INTERSECTION ANALYSIS SHEET

SW 8th St @ SW 19th Ave

"No-Build" - Opening Year

	N-S	E-W
Growth Rate =	0.88%	1.0%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	0	69	85	44	73	0	57	1835	24	0	0	0
Peak Season Volume	0	69	85	44	73	0	57	1,835	24	0	0	0
	0%	45%	55%	38%	62%	0%	3%	96%	1%			
			4%	2%				93%				
Committed Trips	*0*	*0*	*7*	*3*	*0*	*0*	*0*	*134*	*0*	*0*	*0*	*0*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	5	0	0	0	0
Premiere Towers	0	0	0	0	0	0	0	5	0	0	0	0
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	0	0
Miami River Development SAP	0	0	1	1	0	0	0	24	0	0	0	0
Brickell Bayview Center	0	0	0	0	0	0	0	1	0	0	0	0
Brickell CitiCentre	0	0	5	2	0	0	0	92	0	0	0	0
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	0	0	0	0	0	7	0	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	0	73	97	50	78	0	61	2,105	26	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**73**	**97**	**50**	**78**	**0**	**61**	**2,105**	**26**	**0**	**0**	**0**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	0	67	63	120	79	0	89	1705	24	0	0	0
Peak Season Volume	0	67	63	120	79	0	89	1,705	24	0	0	0
	0%	52%	48%	60%	40%	0%	5%	94%	1%			
			3%	6%				87%				
Committed Trips	*0*	*0*	*9*	*14*	*0*	*0*	*0*	*213*	*0*	*0*	*0*	*0*
Brickell CitiCentre North 2	0	0	1	1	0	0	0	18	0	0	0	0
Premiere Towers	0	0	0	0	0	0	0	3	0	0	0	0
600 Brickell	0	0	1	1	0	0	0	14	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	5	0	0	0	0
Miami River Development SAP	0	0	1	2	0	0	0	32	0	0	0	0
Brickell Bayview Center	0	0	0	0	0	0	0	3	0	0	0	0
Brickell CitiCentre	0	0	4	5	0	0	0	81	0	0	0	0
Walgreens	0	0	0	0	0	0	0	7	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	5	0	0	0	0
The Beacon	0	0	0	0	0	0	0	6	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	1	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	1	0	0	0	0
TD Bank	0	0	1	1	0	0	0	12	0	0	0	0
Church of Jesus Christ LDS	0	0	1	2	0	0	0	26	0	0	0	0
Background	0	71	76	142	84	0	96	2,045	26	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**71**	**76**	**142**	**84**	**0**	**96**	**2,045**	**26**	**0**	**0**	**0**

INTERSECTION ANALYSIS SHEET

SW 8th St @ SW 22nd Ave

"No-Build" - Opening Year

	N-S	E-W
Growth Rate =	0.88%	1.0%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	0	817	162	130	1010	0	97	1448	74	0	0	0
Peak Season Volume	0	817	162	130	1,010	0	97	1,448	74	0	0	0
	0%	83%	17%	11%	89%	0%	6%	89%	5%			
			9%	7%				83%				
Committed Trips	*0*	*0*	*12*	*11*	*0*	*0*	*0*	*111*	*0*	*0*	*0*	*0*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	4	0	0	0	0
Premiere Towers	0	0	0	0	0	0	0	4	0	0	0	0
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	0	0
Miami River Development SAP	0	0	2	2	0	0	0	20	0	0	0	0
Brickell Bayview Center	0	0	0	0	0	0	0	1	0	0	0	0
Brickell CitiCentre	0	0	8	7	0	0	0	76	0	0	0	0
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	1	1	0	0	0	5	0	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	0	869	184	149	1,074	0	104	1,667	80	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**869**	**184**	**149**	**1,074**	**0**	**104**	**1,667**	**80**	**0**	**0**	**0**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	0	614	126	54	1099	0	139	1395	62	0	0	0
Peak Season Volume	0	614	126	54	1,099	0	139	1,395	62	0	0	0
	0%	83%	17%	5%	95%	0%	9%	87%	4%			
			7%	3%				80%				
Committed Trips	*0*	*0*	*17*	*6*	*0*	*0*	*0*	*190*	*0*	*0*	*0*	*0*
Brickell CitiCentre North 2	0	0	1	1	0	0	0	16	0	0	0	0
Premiere Towers	0	0	0	0	0	0	0	3	0	0	0	0
600 Brickell	0	0	1	0	0	0	0	12	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	5	0	0	0	0
Miami River Development SAP	0	0	3	1	0	0	0	28	0	0	0	0
Brickell Bayview Center	0	0	0	0	0	0	0	3	0	0	0	0
Brickell CitiCentre	0	0	7	2	0	0	0	72	0	0	0	0
Walgreens	0	0	1	0	0	0	0	6	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	4	0	0	0	0
The Beacon	0	0	0	0	0	0	0	5	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	1	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	1	0	0	0	0
TD Bank	0	0	1	0	0	0	0	11	0	0	0	0
Church of Jesus Christ LDS	0	0	2	1	0	0	0	23	0	0	0	0
Background	0	653	151	63	1,169	0	149	1,689	67	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**653**	**151**	**63**	**1,169**	**0**	**149**	**1,689**	**67**	**0**	**0**	**0**

INTERSECTION ANALYSIS SHEET

SW 8th St @ SW 27th Ave

"No-Build" - Opening Year

	N-S	E-W
Growth Rate =	0.88%	1.0%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	182	1559	317	190	1366	94	0	1119	60	0	1102	21
Peak Season Volume	182	1,559	317	190	1,366	94	0	1,119	60	0	1,102	21
	9%	76%	15%	12%	83%	6%	0%	95%	5%	0%	98%	2%
			19%	12%				69%				
Committed Trips	*0*	*0*	*20*	*12*	*0*	*0*	*0*	*71*	*0*	*0*	*0*	*0*
Brickell CitiCentre North 2	0	0	1	0	0	0	0	3	0	0	0	0
Premiere Towers	0	0	1	0	0	0	0	3	0	0	0	0
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	0	0
Miami River Development SAP	0	0	4	2	0	0	0	13	0	0	0	0
Brickell Bayview Center	0	0	0	0	0	0	0	1	0	0	0	0
Brickell CitiCentre	0	0	13	8	0	0	0	49	0	0	0	0
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	1	1	0	0	0	4	0	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	194	1,658	357	214	1,452	100	0	1,273	64	0	1,184	23
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**194**	**1,658**	**357**	**214**	**1,452**	**100**	**0**	**1,273**	**64**	**0**	**1,184**	**23**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	180	1329	223	262	1320	136	0	885	43	0	1265	38
Peak Season Volume	180	1,329	223	262	1,320	136	0	885	43	0	1,265	38
	10%	77%	13%	15%	77%	8%	0%	95%	5%	0%	97%	3%
			14%	16%				54%				
Committed Trips	*0*	*0*	*28*	*33*	*0*	*0*	*0*	*114*	*0*	*0*	*0*	*0*
Brickell CitiCentre North 2	0	0	2	3	0	0	0	10	0	0	0	0
Premiere Towers	0	0	0	1	0	0	0	2	0	0	0	0
600 Brickell	0	0	2	2	0	0	0	7	0	0	0	0
The Pointe at Brickell Village	0	0	1	1	0	0	0	3	0	0	0	0
Miami River Development SAP	0	0	4	5	0	0	0	17	0	0	0	0
Brickell Bayview Center	0	0	0	0	0	0	0	2	0	0	0	0
Brickell CitiCentre	0	0	11	13	0	0	0	43	0	0	0	0
Walgreens	0	0	1	1	0	0	0	4	0	0	0	0
1101 Brickell Avenue	0	0	1	1	0	0	0	3	0	0	0	0
The Beacon	0	0	1	1	0	0	0	3	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	1	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	2	2	0	0	0	6	0	0	0	0
Church of Jesus Christ LDS	0	0	3	4	0	0	0	14	0	0	0	0
Background	191	1,413	265	312	1,403	145	0	1,065	46	0	1,359	41
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**191**	**1,413**	**265**	**312**	**1,403**	**145**	**0**	**1,065**	**46**	**0**	**1,359**	**41**

INTERSECTION ANALYSIS SHEET

SW 8th St @ SW 3rd Ave

"No-Build" - Opening Year

	N-S	E-W
Growth Rate =	0.88%	1.9%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	0	194	233	15	327	0	32	2063	180	0	0	0
Peak Season Volume	0	194	233	15	327	0	32	2,063	180	0	0	0
	0%	45%	55%	4%	96%	0%	1%	91%	8%			
Committed Trips	*0*	*49*	*5*	*137*	*87*	*0*	*121*	*424*	*0*	*0*	*0*	*0*
Brickell CitiCentre North 2	0	0	2	0	0	0	0	21	0	0	0	0
Premiere Towers	0	0	2	0	0	0	0	21	0	0	0	0
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	0	0
Miami River Development SAP		49		136	8		121					
Brickell Bayview Center	0	0	0	0	0	0	0	4	0	0	0	0
Brickell CitiCentre					79			377				
Walgreens												
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	0	0	0	0	0	1	0	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	0	255	253	153	435	0	157	2,774	205	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**255**	**253**	**153**	**435**	**0**	**157**	**2,774**	**205**	**0**	**0**	**0**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	0	180	176	15	466	0	88	1467	64	0	0	0
Peak Season Volume	0	180	176	15	466	0	88	1,467	64	0	0	0
	0%	51%	49%	3%	97%	0%	5%	91%	4%			
Committed Trips	*0*	*69*	*32*	*234*	*299*	*0*	*199*	*635*	*0*	*0*	*0*	*0*
Brickell CitiCentre North 2	0	0	10	1	0	0	0	81	0	0	0	0
Premiere Towers	0	0	2	0	0	0	0	15	0	0	0	0
600 Brickell	0	0	8	1	0	0	0	63	0	0	0	0
The Pointe at Brickell Village	0	0	3	0	0	0	0	25	0	0	0	0
Miami River Development SAP		66		192	11		168					
Brickell Bayview Center	0	0	2	0	0	0	0	13	0	0	0	0
Brickell CitiCentre					284			369				
Walgreens		3		39	4		30					
1101 Brickell Avenue	0	0	3	0	0	0	0	22	0	0	0	0
The Beacon	0	0	3	0	0	0	0	27	0	0	0	0
Brickell Station	0	0	1	0	0	0	0	4	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	4	0	0	0	0
TD Bank	0	0	0	0	0	0	0	3	0	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	8	0	0	0	0
Background	0	260	219	250	794	0	299	2,306	73	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**260**	**219**	**250**	**794**	**0**	**299**	**2,306**	**73**	**0**	**0**	**0**

INTERSECTION ANALYSIS SHEET

SW 8th St @ SW 4th Ave

"No-Build" - Opening Year

	N-S	E-W
Growth Rate =	0.88%	1.9%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	0	0	0	2456	523	0	0	1608	75	0	0	0
Peak Season Volume	0	0	0	2,456	523	0	0	1,608	75	0	0	0
	#DIV/0!	#DIV/0!	#DIV/0!	82%	18%	0%	0%	96%	4%			
			0%	60%				40%				
Committed Trips	*0*	*0*	*0*	*347*	*51*	*0*	*0*	*247*	*17*	*0*	*0*	*0*
Brickell CitiCentre North 2	0	0	0	10	0	0	0	10	1	0	0	0
Premiere Towers	0	0	0	10	0	0	0	10	1	0	0	0
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	0	0
Miami River Development SAP				144	51			47				
Brickell Bayview Center	0	0	0	2	0	0	0	2	0	0	0	0
Brickell CitiCentre	0	0	0	181	0	0	0	177	15	0	0	0
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	0	0	0	0	0	2	0	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	0	0	0	2,958	607	0	0	2,079	102	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**0**	**0**	**2,958**	**607**	**0**	**0**	**2,079**	**102**	**0**	**0**	**0**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	0	0	0	1424	627	0	0	1574	129	0	0	0
Peak Season Volume	0	0	0	1,424	627	0	0	1,574	129	0	0	0
				69%	31%	0%	0%	92%	8%			
			0%	35%				39%				
Committed Trips	*0*	*0*	*0*	*475*	*72*	*0*	*0*	*379*	*61*	*0*	*0*	*0*
Brickell CitiCentre North 2	0	0	0	34	0	0	0	37	7	0	0	0
Premiere Towers	0	0	0	6	0	0	0	7	1	0	0	0
600 Brickell	0	0	0	26	0	0	0	29	6	0	0	0
The Pointe at Brickell Village	0	0	0	10	0	0	0	11	2	0	0	0
Miami River Development SAP				201	72			66				
Brickell Bayview Center	0	0	0	6	0	0	0	6	1	0	0	0
Brickell CitiCentre	0	0	0	155	0	0	0	170	33	0	0	0
Walgreens	0	0	0	13	0	0	0	14	3	0	0	0
1101 Brickell Avenue	0	0	0	9	0	0	0	10	2	0	0	0
The Beacon	0	0	0	11	0	0	0	12	2	0	0	0
Brickell Station	0	0	0	2	0	0	0	2	0	0	0	0
888 Brickell	0	0	0	2	0	0	0	2	0	0	0	0
TD Bank	0	0	0	0	0	0	0	3	1	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	9	2	0	0	0
Background	0	0	0	1,989	739	0	0	2,172	208	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**0**	**0**	**1,989**	**739**	**0**	**0**	**2,172**	**208**	**0**	**0**	**0**

INTERSECTION ANALYSIS SHEET

SW 7th St @ SW 4th Ave/SB I-95 Off-Ramp

"No-Build" - Opening Year

	N-S	E-W
Growth Rate =	0.88%	1.9%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Southwestbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	0	0	0	0	279	12	0	952	281	0	0	0	316	454	0
Peak Season Volume	0	0	0	0	279	12	0	952	281	0	0	0	316	454	0
				0%	96%	4%	0%	77%	23%				41%	59%	0%
Committed Trips	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*183*	*42*	*0*	*0*	*0*	*61*	*85*	*0*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	0	0	0	10	14	0
Premiere Towers	0	0	0	0	0	0	0	0	0	0	0	0	6	8	0
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Miami River Development SAP								183	40				12	12	
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	0	0	0	5	8	0
Brickell CitiCentre	0	0	0	0	0	0	0	0	0	0	0	0	28	41	0
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Background	0	0	0	0	297	13	0	1,195	341	0	0	0	421	602	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**0**	**0**	**0**	**297**	**13**	**0**	**1,195**	**341**	**0**	**0**	**0**	**421**	**602**	**0**

PM Peak Hour

	Northbound			Southbound			Southwestbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	0	0	0	0	177	36	0	709	478	0	0	0	259	744	0
Peak Season Volume	0	0	0	0	177	36	0	709	478	0	0	0	259	744	0
				0%	83%	17%	0%	333%	224%				26%	74%	0%
Committed Trips	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*256*	*66*	*0*	*0*	*0*	*164*	*453*	*0*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	0	0	0	17	47	0
Premiere Towers	0	0	0	0	0	0	0	0	0	0	0	0	4	12	0
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0	42	119	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	0	0	5	15	0
Miami River Development SAP								256	55				17	17	
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Brickell CitiCentre	0	0	0	0	0	0	0	0	0	0	0	0	65	184	0
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0	8	21	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0	4	12	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0	1	3	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0	2	5	0
TD Bank	0	0	0	0	0	0	0	0	6	0	0	0	0	8	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	5	0	0	0	0	8	0
Background	0	0	0	0	188	38	0	1,010	574	0	0	0	459	1,301	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**0**	**0**	**0**	**188**	**38**	**0**	**1,010**	**574**	**0**	**0**	**0**	**459**	**1,301**	**0**

INTERSECTION ANALYSIS SHEET

SW 7th St @ SW 12th Ave

"No-Build" - Opening Year

	N-S	E-W
Growth Rate =	0.88%	1.0%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	147	520	0	0	380	114	0	0	0	75	752	71
Peak Season Volume	147	520	0	0	380	114	0	0	0	75	752	71
	22%	78%	0%	0%	77%	23%				8%	84%	8%
										8%	84%	8%
Committed Trips	*7*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*12*	*86*	*9*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	1	10	1
Premiere Towers	0	0	0	0	0	0	0	0	0	0	6	1
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	0	0
Miami River Development SAP	0	0	0	0	0	0	0	0	0	3	37	4
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	0	5	1
Brickell CitiCentre	0	0	0	0	0	0	0	0	0	2	29	3
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	7									5		
Church of Jesus Christ LDS												
Background	163	553	0	0	404	121	0	0	0	93	894	85
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**163**	**553**	**0**	**0**	**404**	**121**	**0**	**0**	**0**	**93**	**894**	**85**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	173	497	0	0	534	108	0	0	0	120	1389	95
Peak Season Volume	173	497	0	0	534	108	0	0	0	120	1,389	95
	26%	74%	0%	0%	83%	17%				7%	87%	6%
Committed Trips	*18*	*0*	*0*	*0*	*0*	*9*	*0*	*0*	*0*	*47*	*404*	*27*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	3	37	3
Premiere Towers	0	0	0	0	0	0	0	0	0	1	9	1
600 Brickell	0	0	0	0	0	0	0	0	0	8	94	6
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	1	11	1
Miami River Development SAP	0	0	0	0	0	0	0	0	0	5	57	4
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	0	1	0
Brickell CitiCentre	0	0	0	0	0	0	0	0	0	12	146	10
Walgreens	0	0	0	0	0	0	0	0	0	1	17	1
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	1	9	1
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	3	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	4	0
TD Bank	9									16		
Church of Jesus Christ LDS	9					9					15	
Background	202	528	0	0	568	124	0	0	0	176	1,896	129
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**202**	**528**	**0**	**0**	**568**	**124**	**0**	**0**	**0**	**176**	**1,896**	**129**

INTERSECTION ANALYSIS SHEET

SW 7th St @ Beacom Blvd

"No-Build" - Opening Year

	N-S	E-W
Growth Rate =	0.88%	1.0%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	165	248	0	0	297	367	0	0	0	430	515	0
Peak Season Volume	165	248	0	0	297	367	0	0	0	430	515	0
	40%	60%	0%	0%	45%	55%				46%	54%	0%
Committed Trips	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*27*	*23*	*0*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	3	2	0
Premiere Towers	0	0	0	0	0	0	0	0	0	2	1	0
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	0	0
Miami River Development SAP	0	0	0	0	0	0	0	0	0	11	9	0
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	2	1	0
Brickell CitiCentre	0	0	0	0	0	0	0	0	0	8	7	0
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	0	0	0	0	0	0	0	2	2	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	175	264	0	0	316	390	0	0	0	489	576	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**175**	**264**	**0**	**0**	**316**	**390**	**0**	**0**	**0**	**489**	**576**	**0**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	126	221	0	0	319	302	0	0	0	591	600	0
Peak Season Volume	126	221	0	0	319	302	0	0	0	591	600	0
										50%	50%	0%
Committed Trips	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*226*	*118*	*0*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	24	10	0
Premiere Towers	0	0	0	0	0	0	0	0	0	6	3	0
600 Brickell	0	0	0	0	0	0	0	0	0	59	26	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	7	3	0
Miami River Development SAP	0	0	0	0	0	0	0	0	0	9	16	0
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	1	0	0
Brickell CitiCentre	0	0	0	0	0	0	0	0	0	92	40	0
Walgreens	0	0	0	0	0	0	0	0	0	11	5	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	6	3	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	2	1	0
888 Brickell	0	0	0	0	0	0	0	0	0	2	1	0
TD Bank	0	0	0	0	0	0	0	0	0	4	2	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	4	9	0
Background	134	235	0	0	339	321	0	0	0	861	763	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**134**	**235**	**0**	**0**	**339**	**321**	**0**	**0**	**0**	**861**	**763**	**0**

INTERSECTION ANALYSIS SHEET

SW 7th St @ SW 17th Ave

"No-Build" - Opening Year

	N-S	E-W
Growth Rate =	0.88%	1.0%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	96	661	0	0	922	118	0	0	0	122	808	129
Peak Season Volume	96	661	0	0	922	118	0	0	0	122	808	129
	13%	87%	0%	0%	89%	11%				12%	76%	12%
										12%	76%	12%
Committed Trips	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*11*	*68*	*11*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	1	7	1
Premiere Towers	0	0	0	0	0	0	0	0	0	1	4	1
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	0	0
Miami River Development SAP	0	0	0	0	0	0	0	0	0	4	27	4
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	1	4	1
Brickell CitiCentre	0	0	0	0	0	0	0	0	0	3	21	3
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	0	0	0	0	0	0	0	1	5	1
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	102	703	0	0	980	125	0	0	0	142	936	150
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**102**	**703**	**0**	**0**	**980**	**125**	**0**	**0**	**0**	**142**	**936**	**150**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	109	589	0	0	869	157	0	0	0	161	1237	97
Peak Season Volume	109	589	0	0	869	157	0	0	0	161	1,237	97
	16%	84%	0%	0%	85%	15%				11%	83%	6%
Committed Trips	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*46*	*343*	*25*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	4	30	2
Premiere Towers	0	0	0	0	0	0	0	0	0	1	7	1
600 Brickell	0	0	0	0	0	0	0	0	0	10	75	5
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	1	9	1
Miami River Development SAP	0	0	0	0	0	0	0	0	0	6	45	3
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	0	1	0
Brickell CitiCentre	0	0	0	0	0	0	0	0	0	15	116	8
Walgreens	0	0	0	0	0	0	0	0	0	2	14	1
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	1	7	1
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	2	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	3	0
TD Bank	0	0	0	0	0	0	0	0	0	1	7	1
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	3	26	2
Background	116	626	0	0	924	167	0	0	0	219	1,672	129
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**116**	**626**	**0**	**0**	**924**	**167**	**0**	**0**	**0**	**219**	**1,672**	**129**

INTERSECTION ANALYSIS SHEET

SW 7th St @ SW 19th Ave

"No-Build" - Opening Year

	N-S	E-W
Growth Rate =	0.88%	1.0%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	55	52	0	0	105	47	0	0	0	46	858	16
Peak Season Volume	55	52	0	0	105	47	0	0	0	46	858	16
	51%	49%	0%	0%	69%	31%				5%	93%	2%
										5%	93%	2%
Committed Trips	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*3*	*63*	*1*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	0	7	0
Premiere Towers	0	0	0	0	0	0	0	0	0	0	4	0
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	0	0
Miami River Development SAP	0	0	0	0	0	0	0	0	0	1	25	1
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	0	4	0
Brickell CitiCentre	0	0	0	0	0	0	0	0	0	1	19	0
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	0	0	0	0	0	0	0	0	5	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	58	55	0	0	112	50	0	0	0	52	985	18
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**58**	**55**	**0**	**0**	**112**	**50**	**0**	**0**	**0**	**52**	**985**	**18**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	64	59	0	0	92	43	0	0	0	78	1222	34
Peak Season Volume	64	59	0	0	92	43	0	0	0	78	1,222	34
	52%	48%	0%	0%	68%	32%				6%	92%	3%
Committed Trips	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*21*	*316*	*7*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	2	27	1
Premiere Towers	0	0	0	0	0	0	0	0	0	0	7	0
600 Brickell	0	0	0	0	0	0	0	0	0	4	69	1
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	1	8	0
Miami River Development SAP	0	0	0	0	0	0	0	0	0	3	42	1
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	0	1	0
Brickell CitiCentre	0	0	0	0	0	0	0	0	0	7	107	2
Walgreens	0	0	0	0	0	0	0	0	0	1	12	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	7	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	2	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	3	0
TD Bank	0	0	0	0	0	0	0	0	0	0	7	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	2	24	1
Background	68	63	0	0	98	46	0	0	0	105	1,629	44
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**68**	**63**	**0**	**0**	**98**	**46**	**0**	**0**	**0**	**105**	**1,629**	**44**

INTERSECTION ANALYSIS SHEET

SW 7th St @ SW 22nd Ave

"No-Build" - Opening Year

	N-S	E-W
Growth Rate =	0.88%	1.0%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	83	769	0	0	703	65	0	0	0	128	850	78
Peak Season Volume	83	769	0	0	703	65	0	0	0	128	850	78
	10%	90%	0%	0%	92%	8%				12%	80%	7%
										12%	80%	7%
Committed Trips	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*8*	*51*	*4*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	1	5	0
Premiere Towers	0	0	0	0	0	0	0	0	0	0	3	0
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	0	0
Miami River Development SAP	0	0	0	0	0	0	0	0	0	3	20	2
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	0	3	0
Brickell CitiCentre	0	0	0	0	0	0	0	0	0	3	16	1
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	0	0	0	0	0	0	0	1	4	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	88	818	0	0	747	69	0	0	0	146	964	88
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**88**	**818**	**0**	**0**	**747**	**69**	**0**	**0**	**0**	**146**	**964**	**88**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	95	724	0	0	781	75	0	0	0	215	1095	152
Peak Season Volume	95	724	0	0	781	75	0	0	0	215	1,095	152
	12%	88%	0%	0%	91%	9%				15%	75%	10%
Committed Trips	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*47*	*237*	*32*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	4	21	3
Premiere Towers	0	0	0	0	0	0	0	0	0	1	5	1
600 Brickell	0	0	0	0	0	0	0	0	0	10	52	7
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	1	6	1
Miami River Development SAP	0	0	0	0	0	0	0	0	0	6	31	4
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	0	1	0
Brickell CitiCentre	0	0	0	0	0	0	0	0	0	16	80	11
Walgreens	0	0	0	0	0	0	0	0	0	2	9	1
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	1	5	1
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	2	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	2	0
TD Bank	0	0	0	0	0	0	0	0	0	1	5	1
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	4	18	2
Background	101	770	0	0	830	80	0	0	0	278	1,413	195
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**101**	**770**	**0**	**0**	**830**	**80**	**0**	**0**	**0**	**278**	**1,413**	**195**

INTERSECTION ANALYSIS SHEET

SW 7th St @ SW 27th Ave

"No-Build" - Opening Year

	N-S	E-W
Growth Rate =	0.88%	1.0%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	0	1281	0	0	1966	31	137	0	41	192	99	214
Peak Season Volume	0	1,281	0	0	1,966	31	137	0	41	192	99	214
	0%	100%	0%	0%	98%	2%	77%	0%	23%	38%	20%	42%
										38%	20%	42%
Committed Trips	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*9*	*5*	*10*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	1	0	1
Premiere Towers	0	0	0	0	0	0	0	0	0	1	0	1
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	0	0
Miami River Development SAP	0	0	0	0	0	0	0	0	0	3	2	4
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	1	0	1
Brickell CitiCentre	0	0	0	0	0	0	0	0	0	3	1	3
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	0	0	0	0	0	0	0	1	0	1
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	0	1,362	0	0	2,090	33	147	0	44	215	111	240
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**1,362**	**0**	**0**	**2,090**	**33**	**147**	**0**	**44**	**215**	**111**	**240**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	0	1272	0	0	1218	23	113	0	21	213	346	268
Peak Season Volume	0	1,272	0	0	1,218	23	113	0	21	213	346	268
	0%	100%	0%	0%	98%	2%	84%	0%	16%	26%	42%	32%
Committed Trips	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*31*	*50*	*38*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	3	4	3
Premiere Towers	0	0	0	0	0	0	0	0	0	1	1	1
600 Brickell	0	0	0	0	0	0	0	0	0	7	11	8
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	1	1	1
Miami River Development SAP	0	0	0	0	0	0	0	0	0	4	7	5
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	0	0	0
Brickell CitiCentre	0	0	0	0	0	0	0	0	0	10	17	13
Walgreens	0	0	0	0	0	0	0	0	0	1	2	1
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	1	1	1
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	0	0	0	0	0	0	0	1	1	1
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	2	4	3
Background	0	1,352	0	0	1,295	24	121	0	23	260	422	326
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**1,352**	**0**	**0**	**1,295**	**24**	**121**	**0**	**23**	**260**	**422**	**326**

2013 Node: 4130

INTERSECTION ANALYSIS SHEET

SW 7th St @ Brickell Ave

"No-Build" - Opening Year

	N-S	E-W
Growth Rate =	0.88%	1.9%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	369	1308	256	205	1149	166	0	0	0	4	40	44
Peak Season Volume	369	1,308	256	205	1,149	166	0	0	0	4	40	44
	19%	68%	13%	13%	76%	11%				5%	45%	50%
Committed Trips	*78*	*39*	*0*	*0*	*23*	*126*	*0*	*0*	*0*	*0*	*2*	*0*
Brickell CitiCentre North 2		3			4	13						
Premiere Towers		8			9							
600 Brickell												
The Pointe at Brickell Village												
Miami River Development SAP	25	0	0	0	0	10	0	0	0	0	2	0
Brickell Bayview Center	3	8				2						
Brickell CitiCentre	50	20			10	100						
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue												
The Beacon												
Brickell Station												
888 Brickell												
TD Bank	0	0	0	0	0	0	0	0	0	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	470	1,430	272	218	1,245	302	0	0	0	5	48	50
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**470**	**1,430**	**272**	**218**	**1,245**	**302**	**0**	**0**	**0**	**5**	**48**	**50**

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PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	518	1195	11	23	1277	366	0	0	0	67	231	100
Peak Season Volume	518	1,195	11	23	1,277	366	0	0	0	67	231	100
	30%	69%	1%	1%	77%	22%				17%	58%	25%
Committed Trips	*110*	*97*	*0*	*0*	*226*	*134*	*0*	*0*	*0*	*0*	*15*	*0*
Brickell CitiCentre North 2		10			9	70						
Premiere Towers		9			7							
600 Brickell	48	10			117	10						
The Pointe at Brickell Village		6			6							
Miami River Development SAP	27	0	0	0	0	19	0	0	0	0	12	0
Brickell Bayview Center	2	2				5						
Brickell CitiCentre												
Walgreens	4	0	0	0	0	3	0	0	0	0	2	0
1101 Brickell Avenue	11	26			70	20						
The Beacon	1											
Brickell Station	7	15			8	2						
888 Brickell	8	19			9	3						
TD Bank	1	0	0	0	0	1	0	0	0	0	1	0
Church of Jesus Christ LDS	1	0	0	0	0	1	0	0	0	0	1	0
Background	661	1,368	12	24	1,584	523	0	0	0	76	278	114
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**661**	**1,368**	**12**	**24**	**1,584**	**523**	**0**	**0**	**0**	**76**	**278**	**114**

2013 Node: 4130

INTERSECTION ANALYSIS SHEET

SW 7th St @ Miami Ave

"No-Build" - Opening Year

	N-S	E-W
Growth Rate =	0.88%	1.9%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	283	531	0	0	0	0	0	0	0	0	660	74
Peak Season Volume	283	531	0	0	0	0	0	0	0	0	660	74
	35%	65%	0%							0%	90%	10%
Committed Trips	*71*	*146*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*203*	*125*
Brickell CitiCentre North 2		38									13	
Premiere Towers		56									25	
600 Brickell												
The Pointe at Brickell Village												
Miami River Development SAP	16	0	0	0	0	0	0	0	0	0	37	0
Brickell Bayview Center	30	19									5	
Brickell CitiCentre	25	33									122	125
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue												
The Beacon												
Brickell Station												
888 Brickell												
TD Bank	0	0	0	0	0	0	0	0	0	0	1	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	372	711	0	0	0	0	0	0	0	0	955	209
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**372**	**711**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**955**	**209**

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PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	422	509	0	0	0	0	0	0	0	0	1011	113
Peak Season Volume	422	509	0	0	0	0	0	0	0	0	1,011	113
	45%	55%	0%							0%	90%	10%
Committed Trips	*295*	*545*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*779*	*321*
Brickell CitiCentre North 2		156									70	
Premiere Towers		60									26	
600 Brickell		76									95	
The Pointe at Brickell Village	28	30										
Miami River Development SAP	24	0	0	0	0	0	0	0	0	0	58	0
Brickell Bayview Center	8	4									7	
Brickell CitiCentre	230	219									456	321
Walgreens	3	0	0	0	0	0	0	0	0	0	8	0
1101 Brickell Avenue											31	
The Beacon											1	
Brickell Station											9	
888 Brickell											12	
TD Bank	1	0	0	0	0	0	0	0	0	0	3	0
Church of Jesus Christ LDS	1	0	0	0	0	0	0	0	0	0	3	0
Background	744	1,086	0	0	0	0	0	0	0	0	1,931	450
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**744**	**1,086**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,931**	**450**

INTERSECTION ANALYSIS SHEET

SW 7th St @ SW 3rd Ave

"No-Build" - Opening Year

	N-S	E-W
Growth Rate =	0.88%	1.9%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	94	72	0	0	0	0	0	0	0	224	762	81
Peak Season Volume	94	72	0	0	0	0	0	0	0	224	762	81
	57%	43%	0%							21%	71%	8%
Committed Trips	*0*	*170*	*0*	*0*	*144*	*24*	*0*	*0*	*0*	*94*	*121*	*98*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	7	24	3
Premiere Towers	0	0	0	0	0	0	0	0	0	4	13	2
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	0	0
Miami River Development SAP		170			144	24						92
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	4	13	1
Brickell CitiCentre										79	69	
Walgreens												
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	0	0	0	0	0	0	0	0	2	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	100	247	0	0	144	24	0	0	0	349	989	190
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**100**	**247**	**0**	**0**	**144**	**24**	**0**	**0**	**0**	**349**	**989**	**190**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	122	156	0	0	0	0	0	0	0	266	992	164
Peak Season Volume	122	156	0	0	0	0	0	0	0	266	992	164
	44%	56%	0%							19%	70%	12%
Committed Trips	*9*	*238*	*0*	*0*	*203*	*34*	*0*	*0*	*0*	*358*	*574*	*177*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	16	64	11
Premiere Towers	0	0	0	0	0	0	0	0	0	4	16	3
600 Brickell	0	0	0	0	0	0	0	0	0	41	160	27
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	5	20	3
Miami River Development SAP		234			203	34						127
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	0	2	0
Brickell CitiCentre										284	249	
Walgreens	7	4									22	
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	4	16	3
The Beacon	0	0	0	0	0	0	0	0	0	0	1	0
Brickell Station	0	0	0	0	0	0	0	0	0	1	5	1
888 Brickell	0	0	0	0	0	0	0	0	0	2	6	1
TD Bank	1	0	0	0	0	0	0	0	0	0	7	0
Church of Jesus Christ LDS	1	0	0	0	0	0	0	0	0	0	7	0
Background	139	404	0	0	203	34	0	0	0	661	1,704	364
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**139**	**404**	**0**	**0**	**203**	**34**	**0**	**0**	**0**	**661**	**1,704**	**364**

INTERSECTION ANALYSIS SHEET

SW 7th St @ SW 16th Ave

"No-Build" - Opening Year

	N-S	E-W
Growth Rate =	0.88%	1.0%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	0	0	0	0	36	17	0	0	0	42	911	0
Peak Season Volume	0	0	0	0	36	17	0	0	0	42	911	0
				0%	68%	32%				4%	96%	0%
										4%	96%	0%
Committed Trips	0	0	0	0	0	0	0	0	0	0	*90*	*0*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	0	9	0
Premiere Towers	0	0	0	0	0	0	0	0	0	0	5	0
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	0	0
Miami River Development SAP	0	0	0	0	0	0	0	0	0	1	35	0
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	0	5	0
Brickell CitiCentre	0	0	0	0	0	0	0	0	0	1	28	0
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	0	0	0	0	0	0	0	0	7	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	0	0	0	0	38	18	0	0	0	45	1,069	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**0**	**0**	**0**	**38**	**18**	**0**	**0**	**0**	**45**	**1,069**	**0**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	0	0	0	0	40	24	0	0	0	66	1459	0
Peak Season Volume	0	0	0	0	40	24	0	0	0	66	1,459	0
				0%	63%	38%				4%	96%	0%
Committed Trips	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*17*	*414*	*0*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	1	36	0
Premiere Towers	0	0	0	0	0	0	0	0	0	0	9	0
600 Brickell	0	0	0	0	0	0	0	0	0	4	90	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	11	0
Miami River Development SAP	0	0	0	0	0	0	0	0	0	2	55	0
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	0	1	0
Brickell CitiCentre	0	0	0	0	0	0	0	0	0	6	140	0
Walgreens	0	0	0	0	0	0	0	0	0	1	16	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	9	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	3	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	3	0
TD Bank	0	0	0	0	0	0	0	0	0	0	9	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	1	32	0
Background	0	0	0	0	43	26	0	0	0	88	1,982	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**0**	**0**	**0**	**43**	**26**	**0**	**0**	**0**	**88**	**1,982**	**0**

INTERSECTION ANALYSIS SHEET

SW 8th St @ SW 5th Ave

"No-Build" - Opening Year

	N-S	E-W
Growth Rate =	0.88%	1.0%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	0	85	204	0	0	0	121	1593	16	0	0	0
Peak Season Volume	0	85	204	0	0	0	121	1,593	16	0	0	0
	0%	29%	71%				7%	92%	1%			
			11%	0%				89%				
Committed Trips	*0*	*0*	*27*	*0*	*0*	*0*	*0*	*222*	*0*	*0*	*0*	*0*
Brickell CitiCentre North 2	0	0	1	0	0	0	0	9	0	0	0	0
Premiere Towers	0	0	1	0	0	0	0	9	0	0	0	0
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	0	0
Miami River Development SAP	0	0	5	0	0	0	0	42	0	0	0	0
Brickell Bayview Center	0	0	0	0	0	0	0	2	0	0	0	0
Brickell CitiCentre	0	0	19	0	0	0	0	158	0	0	0	0
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	0	0	0	0	0	3	0	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	0	90	244	0	0	0	130	1,933	17	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**90**	**244**	**0**	**0**	**0**	**130**	**1,933**	**17**	**0**	**0**	**0**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	0	133	304	0	0	0	166	1494	66	0	0	0
Peak Season Volume	0	133	304	0	0	0	166	1,494	66	0	0	0
	0%	30%	70%				10%	87%	4%			
			17%	0%				83%				
Committed Trips	0	0	0	0	0	0	0	*331*	0	0	0	0
Brickell CitiCentre North 2	0	0	6	0	0	0	0	31	0	0	0	0
Premiere Towers	0	0	1	0	0	0	0	6	0	0	0	0
600 Brickell	0	0	5	0	0	0	0	24	0	0	0	0
The Pointe at Brickell Village	0	0	2	0	0	0	0	9	0	0	0	0
Miami River Development SAP	0	0	11	0	0	0	0	55	0	0	0	0
Brickell Bayview Center	0	0	1	0	0	0	0	5	0	0	0	0
Brickell CitiCentre	0	0	29	0	0	0	0	141	0	0	0	0
Walgreens	0	0	2	0	0	0	0	11	0	0	0	0
1101 Brickell Avenue	0	0	2	0	0	0	0	9	0	0	0	0
The Beacon	0	0	2	0	0	0	0	10	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	2	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	1	0	0	0	0
TD Bank	0	0	0	0	0	0	1	7	0	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	2	20	1	0	0	0
Background	0	141	323	0	0	0	178	1,936	71	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**141**	**323**	**0**	**0**	**0**	**178**	**1,936**	**71**	**0**	**0**	**0**

INTERSECTION ANALYSIS SHEET

SW 8th St @ SW 24th Ave

"No-Build" - Opening Year

	N-S	E-W
Growth Rate =	0.88%	1.0%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	0	49	67	37	57	0	49	1378	37	0	0	0
Peak Season Volume	0	49	67	37	57	0	49	1,378	37	0	0	0
	0%	42%	58%	39%	61%	0%	3%	94%	3%			
			5%	2%				93%				
Committed Trips	*0*	*0*	*6*	*2*	*0*	*0*	*0*	*103*	*0*	*0*	*0*	*0*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	4	0	0	0	0
Premiere Towers	0	0	0	0	0	0	0	4	0	0	0	0
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	0	0
Miami River Development SAP	0	0	1	0	0	0	0	19	0	0	0	0
Brickell Bayview Center	0	0	0	0	0	0	0	1	0	0	0	0
Brickell CitiCentre	0	0	4	2	0	0	0	71	0	0	0	0
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	0	0	0	0	0	5	0	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	0	52	77	41	61	0	53	1,583	40	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**52**	**77**	**41**	**61**	**0**	**53**	**1,583**	**40**	**0**	**0**	**0**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	0	47	50	59	88	0	49	1342	32	0	0	0
Peak Season Volume	0	47	50	59	88	0	49	1,342	32	0	0	0
	0%	48%	52%	40%	60%	0%	3%	94%	2%			
			3%	4%				91%				
Committed Trips	0	0	0	0	0	0	0	*175*	0	0	0	0
Brickell CitiCentre North 2	0	0	0	1	0	0	0	15	0	0	0	0
Premiere Towers	0	0	0	0	0	0	0	3	0	0	0	0
600 Brickell	0	0	0	1	0	0	0	11	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	4	0	0	0	0
Miami River Development SAP	0	0	1	1	0	0	0	26	0	0	0	0
Brickell Bayview Center	0	0	0	0	0	0	0	2	0	0	0	0
Brickell CitiCentre	0	0	2	4	0	0	0	67	0	0	0	0
Walgreens	0	0	0	0	0	0	0	5	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	4	0	0	0	0
The Beacon	0	0	0	0	0	0	0	5	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	1	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	1	0	0	0	0
TD Bank	0	0	0	1	0	0	0	10	0	0	0	0
Church of Jesus Christ LDS	0	0	1	1	0	0	0	21	0	0	0	0
Background	0	50	53	63	94	0	53	1,617	34	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**50**	**53**	**63**	**94**	**0**	**53**	**1,617**	**34**	**0**	**0**	**0**

INTERSECTION ANALYSIS SHEET

SW 7th St @ SW 2nd Ave

"No-Build" - Opening Year

	N-S	E-W
Growth Rate =	0.88%	1.88%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	252	632	0	0	214	85	0	0	0	96	655	106
Peak Season Volume	252	632	0	0	214	85	0	0	0	96	655	106
	29%	71%	0%	0%	72%	28%				11%	76%	12%
Committed Trips	*19*	*39*	*0*	*0*	*0*	*37*	*0*	*0*	*0*	*11*	*294*	*11*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	5	33	5
Premiere Towers	0	0	0	0	0	0	0	0	0	3	19	3
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village												
Miami River Development SAP	18	39				37					74	
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	3	18	3
Brickell CitiCentre											148	
Walgreens												
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	1	0	0	0	0	0	0	0	0	0	1	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	287	711	0	0	228	127	0	0	0	120	1,040	132
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**287**	**711**	**0**	**0**	**228**	**127**	**0**	**0**	**0**	**120**	**1,040**	**132**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	253	458	0	0	264	179	0	0	0	86	1148	84
Peak Season Volume	253	458	0	0	264	179	0	0	0	86	1,148	84
	36%	64%	0%	0%	60%	40%				7%	87%	6%
Committed Trips	*30*	*77*	*0*	*0*	*0*	*80*	*0*	*0*	*0*	*31*	*1,072*	*27*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	7	91	6
Premiere Towers	0	0	0	0	0	0	0	0	0	2	23	2
600 Brickell	0	0	0	0	0	0	0	0	0	18	229	16
The Pointe at Brickell Village											28	
Miami River Development SAP	25	55				52					102	
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	0	3	0
Brickell CitiCentre											533	
Walgreens	3	22				26					14	
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	2	23	2
The Beacon	0	0	0	0	0	0	0	0	0	0	1	0
Brickell Station	0	0	0	0	0	0	0	0	0	1	7	0
888 Brickell	0	0	0	0	0	0	0	0	0	1	9	1
TD Bank	1	0	0	0	0	1	0	0	0	0	5	0
Church of Jesus Christ LDS	1	0	0	0	0	1	0	0	0	0	5	0
Background	299	564	0	0	281	270	0	0	0	129	2,380	123
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**299**	**564**	**0**	**0**	**281**	**270**	**0**	**0**	**0**	**129**	**2,380**	**123**

INTERSECTION ANALYSIS SHEET

SW 7th St @ SW 8th Ave

"No-Build" - Opening Year

	N-S	E-W
Growth Rate =	0.88%	1.03%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	65	286	0	0	256	88	0	0	0	47	563	62
Peak Season Volume	65	286	0	0	256	88	0	0	0	47	563	62
	19%	81%	0%	0%	74%	26%				7%	84%	9%
										7%	84%	9%
Committed Trips	*0*	*0*	*0*	*0*	*0*	*1*	*0*	*0*	*0*	*9*	*107*	*11*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	1	12	1
Premiere Towers	0	0	0	0	0	0	0	0	0	1	7	1
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	0	0
Miami River Development SAP	0	0	0	0	0	0	0	0	0	4	44	5
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	1	6	1
Brickell CitiCentre	0	0	0	0	0	0	0	0	0	3	34	4
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	0	0	0	1	0	0	0	0	4	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	69	304	0	0	272	95	0	0	0	59	712	78
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**69**	**304**	**0**	**0**	**272**	**95**	**0**	**0**	**0**	**59**	**712**	**78**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	92	193	0	0	173	66	0	0	0	64	1261	63
Peak Season Volume	92	193	0	0	173	66	0	0	0	64	1,261	63
	32%	68%	0%	0%	72%	28%				5%	91%	5%
Committed Trips	*2*	*0*	*0*	*0*	*0*	*2*	*0*	*0*	*0*	*23*	*475*	*20*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	2	43	2
Premiere Towers	0	0	0	0	0	0	0	0	0	2	11	0
600 Brickell	0	0	0	0	0	0	0	0	0	2	108	5
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	2	13	1
Miami River Development SAP	0	0	0	0	0	0	0	0	0	4	66	3
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	2	1	0
Brickell CitiCentre	0	0	0	0	0	0	0	0	0	2	168	7
Walgreens	0	0	0	0	0	0	0	0	0	2	20	1
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	1	11	0
The Beacon	0	0	0	0	0	0	0	0	0	1	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	1	3	0
888 Brickell	0	0	0	0	0	0	0	0	0	1	4	0
TD Bank	1	0	0	0	0	1	0	0	0	0	14	0
Church of Jesus Christ LDS	1	0	0	0	0	1	0	0	0	0	13	0
Background	100	205	0	0	184	72	0	0	0	92	1,830	88
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**100**	**205**	**0**	**0**	**184**	**72**	**0**	**0**	**0**	**92**	**1,830**	**88**

INTERSECTION ANALYSIS SHEET

SW 7th St @ SW 1st Ave

"No-Build" - Opening Year

	N-S	E-W
Growth Rate =	0.88%	1.88%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	0	0	0	0	611	304	0	0	0	126	783	0
Peak Season Volume	0	0	0	0	611	304	0	0	0	126	783	0
				0%	67%	33%				14%	86%	0%
Committed Trips	*0*	*0*	*0*	*0*	*317*	*70*	*0*	*0*	*0*	*89*	*246*	*0*
Brickell CitiCentre North 2					12	33				2	11	
Premiere Towers					58						25	
600 Brickell												
The Pointe at Brickell Village												
Miami River Development SAP	0	0	0	0	0	21	0	0	0	0	53	0
Brickell Bayview Center					4					11	24	
Brickell CitiCentre					243	16				76	132	
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	0	0	0	0	0	0	0	0	1	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	0	0	0	0	967	393	0	0	0	233	1,138	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**0**	**0**	**0**	**967**	**393**	**0**	**0**	**0**	**233**	**1,138**	**0**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	0	0	0	0	646	286	0	0	0	203	1178	0
Peak Season Volume	0	0	0	0	646	286	0	0	0	203	1,178	0
				0%	69%	31%				15%	85%	0%
Committed Trips	*0*	*0*	*0*	*0*	*360*	*84*	*0*	*0*	*0*	*197*	*1,045*	*0*
Brickell CitiCentre North 2					32	47				12	58	
Premiere Towers					49						26	
600 Brickell										29	263	
The Pointe at Brickell Village					30						28	
Miami River Development SAP	0	0	0	0	0	20	0	0	0	0	82	0
Brickell Bayview Center					11					12	3	
Brickell CitiCentre					238	12				136	521	
Walgreens	0	0	0	0	0	3	0	0	0	0	11	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	5	26	0
The Beacon	0	0	0	0	0	0	0	0	0	0	1	0
Brickell Station	0	0	0	0	0	0	0	0	0	1	8	0
888 Brickell	0	0	0	0	0	0	0	0	0	2	10	0
TD Bank	0	0	0	0	0	1	0	0	0	0	4	0
Church of Jesus Christ LDS	0	0	0	0	0	1	0	0	0	0	4	0
Background	0	0	0	0	1,047	388	0	0	0	428	2,387	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**0**	**0**	**0**	**1,047**	**388**	**0**	**0**	**0**	**428**	**2,387**	**0**

2013 Node: 4130

INTERSECTION ANALYSIS SHEET

SW 8th St @ Brickell Ave

"No-Build" - Opening Year

	N-S	E-W
Growth Rate =	0.88%	1.88%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	0	848	233	346	816	0	534	705	221	233	0	589
Peak Season Volume	0	848	233	346	816	0	534	705	221	233	0	589
	0%	78%	22%	30%	70%	0%	37%	48%	15%	28%	0%	72%
Committed Trips	*0*	*17*	*0*	*10*	*13*	*0*	*50*	*37*	*11*	*0*	*0*	*44*
Brickell CitiCentre North 2		1		3	1							2
Premiere Towers		8			9							
600 Brickell												
The Pointe at Brickell Village												
Miami River Development SAP	0	0	0	0	0	0	19	25	8	0	0	0
Brickell Bayview Center							11	2	3			
Brickell CitiCentre		8		7	3		20	10				42
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue												
The Beacon												
Brickell Station												
888 Brickell												
TD Bank	0	0	0	0	0	0	0	0	0	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	0	919	248	378	881	0	658	840	263	265	0	715
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**919**	**248**	**378**	**881**	**0**	**658**	**840**	**263**	**265**	**0**	**715**

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PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	0	921	191	313	1065	0	261	448	197	278	0	518
Peak Season Volume	0	921	191	313	1,065	0	261	448	197	278	0	518
	0%	83%	17%	23%	77%	0%	29%	49%	22%	35%	0%	65%
Committed Trips	*0*	*145*	*11*	*44*	*182*	*0*	*196*	*121*	*58*	*2*	*0*	*65*
Brickell CitiCentre North 2		3		7	2							7
Premiere Towers		9			7							
600 Brickell		38			117		19					
The Pointe at Brickell Village					6		6					
Miami River Development SAP	0	0	0	0	0	0	18	31	14	0	0	0
Brickell Bayview Center		1					2		1			1
Brickell CitiCentre		8					142	59	12			41
Walgreens	0	0	0	0	0	0	2	4	2	0	0	0
1101 Brickell Avenue		37		35	35			17	18			16
The Beacon							5	8	4			
Brickell Station		22	5	2	6							
888 Brickell		27	6		9				6	2		
TD Bank	0	0	0	0	0	0	0	1	0	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	1	1	1	0	0	0
Background	0	1,124	214	377	1,314	0	493	631	282	319	0	655
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**1,124**	**214**	**377**	**1,314**	**0**	**493**	**631**	**282**	**319**	**0**	**655**

2013 Node: 4130

INTERSECTION ANALYSIS SHEET

SW 8th St @ Miami Ave

"No-Build" - Opening Year

	N-S	E-W
Growth Rate =	0.88%	1.88%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	0	597	69	0	0	0	231	1638	0	0	0	0
Peak Season Volume	0	597	69	0	0	0	231	1,638	0	0	0	0
	0%	90%	10%				12%	88%	0%			
Committed Trips	*0*	*81*	*42*	*0*	*0*	*0*	*122*	*658*	*0*	*0*	*0*	*0*
Brickell CitiCentre North 2		4					34					
Premiere Towers		51						26				
600 Brickell												
The Pointe at Brickell Village												
Miami River Development SAP	0	0	0	0	0	0	7	51	0	0	0	0
Brickell Bayview Center		1					48	16				
Brickell CitiCentre		25	42				33	564				
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue												
The Beacon												
Brickell Station												
888 Brickell												
TD Bank	0	0	0	0	0	0	0	1	0	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	0	716	115	0	0	0	385	2,524	0	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**716**	**115**	**0**	**0**	**0**	**385**	**2,524**	**0**	**0**	**0**	**0**

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PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	0	686	51	0	0	0	286	951	0	0	0	0
Peak Season Volume	0	686	51	0	0	0	286	951	0	0	0	0
	0%	93%	7%				23%	77%	0%			
Committed Trips	*0*	*192*	*43*	*0*	*0*	*0*	*667*	*434*	*0*	*0*	*0*	*0*
Brickell CitiCentre North 2		18					138					
Premiere Towers		43						21				
600 Brickell		10					67	19				
The Pointe at Brickell Village		58										
Miami River Development SAP	0	0	0	0	0	0	19	63	0	0	0	0
Brickell Bayview Center		3					9	3				
Brickell CitiCentre		25	41				424	233				
Walgreens	0	0	0	0	0	0	2	8	0	0	0	0
1101 Brickell Avenue								35				
The Beacon			2					42				
Brickell Station							7					
888 Brickell		35						6				
TD Bank	0	0	0	0	0	0	0	1	0	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	1	3	0	0	0	0
Background	0	921	97	0	0	0	993	1,517	0	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**921**	**97**	**0**	**0**	**0**	**993**	**1,517**	**0**	**0**	**0**	**0**

2013 Node: 4130

INTERSECTION ANALYSIS SHEET

SW 8th St @ SW 1st Ave

"No-Build" - Opening Year

	N-S	E-W
Growth Rate =	0.88%	1.88%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	0	0	0	207	463	0	0	1554	493	0	0	0
Peak Season Volume	0	0	0	207	463	0	0	1,554	493	0	0	0
				31%	69%	0%	0%	76%	24%			
Committed Trips	*0*	*0*	*0*	*307*	*99*	*0*	*0*	*494*	*19*	*0*	*0*	*0*
Brickell CitiCentre North 2				7	7			27				
Premiere Towers					58			26				
600 Brickell												
The Pointe at Brickell Village												
Miami River Development SAP	0	0	0	0	0	0	0	59	18	0	0	0
Brickell Bayview Center				7	8			5				
Brickell CitiCentre				293	26			377				
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	0	0	0	0	0	1	0	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	0	0	0	527	591	0	0	2,264	581	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**0**	**0**	**527**	**591**	**0**	**0**	**2,264**	**581**	**0**	**0**	**0**

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PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	0	0	0	138	712	0	0	1044	340	0	0	0
Peak Season Volume	0	0	0	138	712	0	0	1,044	340	0	0	0
				16%	84%	0%	0%	75%	25%			
Committed Trips	*0*	*0*	*0*	*338*	*222*	*0*	*0*	*782*	*60*	*0*	*0*	*0*
Brickell CitiCentre North 2				27	17			111				
Premiere Towers					49			21				
600 Brickell					29			86				
The Pointe at Brickell Village					30				28			
Miami River Development SAP	0	0	0	0	0	0	0	82	27	0	0	0
Brickell Bayview Center				21	2			18				
Brickell CitiCentre				279	95			369				
Walgreens	0	0	0	0	0	0	0	11	4	0	0	0
1101 Brickell Avenue	0	0	0	4	0	0	0	31	0	0	0	0
The Beacon	0	0	0	5	0	0	0	37	0	0	0	0
Brickell Station	0	0	0	1	0	0	0	6	0	0	0	0
888 Brickell	0	0	0	1	0	0	0	5	0	0	0	0
TD Bank	0	0	0	0	0	0	0	1	0	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	4	1	0	0	0
Background	0	0	0	485	979	0	0	1,971	447	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**0**	**0**	**485**	**979**	**0**	**0**	**1,971**	**447**	**0**	**0**	**0**

INTERSECTION ANALYSIS SHEET

SW 8th St @ SW 2nd Ave

"No-Build" - Opening Year

	N-S	E-W
Growth Rate =	0.88%	1.88%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	0	896	81	129	216	0	386	1651	248	0	0	0
Peak Season Volume	0	896	81	129	216	0	386	1,651	248	0	0	0
	0%	92%	8%	37%	63%	0%	17%	72%	11%			
Committed Trips	*0*	*18*	*2*	*4*	*0*	*0*	*39*	*507*	*20*	*0*	*0*	*0*
Brickell CitiCentre North 2	0	0	1	2	0	0	0	24	0	0	0	0
Premiere Towers	0	0	1	2	0	0	0	23	0	0	0	0
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village												
Miami River Development SAP		18					39	77	20			
Brickell Bayview Center	0	0	0	0	0	0	0	4	0	0	0	0
Brickell CitiCentre								377				
Walgreens												
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	0	0	0	0	0	1	0	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	0	971	88	141	230	0	479	2,388	303	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**971**	**88**	**141**	**230**	**0**	**479**	**2,388**	**303**	**0**	**0**	**0**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	0	869	82	146	351	0	316	1130	375	0	0	0
Peak Season Volume	0	869	82	146	351	0	316	1,130	375	0	0	0
	0%	91%	9%	29%	71%	0%	17%	62%	21%			
Committed Trips	*0*	*28*	*19*	*35*	*0*	*0*	*79*	*789*	*33*	*0*	*0*	*0*
Brickell CitiCentre North 2	0	0	7	12	0	0	0	92	0	0	0	0
Premiere Towers	0	0	1	2	0	0	0	17	0	0	0	0
600 Brickell	0	0	5	9	0	0	0	71	0	0	0	0
The Pointe at Brickell Village								28				
Miami River Development SAP		25					55	109	28			
Brickell Bayview Center	0	0	1	2	0	0	0	15	0	0	0	0
Brickell CitiCentre								369				
Walgreens		3					22	14	3			
1101 Brickell Avenue	0	0	2	3	0	0	0	26	0	0	0	0
The Beacon	0	0	2	4	0	0	0	31	0	0	0	0
Brickell Station	0	0	0	1	0	0	0	5	0	0	0	0
888 Brickell	0	0	0	1	0	0	0	4	0	0	0	0
TD Bank	0	0	0	0	0	0	0	2	1	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	1	5	2	0	0	0
Background	0	952	106	190	373	0	439	2,076	460	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**952**	**106**	**190**	**373**	**0**	**439**	**2,076**	**460**	**0**	**0**	**0**

INTERSECTION ANALYSIS SHEET

SW 8th St @ SW 8th Ave

"No-Build" - Opening Year

	N-S	E-W
Growth Rate =	0.88%	1.03%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	0	146	49	164	115	0	148	1556	52	0	0	0
Peak Season Volume	0	146	49	164	115	0	148	1,556	52	0	0	0
	0%	75%	25%	59%	41%	0%	8%	89%	3%			
Committed Trips	*0*	*0*	*7*	*20*	*0*	*0*	*0*	*196*	*0*	*0*	*0*	*0*
Brickell CitiCentre North 2	0	0	0	1	0	0	0	8	0	0	0	0
Premiere Towers	0	0	0	1	0	0	0	8	0	0	0	0
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	0	0
Miami River Development SAP	0	0	1	4	0	0	0	37	0	0	0	0
Brickell Bayview Center	0	0	0	0	0	0	0	1	0	0	0	0
Brickell CitiCentre	0	0	5	14	0	0	0	139	0	0	0	0
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	0	0	0	0	0	4	0	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	0	155	59	194	122	0	159	1,868	56	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**155**	**59**	**194**	**122**	**0**	**159**	**1,868**	**56**	**0**	**0**	**0**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	0	128	35	100	142	0	168	1563	51	0	0	0
Peak Season Volume	0	128	35	100	142	0	168	1,563	51	0	0	0
	0%	79%	21%	41%	59%	0%	9%	88%	3%			
Committed Trips	*0*	*0*	*6*	*18*	*0*	*0*	*3*	*311*	*1*	*0*	*0*	*0*
Brickell CitiCentre North 2	0	0	1	2	0	0	0	28	0	0	0	0
Premiere Towers	0	0	0	0	0	0	0	5	0	0	0	0
600 Brickell	0	0	0	1	0	0	0	22	0	0	0	0
The Pointe at Brickell Village	0	0	0	1	0	0	0	9	0	0	0	0
Miami River Development SAP	0	0	1	3	0	0	0	50	0	0	0	0
Brickell Bayview Center	0	0	0	0	0	0	0	5	0	0	0	0
Brickell CitiCentre	0	0	3	8	0	0	0	130	0	0	0	0
Walgreens	0	0	0	1	0	0	0	11	0	0	0	0
1101 Brickell Avenue	0	0	0	1	0	0	0	8	0	0	0	0
The Beacon	0	0	0	1	0	0	0	9	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	2	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	1	0	0	0	0
TD Bank	0	0	0	0	0	0	1	8	0	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	2	23	1	0	0	0
Background	0	136	43	124	151	0	183	1,990	56	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**136**	**43**	**124**	**151**	**0**	**183**	**1,990**	**56**	**0**	**0**	**0**

INTERSECTION ANALYSIS SHEET

SW 8th St @ SW 12th Ave

"No-Build" - Opening Year

	N-S	E-W
Growth Rate =	0.88%	1.03%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	0	452	88	124	333	0	193	1831	97	0	0	0
Peak Season Volume	0	452	88	124	333	0	193	1,831	97	0	0	0
	0%	84%	16%	27%	73%	0%	9%	86%	5%			
			4%	6%				90%				
Committed Trips	*0*	*7*	*12*	*12*	*5*	*0*	*0*	*173*	*9*	*0*	*0*	*0*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	7	0	0	0	0
Premiere Towers	0	0	0	0	0	0	0	7	0	0	0	0
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	0	0
Miami River Development SAP	0	0	1	2	0	0	0	33	0	0	0	0
Brickell Bayview Center	0	0	0	0	0	0	0	1	0	0	0	0
Brickell CitiCentre	0	0	6	8	0	0	0	125	0	0	0	0
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank		7	4		5				9			
Church of Jesus Christ LDS												
Background	0	488	106	144	359	0	207	2,140	113	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**488**	**106**	**144**	**359**	**0**	**207**	**2,140**	**113**	**0**	**0**	**0**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	0	452	87	163	516	0	174	1403	78	0	0	0
Peak Season Volume	0	452	87	163	516	0	174	1,403	78	0	0	0
	0%	84%	16%	24%	76%	0%	11%	85%	5%			
			4%	8%				69%				
Committed Trips	*0*	*16*	*23*	*28*	*9*	*0*	*9*	*264*	*16*	*0*	*0*	*0*
Brickell CitiCentre North 2	0	0	1	3	0	0	0	24	0	0	0	0
Premiere Towers	0	0	0	1	0	0	0	5	0	0	0	0
600 Brickell	0	0	1	2	0	0	0	19	0	0	0	0
The Pointe at Brickell Village	0	0	0	1	0	0	0	7	0	0	0	0
Miami River Development SAP	0	0	3	5	0	0	0	43	0	0	0	0
Brickell Bayview Center	0	0	0	0	0	0	0	4	0	0	0	0
Brickell CitiCentre	0	0	6	13	0	0	0	110	0	0	0	0
Walgreens	0	0	1	1	0	0	0	9	0	0	0	0
1101 Brickell Avenue	0	0	0	1	0	0	0	7	0	0	0	0
The Beacon	0	0	0	1	0	0	0	8	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	1	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	1	0	0	0	0
TD Bank		16	9		9				16			
Church of Jesus Christ LDS							9	26				
Background	0	497	116	201	558	0	196	1,771	100	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**497**	**116**	**201**	**558**	**0**	**196**	**1,771**	**100**	**0**	**0**	**0**

INTERSECTION ANALYSIS SHEET

SW 8th St @ SW 17th Ave

"No-Build" - Opening Year

	N-S	E-W
Growth Rate =	0.88%	1.03%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	0	698	189	217	978	0	187	1523	78	0	0	0
Peak Season Volume	0	698	189	217	978	0	187	1,523	78	0	0	0
	0%	79%	21%	18%	82%	0%	10%	85%	4%			
			10%	11%				79%				
Committed Trips	*0*	*0*	*18*	*20*	*0*	*0*	*0*	*144*	*0*	*0*	*0*	*0*
Brickell CitiCentre North 2	0	0	1	1	0	0	0	6	0	0	0	0
Premiere Towers	0	0	1	1	0	0	0	5	0	0	0	0
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	0	0
Miami River Development SAP	0	0	3	4	0	0	0	26	0	0	0	0
Brickell Bayview Center	0	0	0	0	0	0	0	1	0	0	0	0
Brickell CitiCentre	0	0	12	14	0	0	0	99	0	0	0	0
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	1	1	0	0	0	7	0	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	0	742	219	251	1,040	0	201	1,780	84	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**742**	**219**	**251**	**1,040**	**0**	**201**	**1,780**	**84**	**0**	**0**	**0**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	0	602	140	194	703	0	126	1487	104	0	0	0
Peak Season Volume	0	602	140	194	703	0	126	1,487	104	0	0	0
	0%	81%	19%	22%	78%	0%	7%	87%	6%			
			7%	10%				77%				
Committed Trips	*0*	*0*	*20*	*32*	*0*	*0*	*0*	*237*	*0*	*0*	*0*	*0*
Brickell CitiCentre North 2	0	0	2	3	0	0	0	20	0	0	0	0
Premiere Towers	0	0	0	1	0	0	0	4	0	0	0	0
600 Brickell	0	0	1	2	0	0	0	15	0	0	0	0
The Pointe at Brickell Village	0	0	1	1	0	0	0	6	0	0	0	0
Miami River Development SAP	0	0	3	5	0	0	0	35	0	0	0	0
Brickell Bayview Center	0	0	0	0	0	0	0	3	0	0	0	0
Brickell CitiCentre	0	0	8	12	0	0	0	90	0	0	0	0
Walgreens	0	0	1	1	0	0	0	7	0	0	0	0
1101 Brickell Avenue	0	0	0	1	0	0	0	6	0	0	0	0
The Beacon	0	0	1	1	0	0	0	7	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	1	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	1	0	0	0	0
TD Bank	0	0	1	2	0	0	0	13	0	0	0	0
Church of Jesus Christ LDS	0	0	2	4	0	0	0	29	0	0	0	0
Background	0	640	169	238	747	0	135	1,835	112	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**640**	**169**	**238**	**747**	**0**	**135**	**1,835**	**112**	**0**	**0**	**0**

INTERSECTION ANALYSIS SHEET

SW 8th St @ SW 19th Ave

"No-Build" - Opening Year

	N-S	E-W
Growth Rate =	0.88%	1.03%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	0	69	85	44	73	0	57	1835	24	0	0	0
Peak Season Volume	0	69	85	44	73	0	57	1,835	24	0	0	0
	0%	45%	55%	38%	62%	0%	3%	96%	1%			
			4%	2%				93%				
Committed Trips	*0*	*0*	*7*	*3*	*0*	*0*	*0*	*134*	*0*	*0*	*0*	*0*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	5	0	0	0	0
Premiere Towers	0	0	0	0	0	0	0	5	0	0	0	0
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	0	0
Miami River Development SAP	0	0	1	1	0	0	0	24	0	0	0	0
Brickell Bayview Center	0	0	0	0	0	0	0	1	0	0	0	0
Brickell CitiCentre	0	0	5	2	0	0	0	92	0	0	0	0
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	0	0	0	0	0	7	0	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	0	73	97	50	78	0	61	2,105	26	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**73**	**97**	**50**	**78**	**0**	**61**	**2,105**	**26**	**0**	**0**	**0**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	0	67	63	120	79	0	89	1705	24	0	0	0
Peak Season Volume	0	67	63	120	79	0	89	1,705	24	0	0	0
	0%	52%	48%	60%	40%	0%	5%	94%	1%			
			3%	6%				87%				
Committed Trips	*0*	*0*	*9*	*14*	*0*	*0*	*0*	*213*	*0*	*0*	*0*	*0*
Brickell CitiCentre North 2	0	0	1	1	0	0	0	18	0	0	0	0
Premiere Towers	0	0	0	0	0	0	0	3	0	0	0	0
600 Brickell	0	0	1	1	0	0	0	14	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	5	0	0	0	0
Miami River Development SAP	0	0	1	2	0	0	0	32	0	0	0	0
Brickell Bayview Center	0	0	0	0	0	0	0	3	0	0	0	0
Brickell CitiCentre	0	0	4	5	0	0	0	81	0	0	0	0
Walgreens	0	0	0	0	0	0	0	7	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	5	0	0	0	0
The Beacon	0	0	0	0	0	0	0	6	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	1	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	1	0	0	0	0
TD Bank	0	0	1	1	0	0	0	12	0	0	0	0
Church of Jesus Christ LDS	0	0	1	2	0	0	0	26	0	0	0	0
Background	0	71	76	142	84	0	96	2,045	26	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**71**	**76**	**142**	**84**	**0**	**96**	**2,045**	**26**	**0**	**0**	**0**

INTERSECTION ANALYSIS SHEET

SW 8th St @ SW 22nd Ave

"No-Build" - Opening Year

	N-S	E-W
Growth Rate =	0.88%	1.03%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	0	817	162	130	1010	0	97	1448	74	0	0	0
Peak Season Volume	0	817	162	130	1,010	0	97	1,448	74	0	0	0
	0%	83%	17%	11%	89%	0%	6%	89%	5%			
			9%	7%				83%				
Committed Trips	*0*	*0*	*12*	*11*	*0*	*0*	*0*	*111*	*0*	*0*	*0*	*0*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	4	0	0	0	0
Premiere Towers	0	0	0	0	0	0	0	4	0	0	0	0
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	0	0
Miami River Development SAP	0	0	2	2	0	0	0	20	0	0	0	0
Brickell Bayview Center	0	0	0	0	0	0	0	1	0	0	0	0
Brickell CitiCentre	0	0	8	7	0	0	0	76	0	0	0	0
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	1	1	0	0	0	5	0	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	0	869	184	149	1,074	0	104	1,667	80	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**869**	**184**	**149**	**1,074**	**0**	**104**	**1,667**	**80**	**0**	**0**	**0**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	0	614	126	54	1099	0	139	1395	62	0	0	0
Peak Season Volume	0	614	126	54	1,099	0	139	1,395	62	0	0	0
	0%	83%	17%	5%	95%	0%	9%	87%	4%			
			7%	3%				80%				
Committed Trips	*0*	*0*	*17*	*6*	*0*	*0*	*0*	*190*	*0*	*0*	*0*	*0*
Brickell CitiCentre North 2	0	0	1	1	0	0	0	16	0	0	0	0
Premiere Towers	0	0	0	0	0	0	0	3	0	0	0	0
600 Brickell	0	0	1	0	0	0	0	12	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	5	0	0	0	0
Miami River Development SAP	0	0	3	1	0	0	0	28	0	0	0	0
Brickell Bayview Center	0	0	0	0	0	0	0	3	0	0	0	0
Brickell CitiCentre	0	0	7	2	0	0	0	72	0	0	0	0
Walgreens	0	0	1	0	0	0	0	6	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	4	0	0	0	0
The Beacon	0	0	0	0	0	0	0	5	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	1	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	1	0	0	0	0
TD Bank	0	0	1	0	0	0	0	11	0	0	0	0
Church of Jesus Christ LDS	0	0	2	1	0	0	0	23	0	0	0	0
Background	0	653	151	63	1,169	0	149	1,689	67	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**653**	**151**	**63**	**1,169**	**0**	**149**	**1,689**	**67**	**0**	**0**	**0**

INTERSECTION ANALYSIS SHEET

SW 8th St @ SW 27th Ave

"No-Build" - Opening Year

	N-S	E-W
Growth Rate =	0.88%	1.03%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	182	1559	317	190	1366	94	0	1119	60	0	1102	21
Peak Season Volume	182	1,559	317	190	1,366	94	0	1,119	60	0	1,102	21
	9%	76%	15%	12%	83%	6%	0%	95%	5%	0%	98%	2%
			19%	12%				69%				
Committed Trips	*0*	*0*	*20*	*12*	*0*	*0*	*0*	*71*	*0*	*0*	*0*	*0*
Brickell CitiCentre North 2	0	0	1	0	0	0	0	3	0	0	0	0
Premiere Towers	0	0	1	0	0	0	0	3	0	0	0	0
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	0	0
Miami River Development SAP	0	0	4	2	0	0	0	13	0	0	0	0
Brickell Bayview Center	0	0	0	0	0	0	0	1	0	0	0	0
Brickell CitiCentre	0	0	13	8	0	0	0	49	0	0	0	0
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	1	1	0	0	0	4	0	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	194	1,658	357	214	1,452	100	0	1,273	64	0	1,184	23
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**194**	**1,658**	**357**	**214**	**1,452**	**100**	**0**	**1,273**	**64**	**0**	**1,184**	**23**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	180	1329	223	262	1320	136	0	885	43	0	1265	38
Peak Season Volume	180	1,329	223	262	1,320	136	0	885	43	0	1,265	38
	10%	77%	13%	15%	77%	8%	0%	95%	5%	0%	97%	3%
			14%	16%				54%				
Committed Trips	*0*	*0*	*28*	*33*	*0*	*0*	*0*	*114*	*0*	*0*	*0*	*0*
Brickell CitiCentre North 2	0	0	2	3	0	0	0	10	0	0	0	0
Premiere Towers	0	0	0	1	0	0	0	2	0	0	0	0
600 Brickell	0	0	2	2	0	0	0	7	0	0	0	0
The Pointe at Brickell Village	0	0	1	1	0	0	0	3	0	0	0	0
Miami River Development SAP	0	0	4	5	0	0	0	17	0	0	0	0
Brickell Bayview Center	0	0	0	0	0	0	0	2	0	0	0	0
Brickell CitiCentre	0	0	11	13	0	0	0	43	0	0	0	0
Walgreens	0	0	1	1	0	0	0	4	0	0	0	0
1101 Brickell Avenue	0	0	1	1	0	0	0	3	0	0	0	0
The Beacon	0	0	1	1	0	0	0	3	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	1	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	2	2	0	0	0	6	0	0	0	0
Church of Jesus Christ LDS	0	0	3	4	0	0	0	14	0	0	0	0
Background	191	1,413	265	312	1,403	145	0	1,065	46	0	1,359	41
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**191**	**1,413**	**265**	**312**	**1,403**	**145**	**0**	**1,065**	**46**	**0**	**1,359**	**41**

INTERSECTION ANALYSIS SHEET

SW 8th St @ SW 3rd Ave

"No-Build" - Opening Year

	N-S	E-W
Growth Rate =	0.88%	1.88%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	0	194	233	15	327	0	32	2063	180	0	0	0
Peak Season Volume	0	194	233	15	327	0	32	2,063	180	0	0	0
	0%	45%	55%	4%	96%	0%	1%	91%	8%			
Committed Trips	*0*	*49*	*5*	*137*	*87*	*0*	*121*	*424*	*0*	*0*	*0*	*0*
Brickell CitiCentre North 2	0	0	2	0	0	0	0	21	0	0	0	0
Premiere Towers	0	0	2	0	0	0	0	21	0	0	0	0
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	0	0
Miami River Development SAP		49		136	8		121					
Brickell Bayview Center	0	0	0	0	0	0	0	4	0	0	0	0
Brickell CitiCentre					79			377				
Walgreens												
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	0	0	0	0	0	1	0	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	0	255	253	153	435	0	157	2,774	205	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**255**	**253**	**153**	**435**	**0**	**157**	**2,774**	**205**	**0**	**0**	**0**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	0	180	176	15	466	0	88	1467	64	0	0	0
Peak Season Volume	0	180	176	15	466	0	88	1,467	64	0	0	0
	0%	51%	49%	3%	97%	0%	5%	91%	4%			
Committed Trips	*0*	*69*	*32*	*234*	*299*	*0*	*199*	*635*	*0*	*0*	*0*	*0*
Brickell CitiCentre North 2	0	0	10	1	0	0	0	81	0	0	0	0
Premiere Towers	0	0	2	0	0	0	0	15	0	0	0	0
600 Brickell	0	0	8	1	0	0	0	63	0	0	0	0
The Pointe at Brickell Village	0	0	3	0	0	0	0	25	0	0	0	0
Miami River Development SAP		66		192	11		168					
Brickell Bayview Center	0	0	2	0	0	0	0	13	0	0	0	0
Brickell CitiCentre					284			369				
Walgreens		3		39	4		30					
1101 Brickell Avenue	0	0	3	0	0	0	0	22	0	0	0	0
The Beacon	0	0	3	0	0	0	0	27	0	0	0	0
Brickell Station	0	0	1	0	0	0	0	4	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	4	0	0	0	0
TD Bank	0	0	0	0	0	0	0	3	0	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	8	0	0	0	0
Background	0	260	219	250	794	0	299	2,306	73	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**260**	**219**	**250**	**794**	**0**	**299**	**2,306**	**73**	**0**	**0**	**0**

INTERSECTION ANALYSIS SHEET

SW 8th St @ SW 4th Ave

"No-Build" - Opening Year

	N-S	E-W
Growth Rate =	0.88%	1.88%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	0	0	0	2456	523	0	0	1608	75	0	0	0
Peak Season Volume	0	0	0	2,456	523	0	0	1,608	75	0	0	0
	#DIV/0!	#DIV/0!	#DIV/0!	82%	18%	0%	0%	96%	4%			
			0%	60%				40%				
Committed Trips	*0*	*0*	*0*	*347*	*51*	*0*	*0*	*247*	*17*	*0*	*0*	*0*
Brickell CitiCentre North 2	0	0	0	10	0	0	0	10	1	0	0	0
Premiere Towers	0	0	0	10	0	0	0	10	1	0	0	0
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	0	0
Miami River Development SAP				144	51			47				
Brickell Bayview Center	0	0	0	2	0	0	0	2	0	0	0	0
Brickell CitiCentre	0	0	0	181	0	0	0	177	15	0	0	0
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	0	0	0	0	0	2	0	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	0	0	0	2,958	607	0	0	2,079	102	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**0**	**0**	**2,958**	**607**	**0**	**0**	**2,079**	**102**	**0**	**0**	**0**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	0	0	0	1424	627	0	0	1574	129	0	0	0
Peak Season Volume	0	0	0	1,424	627	0	0	1,574	129	0	0	0
				69%	31%	0%	0%	92%	8%			
			0%	35%				39%				
Committed Trips	*0*	*0*	*0*	*475*	*72*	*0*	*0*	*379*	*61*	*0*	*0*	*0*
Brickell CitiCentre North 2	0	0	0	34	0	0	0	37	7	0	0	0
Premiere Towers	0	0	0	6	0	0	0	7	1	0	0	0
600 Brickell	0	0	0	26	0	0	0	29	6	0	0	0
The Pointe at Brickell Village	0	0	0	10	0	0	0	11	2	0	0	0
Miami River Development SAP				201	72			66				
Brickell Bayview Center	0	0	0	6	0	0	0	6	1	0	0	0
Brickell CitiCentre	0	0	0	155	0	0	0	170	33	0	0	0
Walgreens	0	0	0	13	0	0	0	14	3	0	0	0
1101 Brickell Avenue	0	0	0	9	0	0	0	10	2	0	0	0
The Beacon	0	0	0	11	0	0	0	12	2	0	0	0
Brickell Station	0	0	0	2	0	0	0	2	0	0	0	0
888 Brickell	0	0	0	2	0	0	0	2	0	0	0	0
TD Bank	0	0	0	0	0	0	0	3	1	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	9	2	0	0	0
Background	0	0	0	1,989	739	0	0	2,172	208	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**0**	**0**	**1,989**	**739**	**0**	**0**	**2,172**	**208**	**0**	**0**	**0**

INTERSECTION ANALYSIS SHEET

SW 7th St @ SW 4th Ave/SB I-95 Off-Ramp

"No-Build" - Opening Year

	N-S	E-W
Growth Rate =	0.88%	1.88%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Southwestbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	0	0	0	0	279	12	0	952	281	0	0	0	316	454	0
Peak Season Volume	0	0	0	0	279	12	0	952	281	0	0	0	316	454	0
				0%	96%	4%	0%	77%	23%				41%	59%	0%
Committed Trips	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*183*	*42*	*0*	*0*	*0*	*61*	*85*	*0*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	0	0	0	10	14	0
Premiere Towers	0	0	0	0	0	0	0	0	0	0	0	0	6	8	0
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Miami River Development SAP								183	40				12	12	
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	0	0	0	5	8	0
Brickell CitiCentre	0	0	0	0	0	0	0	0	0	0	0	0	28	41	0
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Background	0	0	0	0	297	13	0	1,195	341	0	0	0	421	602	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**0**	**0**	**0**	**297**	**13**	**0**	**1,195**	**341**	**0**	**0**	**0**	**421**	**602**	**0**

PM Peak Hour

	Northbound			Southbound			Southwestbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	0	0	0	0	177	36	0	709	478	0	0	0	259	744	0
Peak Season Volume	0	0	0	0	177	36	0	709	478	0	0	0	259	744	0
				0%	83%	17%	0%	333%	224%				26%	74%	0%
Committed Trips	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*256*	*66*	*0*	*0*	*0*	*164*	*453*	*0*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	0	0	0	17	47	0
Premiere Towers	0	0	0	0	0	0	0	0	0	0	0	0	4	12	0
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0	42	119	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	0	0	5	15	0
Miami River Development SAP								256	55				17	17	
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Brickell CitiCentre	0	0	0	0	0	0	0	0	0	0	0	0	65	184	0
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0	8	21	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0	4	12	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0	1	3	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0	2	5	0
TD Bank	0	0	0	0	0	0	0	0	6	0	0	0	0	8	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	5	0	0	0	0	8	0
Background	0	0	0	0	188	38	0	1,010	574	0	0	0	459	1,301	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**0**	**0**	**0**	**188**	**38**	**0**	**1,010**	**574**	**0**	**0**	**0**	**459**	**1,301**	**0**

INTERSECTION ANALYSIS SHEET

SW 7th St @ SW 12th Ave

"No-Build" - Opening Year

	N-S	E-W
Growth Rate =	0.88%	1.03%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	147	520	0	0	380	114	0	0	0	75	752	71
Peak Season Volume	147	520	0	0	380	114	0	0	0	75	752	71
	22%	78%	0%	0%	77%	23%				8%	84%	8%
										8%	84%	8%
Committed Trips	*7*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*12*	*86*	*9*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	1	10	1
Premiere Towers	0	0	0	0	0	0	0	0	0	0	6	1
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	0	0
Miami River Development SAP	0	0	0	0	0	0	0	0	0	3	37	4
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	0	5	1
Brickell CitiCentre	0	0	0	0	0	0	0	0	0	2	29	3
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	7									5		
Church of Jesus Christ LDS												
Background	163	553	0	0	404	121	0	0	0	93	894	85
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**163**	**553**	**0**	**0**	**404**	**121**	**0**	**0**	**0**	**93**	**894**	**85**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	173	497	0	0	534	108	0	0	0	120	1389	95
Peak Season Volume	173	497	0	0	534	108	0	0	0	120	1,389	95
	26%	74%	0%	0%	83%	17%				7%	87%	6%
Committed Trips	*18*	*0*	*0*	*0*	*0*	*9*	*0*	*0*	*0*	*47*	*404*	*27*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	3	37	3
Premiere Towers	0	0	0	0	0	0	0	0	0	1	9	1
600 Brickell	0	0	0	0	0	0	0	0	0	8	94	6
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	1	11	1
Miami River Development SAP	0	0	0	0	0	0	0	0	0	5	57	4
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	0	1	0
Brickell CitiCentre	0	0	0	0	0	0	0	0	0	12	146	10
Walgreens	0	0	0	0	0	0	0	0	0	1	17	1
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	1	9	1
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	3	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	4	0
TD Bank	9									16		
Church of Jesus Christ LDS	9					9					15	
Background	202	528	0	0	568	124	0	0	0	176	1,896	129
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**202**	**528**	**0**	**0**	**568**	**124**	**0**	**0**	**0**	**176**	**1,896**	**129**

INTERSECTION ANALYSIS SHEET

SW 7th St @ Beacom Blvd

"No-Build" - Opening Year

	N-S	E-W
Growth Rate =	0.88%	1.03%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	165	248	0	0	297	367	0	0	0	430	515	0
Peak Season Volume	165	248	0	0	297	367	0	0	0	430	515	0
	40%	60%	0%	0%	45%	55%				46%	54%	0%
Committed Trips	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*27*	*23*	*0*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	3	2	0
Premiere Towers	0	0	0	0	0	0	0	0	0	2	1	0
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	0	0
Miami River Development SAP	0	0	0	0	0	0	0	0	0	11	9	0
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	2	1	0
Brickell CitiCentre	0	0	0	0	0	0	0	0	0	8	7	0
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	0	0	0	0	0	0	0	2	2	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	175	264	0	0	316	390	0	0	0	489	576	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**175**	**264**	**0**	**0**	**316**	**390**	**0**	**0**	**0**	**489**	**576**	**0**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	126	221	0	0	319	302	0	0	0	591	600	0
Peak Season Volume	126	221	0	0	319	302	0	0	0	591	600	0
										50%	50%	0%
Committed Trips	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*226*	*118*	*0*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	24	10	0
Premiere Towers	0	0	0	0	0	0	0	0	0	6	3	0
600 Brickell	0	0	0	0	0	0	0	0	0	59	26	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	7	3	0
Miami River Development SAP	0	0	0	0	0	0	0	0	0	9	16	0
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	1	0	0
Brickell CitiCentre	0	0	0	0	0	0	0	0	0	92	40	0
Walgreens	0	0	0	0	0	0	0	0	0	11	5	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	6	3	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	2	1	0
888 Brickell	0	0	0	0	0	0	0	0	0	2	1	0
TD Bank	0	0	0	0	0	0	0	0	0	4	2	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	4	9	0
Background	134	235	0	0	339	321	0	0	0	861	763	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**134**	**235**	**0**	**0**	**339**	**321**	**0**	**0**	**0**	**861**	**763**	**0**

INTERSECTION ANALYSIS SHEET

SW 7th St @ SW 17th Ave

"No-Build" - Opening Year

	N-S	E-W
Growth Rate =	0.88%	1.03%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	96	661	0	0	922	118	0	0	0	122	808	129
Peak Season Volume	96	661	0	0	922	118	0	0	0	122	808	129
	13%	87%	0%	0%	89%	11%				12%	76%	12%
										12%	76%	12%
Committed Trips	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*11*	*68*	*11*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	1	7	1
Premiere Towers	0	0	0	0	0	0	0	0	0	1	4	1
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	0	0
Miami River Development SAP	0	0	0	0	0	0	0	0	0	4	27	4
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	1	4	1
Brickell CitiCentre	0	0	0	0	0	0	0	0	0	3	21	3
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	0	0	0	0	0	0	0	1	5	1
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	102	703	0	0	980	125	0	0	0	142	936	150
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**102**	**703**	**0**	**0**	**980**	**125**	**0**	**0**	**0**	**142**	**936**	**150**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	109	589	0	0	869	157	0	0	0	161	1237	97
Peak Season Volume	109	589	0	0	869	157	0	0	0	161	1,237	97
	16%	84%	0%	0%	85%	15%				11%	83%	6%
Committed Trips	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*46*	*343*	*25*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	4	30	2
Premiere Towers	0	0	0	0	0	0	0	0	0	1	7	1
600 Brickell	0	0	0	0	0	0	0	0	0	10	75	5
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	1	9	1
Miami River Development SAP	0	0	0	0	0	0	0	0	0	6	45	3
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	0	1	0
Brickell CitiCentre	0	0	0	0	0	0	0	0	0	15	116	8
Walgreens	0	0	0	0	0	0	0	0	0	2	14	1
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	1	7	1
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	2	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	3	0
TD Bank	0	0	0	0	0	0	0	0	0	1	7	1
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	3	26	2
Background	116	626	0	0	924	167	0	0	0	219	1,672	129
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**116**	**626**	**0**	**0**	**924**	**167**	**0**	**0**	**0**	**219**	**1,672**	**129**

INTERSECTION ANALYSIS SHEET

SW 7th St @ SW 19th Ave

"No-Build" - Opening Year

	N-S	E-W
Growth Rate =	0.88%	1.03%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	55	52	0	0	105	47	0	0	0	46	858	16
Peak Season Volume	55	52	0	0	105	47	0	0	0	46	858	16
	51%	49%	0%	0%	69%	31%				5%	93%	2%
										5%	93%	2%
Committed Trips	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*3*	*63*	*1*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	0	7	0
Premiere Towers	0	0	0	0	0	0	0	0	0	0	4	0
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	0	0
Miami River Development SAP	0	0	0	0	0	0	0	0	0	1	25	1
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	0	4	0
Brickell CitiCentre	0	0	0	0	0	0	0	0	0	1	19	0
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	0	0	0	0	0	0	0	0	5	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	58	55	0	0	112	50	0	0	0	52	985	18
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**58**	**55**	**0**	**0**	**112**	**50**	**0**	**0**	**0**	**52**	**985**	**18**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	64	59	0	0	92	43	0	0	0	78	1222	34
Peak Season Volume	64	59	0	0	92	43	0	0	0	78	1,222	34
	52%	48%	0%	0%	68%	32%				6%	92%	3%
Committed Trips	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*21*	*316*	*7*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	2	27	1
Premiere Towers	0	0	0	0	0	0	0	0	0	0	7	0
600 Brickell	0	0	0	0	0	0	0	0	0	4	69	1
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	1	8	0
Miami River Development SAP	0	0	0	0	0	0	0	0	0	3	42	1
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	0	1	0
Brickell CitiCentre	0	0	0	0	0	0	0	0	0	7	107	2
Walgreens	0	0	0	0	0	0	0	0	0	1	12	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	7	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	2	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	3	0
TD Bank	0	0	0	0	0	0	0	0	0	0	7	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	2	24	1
Background	68	63	0	0	98	46	0	0	0	105	1,629	44
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**68**	**63**	**0**	**0**	**98**	**46**	**0**	**0**	**0**	**105**	**1,629**	**44**

INTERSECTION ANALYSIS SHEET

SW 7th St @ SW 22nd Ave

"No-Build" - Opening Year

	N-S	E-W
Growth Rate =	0.88%	1.03%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	83	769	0	0	703	65	0	0	0	128	850	78
Peak Season Volume	83	769	0	0	703	65	0	0	0	128	850	78
	10%	90%	0%	0%	92%	8%				12%	80%	7%
										12%	80%	7%
Committed Trips	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*8*	*51*	*4*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	1	5	0
Premiere Towers	0	0	0	0	0	0	0	0	0	0	3	0
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	0	0
Miami River Development SAP	0	0	0	0	0	0	0	0	0	3	20	2
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	0	3	0
Brickell CitiCentre	0	0	0	0	0	0	0	0	0	3	16	1
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	0	0	0	0	0	0	0	1	4	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	88	818	0	0	747	69	0	0	0	146	964	88
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**88**	**818**	**0**	**0**	**747**	**69**	**0**	**0**	**0**	**146**	**964**	**88**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	95	724	0	0	781	75	0	0	0	215	1095	152
Peak Season Volume	95	724	0	0	781	75	0	0	0	215	1,095	152
	12%	88%	0%	0%	91%	9%				15%	75%	10%
Committed Trips	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*47*	*237*	*32*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	4	21	3
Premiere Towers	0	0	0	0	0	0	0	0	0	1	5	1
600 Brickell	0	0	0	0	0	0	0	0	0	10	52	7
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	1	6	1
Miami River Development SAP	0	0	0	0	0	0	0	0	0	6	31	4
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	0	1	0
Brickell CitiCentre	0	0	0	0	0	0	0	0	0	16	80	11
Walgreens	0	0	0	0	0	0	0	0	0	2	9	1
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	1	5	1
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	2	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	2	0
TD Bank	0	0	0	0	0	0	0	0	0	1	5	1
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	4	18	2
Background	101	770	0	0	830	80	0	0	0	278	1,413	195
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**101**	**770**	**0**	**0**	**830**	**80**	**0**	**0**	**0**	**278**	**1,413**	**195**

INTERSECTION ANALYSIS SHEET

SW 7th St @ SW 27th Ave

"No-Build" - Opening Year

	N-S	E-W
Growth Rate =	0.88%	1.03%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	0	1281	0	0	1966	31	137	0	41	192	99	214
Peak Season Volume	0	1,281	0	0	1,966	31	137	0	41	192	99	214
	0%	100%	0%	0%	98%	2%	77%	0%	23%	38%	20%	42%
										38%	20%	42%
Committed Trips	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*9*	*5*	*10*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	1	0	1
Premiere Towers	0	0	0	0	0	0	0	0	0	1	0	1
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	0	0
Miami River Development SAP	0	0	0	0	0	0	0	0	0	3	2	4
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	1	0	1
Brickell CitiCentre	0	0	0	0	0	0	0	0	0	3	1	3
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	0	0	0	0	0	0	0	1	0	1
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	0	1,362	0	0	2,090	33	147	0	44	215	111	240
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**1,362**	**0**	**0**	**2,090**	**33**	**147**	**0**	**44**	**215**	**111**	**240**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	0	1272	0	0	1218	23	113	0	21	213	346	268
Peak Season Volume	0	1,272	0	0	1,218	23	113	0	21	213	346	268
	0%	100%	0%	0%	98%	2%	84%	0%	16%	26%	42%	32%
Committed Trips	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*31*	*50*	*38*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	3	4	3
Premiere Towers	0	0	0	0	0	0	0	0	0	1	1	1
600 Brickell	0	0	0	0	0	0	0	0	0	7	11	8
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	1	1	1
Miami River Development SAP	0	0	0	0	0	0	0	0	0	4	7	5
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	0	0	0
Brickell CitiCentre	0	0	0	0	0	0	0	0	0	10	17	13
Walgreens	0	0	0	0	0	0	0	0	0	1	2	1
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	1	1	1
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	0	0	0	0	0	0	0	1	1	1
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	2	4	3
Background	0	1,352	0	0	1,295	24	121	0	23	260	422	326
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**1,352**	**0**	**0**	**1,295**	**24**	**121**	**0**	**23**	**260**	**422**	**326**

2013 Node: 4130

INTERSECTION ANALYSIS SHEET

SW 7th St @ Brickell Ave

"No-Build" - Opening Year

	N-S	E-W
Growth Rate =	0.88%	1.88%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	369	1308	256	205	1149	166	0	0	0	4	40	44
Peak Season Volume	369	1,308	256	205	1,149	166	0	0	0	4	40	44
	19%	68%	13%	13%	76%	11%				5%	45%	50%
Committed Trips	*78*	*39*	*0*	*0*	*23*	*126*	*0*	*0*	*0*	*0*	*2*	*0*
Brickell CitiCentre North 2		3			4	13						
Premiere Towers		8			9							
600 Brickell												
The Pointe at Brickell Village												
Miami River Development SAP	25	0	0	0	0	10	0	0	0	0	2	0
Brickell Bayview Center	3	8				2						
Brickell CitiCentre	50	20			10	100						
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue												
The Beacon												
Brickell Station												
888 Brickell												
TD Bank	0	0	0	0	0	0	0	0	0	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	470	1,430	272	218	1,245	302	0	0	0	5	48	50
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**470**	**1,430**	**272**	**218**	**1,245**	**302**	**0**	**0**	**0**	**5**	**48**	**50**

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PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	518	1195	11	23	1277	366	0	0	0	67	231	100
Peak Season Volume	518	1,195	11	23	1,277	366	0	0	0	67	231	100
	30%	69%	1%	1%	77%	22%				17%	58%	25%
Committed Trips	*110*	*97*	*0*	*0*	*226*	*134*	*0*	*0*	*0*	*0*	*15*	*0*
Brickell CitiCentre North 2		10			9	70						
Premiere Towers		9			7							
600 Brickell	48	10			117	10						
The Pointe at Brickell Village		6			6							
Miami River Development SAP	27	0	0	0	0	19	0	0	0	0	12	0
Brickell Bayview Center	2	2				5						
Brickell CitiCentre												
Walgreens	4	0	0	0	0	3	0	0	0	0	2	0
1101 Brickell Avenue	11	26			70	20						
The Beacon	1											
Brickell Station	7	15			8	2						
888 Brickell	8	19			9	3						
TD Bank	1	0	0	0	0	1	0	0	0	0	1	0
Church of Jesus Christ LDS	1	0	0	0	0	1	0	0	0	0	1	0
Background	661	1,368	12	24	1,584	523	0	0	0	76	278	114
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**661**	**1,368**	**12**	**24**	**1,584**	**523**	**0**	**0**	**0**	**76**	**278**	**114**

2013 Node: 4130

INTERSECTION ANALYSIS SHEET

SW 7th St @ Miami Ave

"No-Build" - Opening Year

	N-S	E-W
Growth Rate =	0.88%	1.88%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	283	531	0	0	0	0	0	0	0	0	660	74
Peak Season Volume	283	531	0	0	0	0	0	0	0	0	660	74
	35%	65%	0%							0%	90%	10%
Committed Trips	*71*	*146*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*203*	*125*
Brickell CitiCentre North 2		38									13	
Premiere Towers		56									25	
600 Brickell												
The Pointe at Brickell Village												
Miami River Development SAP	16	0	0	0	0	0	0	0	0	0	37	0
Brickell Bayview Center	30	19									5	
Brickell CitiCentre	25	33									122	125
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue												
The Beacon												
Brickell Station												
888 Brickell												
TD Bank	0	0	0	0	0	0	0	0	0	0	1	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	372	711	0	0	0	0	0	0	0	0	955	209
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**372**	**711**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**955**	**209**

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PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	422	509	0	0	0	0	0	0	0	0	1011	113
Peak Season Volume	422	509	0	0	0	0	0	0	0	0	1,011	113
	45%	55%	0%							0%	90%	10%
Committed Trips	*295*	*545*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*779*	*321*
Brickell CitiCentre North 2		156									70	
Premiere Towers		60									26	
600 Brickell		76									95	
The Pointe at Brickell Village	28	30										
Miami River Development SAP	24	0	0	0	0	0	0	0	0	0	58	0
Brickell Bayview Center	8	4									7	
Brickell CitiCentre	230	219									456	321
Walgreens	3	0	0	0	0	0	0	0	0	0	8	0
1101 Brickell Avenue											31	
The Beacon											1	
Brickell Station											9	
888 Brickell											12	
TD Bank	1	0	0	0	0	0	0	0	0	0	3	0
Church of Jesus Christ LDS	1	0	0	0	0	0	0	0	0	0	3	0
Background	744	1,086	0	0	0	0	0	0	0	0	1,931	450
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**744**	**1,086**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,931**	**450**

INTERSECTION ANALYSIS SHEET

SW 7th St @ SW 3rd Ave

"No-Build" - Opening Year

	N-S	E-W
Growth Rate =	0.88%	1.88%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	94	72	0	0	0	0	0	0	0	224	762	81
Peak Season Volume	94	72	0	0	0	0	0	0	0	224	762	81
	57%	43%	0%							21%	71%	8%
Committed Trips	*0*	*170*	*0*	*0*	*144*	*24*	*0*	*0*	*0*	*94*	*121*	*98*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	7	24	3
Premiere Towers	0	0	0	0	0	0	0	0	0	4	13	2
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	0	0
Miami River Development SAP		170			144	24						92
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	4	13	1
Brickell CitiCentre										79	69	
Walgreens												
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	0	0	0	0	0	0	0	0	2	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	100	247	0	0	144	24	0	0	0	349	989	190
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**100**	**247**	**0**	**0**	**144**	**24**	**0**	**0**	**0**	**349**	**989**	**190**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	122	156	0	0	0	0	0	0	0	266	992	164
Peak Season Volume	122	156	0	0	0	0	0	0	0	266	992	164
	44%	56%	0%							19%	70%	12%
Committed Trips	*9*	*238*	*0*	*0*	*203*	*34*	*0*	*0*	*0*	*358*	*574*	*177*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	16	64	11
Premiere Towers	0	0	0	0	0	0	0	0	0	4	16	3
600 Brickell	0	0	0	0	0	0	0	0	0	41	160	27
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	5	20	3
Miami River Development SAP		234			203	34						127
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	0	2	0
Brickell CitiCentre										284	249	
Walgreens	7	4									22	
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	4	16	3
The Beacon	0	0	0	0	0	0	0	0	0	0	1	0
Brickell Station	0	0	0	0	0	0	0	0	0	1	5	1
888 Brickell	0	0	0	0	0	0	0	0	0	2	6	1
TD Bank	1	0	0	0	0	0	0	0	0	0	7	0
Church of Jesus Christ LDS	1	0	0	0	0	0	0	0	0	0	7	0
Background	139	404	0	0	203	34	0	0	0	661	1,704	364
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**139**	**404**	**0**	**0**	**203**	**34**	**0**	**0**	**0**	**661**	**1,704**	**364**

INTERSECTION ANALYSIS SHEET

SW 7th St @ SW 16th Ave

"No-Build" - Opening Year

	N-S	E-W
Growth Rate =	0.88%	1.03%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	0	0	0	0	36	17	0	0	0	42	911	0
Peak Season Volume	0	0	0	0	36	17	0	0	0	42	911	0
				0%	68%	32%				4%	96%	0%
										4%	96%	0%
Committed Trips	0	0	0	0	0	0	0	0	0	0	*90*	*0*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	0	9	0
Premiere Towers	0	0	0	0	0	0	0	0	0	0	5	0
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	0	0
Miami River Development SAP	0	0	0	0	0	0	0	0	0	1	35	0
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	0	5	0
Brickell CitiCentre	0	0	0	0	0	0	0	0	0	1	28	0
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	0	0	0	0	0	0	0	0	7	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	0	0	0	0	38	18	0	0	0	45	1,069	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**0**	**0**	**0**	**38**	**18**	**0**	**0**	**0**	**45**	**1,069**	**0**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	0	0	0	0	40	24	0	0	0	66	1459	0
Peak Season Volume	0	0	0	0	40	24	0	0	0	66	1,459	0
				0%	63%	38%				4%	96%	0%
Committed Trips	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*17*	*414*	*0*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	1	36	0
Premiere Towers	0	0	0	0	0	0	0	0	0	0	9	0
600 Brickell	0	0	0	0	0	0	0	0	0	4	90	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	11	0
Miami River Development SAP	0	0	0	0	0	0	0	0	0	2	55	0
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	0	1	0
Brickell CitiCentre	0	0	0	0	0	0	0	0	0	6	140	0
Walgreens	0	0	0	0	0	0	0	0	0	1	16	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	9	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	3	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	3	0
TD Bank	0	0	0	0	0	0	0	0	0	0	9	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	1	32	0
Background	0	0	0	0	43	26	0	0	0	88	1,982	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**0**	**0**	**0**	**43**	**26**	**0**	**0**	**0**	**88**	**1,982**	**0**

INTERSECTION ANALYSIS SHEET

SW 8th St @ SW 5th Ave

"No-Build" - Opening Year

	N-S	E-W
Growth Rate =	0.88%	1.03%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	0	85	204	0	0	0	121	1593	16	0	0	0
Peak Season Volume	0	85	204	0	0	0	121	1,593	16	0	0	0
	0%	29%	71%				7%	92%	1%			
			11%	0%				89%				
Committed Trips	*0*	*0*	*27*	*0*	*0*	*0*	*0*	*222*	*0*	*0*	*0*	*0*
Brickell CitiCentre North 2	0	0	1	0	0	0	0	9	0	0	0	0
Premiere Towers	0	0	1	0	0	0	0	9	0	0	0	0
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	0	0
Miami River Development SAP	0	0	5	0	0	0	0	42	0	0	0	0
Brickell Bayview Center	0	0	0	0	0	0	0	2	0	0	0	0
Brickell CitiCentre	0	0	19	0	0	0	0	158	0	0	0	0
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	0	0	0	0	0	3	0	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	0	90	244	0	0	0	130	1,933	17	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**90**	**244**	**0**	**0**	**0**	**130**	**1,933**	**17**	**0**	**0**	**0**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	0	133	304	0	0	0	166	1494	66	0	0	0
Peak Season Volume	0	133	304	0	0	0	166	1,494	66	0	0	0
	0%	30%	70%				10%	87%	4%			
			17%	0%				83%				
Committed Trips	0	0	0	0	0	0	0	*331*	0	0	0	0
Brickell CitiCentre North 2	0	0	6	0	0	0	0	31	0	0	0	0
Premiere Towers	0	0	1	0	0	0	0	6	0	0	0	0
600 Brickell	0	0	5	0	0	0	0	24	0	0	0	0
The Pointe at Brickell Village	0	0	2	0	0	0	0	9	0	0	0	0
Miami River Development SAP	0	0	11	0	0	0	0	55	0	0	0	0
Brickell Bayview Center	0	0	1	0	0	0	0	5	0	0	0	0
Brickell CitiCentre	0	0	29	0	0	0	0	141	0	0	0	0
Walgreens	0	0	2	0	0	0	0	11	0	0	0	0
1101 Brickell Avenue	0	0	2	0	0	0	0	9	0	0	0	0
The Beacon	0	0	2	0	0	0	0	10	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	2	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	1	0	0	0	0
TD Bank	0	0	0	0	0	0	1	7	0	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	2	20	1	0	0	0
Background	0	141	323	0	0	0	178	1,936	71	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**141**	**323**	**0**	**0**	**0**	**178**	**1,936**	**71**	**0**	**0**	**0**

INTERSECTION ANALYSIS SHEET

SW 8th St @ SW 24th Ave

"No-Build" - Opening Year

	N-S	E-W
Growth Rate =	0.88%	1.03%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	0	49	67	37	57	0	49	1378	37	0	0	0
Peak Season Volume	0	49	67	37	57	0	49	1,378	37	0	0	0
	0%	42%	58%	39%	61%	0%	3%	94%	3%			
			5%	2%				93%				
Committed Trips	*0*	*0*	*6*	*2*	*0*	*0*	*0*	*103*	*0*	*0*	*0*	*0*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	4	0	0	0	0
Premiere Towers	0	0	0	0	0	0	0	4	0	0	0	0
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	0	0
Miami River Development SAP	0	0	1	0	0	0	0	19	0	0	0	0
Brickell Bayview Center	0	0	0	0	0	0	0	1	0	0	0	0
Brickell CitiCentre	0	0	4	2	0	0	0	71	0	0	0	0
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	0	0	0	0	0	5	0	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	0	52	77	41	61	0	53	1,583	40	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**52**	**77**	**41**	**61**	**0**	**53**	**1,583**	**40**	**0**	**0**	**0**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	0	47	50	59	88	0	49	1342	32	0	0	0
Peak Season Volume	0	47	50	59	88	0	49	1,342	32	0	0	0
	0%	48%	52%	40%	60%	0%	3%	94%	2%			
			3%	4%				91%				
Committed Trips	0	0	0	0	0	0	0	*175*	0	0	0	0
Brickell CitiCentre North 2	0	0	0	1	0	0	0	15	0	0	0	0
Premiere Towers	0	0	0	0	0	0	0	3	0	0	0	0
600 Brickell	0	0	0	1	0	0	0	11	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	4	0	0	0	0
Miami River Development SAP	0	0	1	1	0	0	0	26	0	0	0	0
Brickell Bayview Center	0	0	0	0	0	0	0	2	0	0	0	0
Brickell CitiCentre	0	0	2	4	0	0	0	67	0	0	0	0
Walgreens	0	0	0	0	0	0	0	5	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	4	0	0	0	0
The Beacon	0	0	0	0	0	0	0	5	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	1	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	1	0	0	0	0
TD Bank	0	0	0	1	0	0	0	10	0	0	0	0
Church of Jesus Christ LDS	0	0	1	1	0	0	0	21	0	0	0	0
Background	0	50	53	63	94	0	53	1,617	34	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**50**	**53**	**63**	**94**	**0**	**53**	**1,617**	**34**	**0**	**0**	**0**

INTERSECTION ANALYSIS SHEET

SW 7th St @ SW 2nd Ave

	N-S	E-W
Growth Rate =	0.88%	1.88%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	252	632	0	0	214	85	0	0	0	96	655	106
Peak Season Volume	252	632	0	0	214	85	0	0	0	96	655	106
	29%	71%	0%	0%	72%	28%				11%	76%	12%
Committed Trips	*19*	*39*	*0*	*0*	*0*	*37*	*0*	*0*	*0*	*11*	*294*	*11*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	5	33	5
Premiere Towers	0	0	0	0	0	0	0	0	0	3	19	3
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village												
Miami River Development SAP	18	39				37					74	
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	3	18	3
Brickell CitiCentre											148	
Walgreens												
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	1	0	0	0	0	0	0	0	0	0	1	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	287	711	0	0	228	127	0	0	0	120	1,040	132
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**287**	**711**	**0**	**0**	**228**	**127**	**0**	**0**	**0**	**120**	**1,040**	**132**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	253	458	0	0	264	179	0	0	0	86	1148	84
Peak Season Volume	253	458	0	0	264	179	0	0	0	86	1,148	84
	36%	64%	0%	0%	60%	40%				7%	87%	6%
Committed Trips	*30*	*77*	*0*	*0*	*0*	*80*	*0*	*0*	*0*	*31*	*1,072*	*27*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	7	91	6
Premiere Towers	0	0	0	0	0	0	0	0	0	2	23	2
600 Brickell	0	0	0	0	0	0	0	0	0	18	229	16
The Pointe at Brickell Village											28	
Miami River Development SAP	25	55				52					102	
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	0	3	0
Brickell CitiCentre											533	
Walgreens	3	22				26					14	
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	2	23	2
The Beacon	0	0	0	0	0	0	0	0	0	0	1	0
Brickell Station	0	0	0	0	0	0	0	0	0	1	7	0
888 Brickell	0	0	0	0	0	0	0	0	0	1	9	1
TD Bank	1	0	0	0	0	1	0	0	0	0	5	0
Church of Jesus Christ LDS	1	0	0	0	0	1	0	0	0	0	5	0
Background	299	564	0	0	281	270	0	0	0	129	2,380	123
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**299**	**564**	**0**	**0**	**281**	**270**	**0**	**0**	**0**	**129**	**2,380**	**123**

INTERSECTION ANALYSIS SHEET

SW 7th St @ SW 8th Ave

	N-S	E-W
Growth Rate =	0.88%	1.03%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	65	286	0	0	256	88	0	0	0	47	563	62
Peak Season Volume	65	286	0	0	256	88	0	0	0	47	563	62
	19%	81%	0%	0%	74%	26%				7%	84%	9%
										7%	84%	9%
Committed Trips	*0*	*0*	*0*	*0*	*0*	*1*	*0*	*0*	*0*	*9*	*107*	*11*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	1	12	1
Premiere Towers	0	0	0	0	0	0	0	0	0	1	7	1
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	0	0
Miami River Development SAP	0	0	0	0	0	0	0	0	0	4	44	5
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	1	6	1
Brickell CitiCentre	0	0	0	0	0	0	0	0	0	3	34	4
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	0	0	0	1	0	0	0	0	4	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	69	304	0	0	272	95	0	0	0	59	712	78
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**69**	**304**	**0**	**0**	**272**	**95**	**0**	**0**	**0**	**59**	**712**	**78**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	92	193	0	0	173	66	0	0	0	64	1261	63
Peak Season Volume	92	193	0	0	173	66	0	0	0	64	1,261	63
	32%	68%	0%	0%	72%	28%				5%	91%	5%
Committed Trips	*2*	*0*	*0*	*0*	*0*	*2*	*0*	*0*	*0*	*23*	*475*	*20*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	2	43	2
Premiere Towers	0	0	0	0	0	0	0	0	0	2	11	0
600 Brickell	0	0	0	0	0	0	0	0	0	2	108	5
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	2	13	1
Miami River Development SAP	0	0	0	0	0	0	0	0	0	4	66	3
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	2	1	0
Brickell CitiCentre	0	0	0	0	0	0	0	0	0	2	168	7
Walgreens	0	0	0	0	0	0	0	0	0	2	20	1
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	1	11	0
The Beacon	0	0	0	0	0	0	0	0	0	1	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	1	3	0
888 Brickell	0	0	0	0	0	0	0	0	0	1	4	0
TD Bank	1	0	0	0	0	1	0	0	0	0	14	0
Church of Jesus Christ LDS	1	0	0	0	0	1	0	0	0	0	13	0
Background	100	205	0	0	184	72	0	0	0	92	1,830	88
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**100**	**205**	**0**	**0**	**184**	**72**	**0**	**0**	**0**	**92**	**1,830**	**88**

INTERSECTION ANALYSIS SHEET

SW 7th St @ SW 1st Ave

	N-S	E-W
Growth Rate =	0.88%	1.88%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	0	0	0	0	611	304	0	0	0	126	783	0
Peak Season Volume	0	0	0	0	611	304	0	0	0	126	783	0
				0%	67%	33%				14%	86%	0%
Committed Trips	*0*	*0*	*0*	*0*	*317*	*70*	*0*	*0*	*0*	*89*	*246*	*0*
Brickell CitiCentre North 2					12	33				2	11	
Premiere Towers					58						25	
600 Brickell												
The Pointe at Brickell Village												
Miami River Development SAP	0	0	0	0	0	21	0	0	0	0	53	0
Brickell Bayview Center					4					11	24	
Brickell CitiCentre					243	16				76	132	
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	0	0	0	0	0	0	0	0	1	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	0	0	0	0	967	393	0	0	0	233	1,138	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**0**	**0**	**0**	**967**	**393**	**0**	**0**	**0**	**233**	**1,138**	**0**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	0	0	0	0	646	286	0	0	0	203	1178	0
Peak Season Volume	0	0	0	0	646	286	0	0	0	203	1,178	0
				0%	69%	31%				15%	85%	0%
Committed Trips	*0*	*0*	*0*	*0*	*360*	*84*	*0*	*0*	*0*	*197*	*1,045*	*0*
Brickell CitiCentre North 2					32	47				12	58	
Premiere Towers					49						26	
600 Brickell										29	263	
The Pointe at Brickell Village					30						28	
Miami River Development SAP	0	0	0	0	0	20	0	0	0	0	82	0
Brickell Bayview Center					11					12	3	
Brickell CitiCentre					238	12				136	521	
Walgreens	0	0	0	0	0	3	0	0	0	0	11	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	5	26	0
The Beacon	0	0	0	0	0	0	0	0	0	0	1	0
Brickell Station	0	0	0	0	0	0	0	0	0	1	8	0
888 Brickell	0	0	0	0	0	0	0	0	0	2	10	0
TD Bank	0	0	0	0	0	1	0	0	0	0	4	0
Church of Jesus Christ LDS	0	0	0	0	0	1	0	0	0	0	4	0
Background	0	0	0	0	1,047	388	0	0	0	428	2,387	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**0**	**0**	**0**	**1,047**	**388**	**0**	**0**	**0**	**428**	**2,387**	**0**

2013 Node: 4130

INTERSECTION ANALYSIS SHEET

SW 8th St @ Brickell Ave

	N-S	E-W
Growth Rate =	0.88%	1.88%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	0	848	233	346	816	0	534	705	221	233	0	589
Peak Season Volume	0	848	233	346	816	0	534	705	221	233	0	589
	0%	78%	22%	30%	70%	0%	37%	48%	15%	28%	0%	72%
Committed Trips	*0*	*17*	*0*	*10*	*13*	*0*	*50*	*37*	*11*	*0*	*0*	*44*
Brickell CitiCentre North 2		1		3	1							2
Premiere Towers		8			9							
600 Brickell												
The Pointe at Brickell Village												
Miami River Development SAP	0	0	0	0	0	0	19	25	8	0	0	0
Brickell Bayview Center							11	2	3			
Brickell CitiCentre		8		7	3		20	10				42
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue												
The Beacon												
Brickell Station												
888 Brickell												
TD Bank	0	0	0	0	0	0	0	0	0	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	0	919	248	378	881	0	658	840	263	265	0	715
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**919**	**248**	**378**	**881**	**0**	**658**	**840**	**263**	**265**	**0**	**715**

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PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	0	921	191	313	1065	0	261	448	197	278	0	518
Peak Season Volume	0	921	191	313	1,065	0	261	448	197	278	0	518
	0%	83%	17%	23%	77%	0%	29%	49%	22%	35%	0%	65%
Committed Trips	*0*	*145*	*11*	*44*	*182*	*0*	*196*	*121*	*58*	*2*	*0*	*65*
Brickell CitiCentre North 2		3		7	2							7
Premiere Towers		9			7							
600 Brickell		38			117		19					
The Pointe at Brickell Village					6		6					
Miami River Development SAP	0	0	0	0	0	0	18	31	14	0	0	0
Brickell Bayview Center		1					2		1			1
Brickell CitiCentre		8					142	59	12			41
Walgreens	0	0	0	0	0	0	2	4	2	0	0	0
1101 Brickell Avenue		37		35	35			17	18			16
The Beacon							5	8	4			
Brickell Station		22	5	2	6							
888 Brickell		27	6		9				6	2		
TD Bank	0	0	0	0	0	0	0	1	0	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	1	1	1	0	0	0
Background	0	1,124	214	377	1,314	0	493	631	282	319	0	655
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**1,124**	**214**	**377**	**1,314**	**0**	**493**	**631**	**282**	**319**	**0**	**655**

2013 Node: 4130

INTERSECTION ANALYSIS SHEET

SW 8th St @ Miami Ave

	N-S	E-W
Growth Rate =	0.88%	1.88%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	0	597	69	0	0	0	231	1638	0	0	0	0
Peak Season Volume	0	597	69	0	0	0	231	1,638	0	0	0	0
	0%	90%	10%				12%	88%	0%			
Committed Trips	*0*	*81*	*42*	*0*	*0*	*0*	*122*	*658*	*0*	*0*	*0*	*0*
Brickell CitiCentre North 2		4					34					
Premiere Towers		51						26				
600 Brickell												
The Pointe at Brickell Village												
Miami River Development SAP	0	0	0	0	0	0	7	51	0	0	0	0
Brickell Bayview Center		1					48	16				
Brickell CitiCentre		25	42				33	564				
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue												
The Beacon												
Brickell Station												
888 Brickell												
TD Bank	0	0	0	0	0	0	0	1	0	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	0	716	115	0	0	0	385	2,524	0	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**716**	**115**	**0**	**0**	**0**	**385**	**2,524**	**0**	**0**	**0**	**0**

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PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	0	686	51	0	0	0	286	951	0	0	0	0
Peak Season Volume	0	686	51	0	0	0	286	951	0	0	0	0
	0%	93%	7%				23%	77%	0%			
Committed Trips	*0*	*192*	*43*	*0*	*0*	*0*	*667*	*434*	*0*	*0*	*0*	*0*
Brickell CitiCentre North 2		18					138					
Premiere Towers		43						21				
600 Brickell		10					67	19				
The Pointe at Brickell Village		58										
Miami River Development SAP	0	0	0	0	0	0	19	63	0	0	0	0
Brickell Bayview Center		3					9	3				
Brickell CitiCentre		25	41				424	233				
Walgreens	0	0	0	0	0	0	2	8	0	0	0	0
1101 Brickell Avenue								35				
The Beacon			2					42				
Brickell Station							7					
888 Brickell		35						6				
TD Bank	0	0	0	0	0	0	0	1	0	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	1	3	0	0	0	0
Background	0	921	97	0	0	0	993	1,517	0	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**921**	**97**	**0**	**0**	**0**	**993**	**1,517**	**0**	**0**	**0**	**0**

2013 Node: 4130

INTERSECTION ANALYSIS SHEET

SW 8th St @ SW 1st Ave

	N-S	E-W
Growth Rate =	0.88%	1.88%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	0	0	0	207	463	0	0	1554	493	0	0	0
Peak Season Volume	0	0	0	207	463	0	0	1,554	493	0	0	0
				31%	69%	0%	0%	76%	24%			
Committed Trips	*0*	*0*	*0*	*307*	*99*	*0*	*0*	*494*	*19*	*0*	*0*	*0*
Brickell CitiCentre North 2				7	7			27				
Premiere Towers					58			26				
600 Brickell												
The Pointe at Brickell Village												
Miami River Development SAP	0	0	0	0	0	0	0	59	18	0	0	0
Brickell Bayview Center				7	8			5				
Brickell CitiCentre				293	26			377				
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	0	0	0	0	0	1	0	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	0	0	0	527	591	0	0	2,264	581	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**0**	**0**	**527**	**591**	**0**	**0**	**2,264**	**581**	**0**	**0**	**0**

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PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	0	0	0	138	712	0	0	1044	340	0	0	0
Peak Season Volume	0	0	0	138	712	0	0	1,044	340	0	0	0
				16%	84%	0%	0%	75%	25%			
Committed Trips	*0*	*0*	*0*	*338*	*222*	*0*	*0*	*782*	*60*	*0*	*0*	*0*
Brickell CitiCentre North 2				27	17			111				
Premiere Towers					49			21				
600 Brickell					29			86				
The Pointe at Brickell Village					30				28			
Miami River Development SAP	0	0	0	0	0	0	0	82	27	0	0	0
Brickell Bayview Center				21	2			18				
Brickell CitiCentre				279	95			369				
Walgreens	0	0	0	0	0	0	0	11	4	0	0	0
1101 Brickell Avenue	0	0	0	4	0	0	0	31	0	0	0	0
The Beacon	0	0	0	5	0	0	0	37	0	0	0	0
Brickell Station	0	0	0	1	0	0	0	6	0	0	0	0
888 Brickell	0	0	0	1	0	0	0	5	0	0	0	0
TD Bank	0	0	0	0	0	0	0	1	0	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	4	1	0	0	0
Background	0	0	0	485	979	0	0	1,971	447	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**0**	**0**	**485**	**979**	**0**	**0**	**1,971**	**447**	**0**	**0**	**0**

INTERSECTION ANALYSIS SHEET

SW 8th St @ SW 2nd Ave

	N-S	E-W
Growth Rate =	0.88%	1.88%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	0	896	81	129	216	0	386	1651	248	0	0	0
Peak Season Volume	0	896	81	129	216	0	386	1,651	248	0	0	0
	0%	92%	8%	37%	63%	0%	17%	72%	11%			
Committed Trips	*0*	*18*	*2*	*4*	*0*	*0*	*39*	*507*	*20*	*0*	*0*	*0*
Brickell CitiCentre North 2	0	0	1	2	0	0	0	24	0	0	0	0
Premiere Towers	0	0	1	2	0	0	0	23	0	0	0	0
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village												
Miami River Development SAP		18					39	77	20			
Brickell Bayview Center	0	0	0	0	0	0	0	4	0	0	0	0
Brickell CitiCentre								377				
Walgreens												
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	0	0	0	0	0	1	0	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	0	971	88	141	230	0	479	2,388	303	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**971**	**88**	**141**	**230**	**0**	**479**	**2,388**	**303**	**0**	**0**	**0**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	0	869	82	146	351	0	316	1130	375	0	0	0
Peak Season Volume	0	869	82	146	351	0	316	1,130	375	0	0	0
	0%	91%	9%	29%	71%	0%	17%	62%	21%			
Committed Trips	*0*	*28*	*19*	*35*	*0*	*0*	*79*	*789*	*33*	*0*	*0*	*0*
Brickell CitiCentre North 2	0	0	7	12	0	0	0	92	0	0	0	0
Premiere Towers	0	0	1	2	0	0	0	17	0	0	0	0
600 Brickell	0	0	5	9	0	0	0	71	0	0	0	0
The Pointe at Brickell Village								28				
Miami River Development SAP		25					55	109	28			
Brickell Bayview Center	0	0	1	2	0	0	0	15	0	0	0	0
Brickell CitiCentre								369				
Walgreens		3					22	14	3			
1101 Brickell Avenue	0	0	2	3	0	0	0	26	0	0	0	0
The Beacon	0	0	2	4	0	0	0	31	0	0	0	0
Brickell Station	0	0	0	1	0	0	0	5	0	0	0	0
888 Brickell	0	0	0	1	0	0	0	4	0	0	0	0
TD Bank	0	0	0	0	0	0	0	2	1	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	1	5	2	0	0	0
Background	0	952	106	190	373	0	439	2,076	460	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**952**	**106**	**190**	**373**	**0**	**439**	**2,076**	**460**	**0**	**0**	**0**

INTERSECTION ANALYSIS SHEET

SW 8th St @ SW 8th Ave

	N-S	E-W
Growth Rate =	0.88%	1.03%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	0	146	49	164	115	0	148	1556	52	0	0	0
Peak Season Volume	0	146	49	164	115	0	148	1,556	52	0	0	0
	0%	75%	25%	59%	41%	0%	8%	89%	3%			
Committed Trips	*0*	*0*	*7*	*20*	*0*	*0*	*0*	*196*	*0*	*0*	*0*	*0*
Brickell CitiCentre North 2	0	0	0	1	0	0	0	8	0	0	0	0
Premiere Towers	0	0	0	1	0	0	0	8	0	0	0	0
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	0	0
Miami River Development SAP	0	0	1	4	0	0	0	37	0	0	0	0
Brickell Bayview Center	0	0	0	0	0	0	0	1	0	0	0	0
Brickell CitiCentre	0	0	5	14	0	0	0	139	0	0	0	0
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	0	0	0	0	0	4	0	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	0	155	59	194	122	0	159	1,868	56	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**155**	**59**	**194**	**122**	**0**	**159**	**1,868**	**56**	**0**	**0**	**0**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	0	128	35	100	142	0	168	1563	51	0	0	0
Peak Season Volume	0	128	35	100	142	0	168	1,563	51	0	0	0
	0%	79%	21%	41%	59%	0%	9%	88%	3%			
Committed Trips	*0*	*0*	*6*	*18*	*0*	*0*	*3*	*311*	*1*	*0*	*0*	*0*
Brickell CitiCentre North 2	0	0	1	2	0	0	0	28	0	0	0	0
Premiere Towers	0	0	0	0	0	0	0	5	0	0	0	0
600 Brickell	0	0	0	1	0	0	0	22	0	0	0	0
The Pointe at Brickell Village	0	0	0	1	0	0	0	9	0	0	0	0
Miami River Development SAP	0	0	1	3	0	0	0	50	0	0	0	0
Brickell Bayview Center	0	0	0	0	0	0	0	5	0	0	0	0
Brickell CitiCentre	0	0	3	8	0	0	0	130	0	0	0	0
Walgreens	0	0	0	1	0	0	0	11	0	0	0	0
1101 Brickell Avenue	0	0	0	1	0	0	0	8	0	0	0	0
The Beacon	0	0	0	1	0	0	0	9	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	2	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	1	0	0	0	0
TD Bank	0	0	0	0	0	0	1	8	0	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	2	23	1	0	0	0
Background	0	136	43	124	151	0	183	1,990	56	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**136**	**43**	**124**	**151**	**0**	**183**	**1,990**	**56**	**0**	**0**	**0**

INTERSECTION ANALYSIS SHEET

SW 8th St @ SW 12th Ave

	N-S	E-W
Growth Rate =	0.88%	1.03%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	0	452	88	124	333	0	193	1831	97	0	0	0
Peak Season Volume	0	452	88	124	333	0	193	1,831	97	0	0	0
	0%	84%	16%	27%	73%	0%	9%	86%	5%			
			4%	6%				90%				
Committed Trips	*0*	*7*	*12*	*12*	*5*	*0*	*0*	*173*	*9*	*0*	*0*	*0*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	7	0	0	0	0
Premiere Towers	0	0	0	0	0	0	0	7	0	0	0	0
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	0	0
Miami River Development SAP	0	0	1	2	0	0	0	33	0	0	0	0
Brickell Bayview Center	0	0	0	0	0	0	0	1	0	0	0	0
Brickell CitiCentre	0	0	6	8	0	0	0	125	0	0	0	0
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank		7	4		5				9			
Church of Jesus Christ LDS												
Background	0	488	106	144	359	0	207	2,140	113	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**488**	**106**	**144**	**359**	**0**	**207**	**2,140**	**113**	**0**	**0**	**0**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	0	452	87	163	516	0	174	1403	78	0	0	0
Peak Season Volume	0	452	87	163	516	0	174	1,403	78	0	0	0
	0%	84%	16%	24%	76%	0%	11%	85%	5%			
			4%	8%				69%				
Committed Trips	*0*	*16*	*23*	*28*	*9*	*0*	*9*	*264*	*16*	*0*	*0*	*0*
Brickell CitiCentre North 2	0	0	1	3	0	0	0	24	0	0	0	0
Premiere Towers	0	0	0	1	0	0	0	5	0	0	0	0
600 Brickell	0	0	1	2	0	0	0	19	0	0	0	0
The Pointe at Brickell Village	0	0	0	1	0	0	0	7	0	0	0	0
Miami River Development SAP	0	0	3	5	0	0	0	43	0	0	0	0
Brickell Bayview Center	0	0	0	0	0	0	0	4	0	0	0	0
Brickell CitiCentre	0	0	6	13	0	0	0	110	0	0	0	0
Walgreens	0	0	1	1	0	0	0	9	0	0	0	0
1101 Brickell Avenue	0	0	0	1	0	0	0	7	0	0	0	0
The Beacon	0	0	0	1	0	0	0	8	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	1	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	1	0	0	0	0
TD Bank		16	9		9				16			
Church of Jesus Christ LDS							9	26				
Background	0	497	116	201	558	0	196	1,771	100	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**497**	**116**	**201**	**558**	**0**	**196**	**1,771**	**100**	**0**	**0**	**0**

INTERSECTION ANALYSIS SHEET

SW 8th St @ SW 17th Ave

	N-S	E-W
Growth Rate =	0.88%	1.03%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	0	698	189	217	978	0	187	1523	78	0	0	0
Peak Season Volume	0	698	189	217	978	0	187	1,523	78	0	0	0
	0%	79%	21%	18%	82%	0%	10%	85%	4%			
			10%	11%				79%				
Committed Trips	*0*	*0*	*18*	*20*	*0*	*0*	*0*	*144*	*0*	*0*	*0*	*0*
Brickell CitiCentre North 2	0	0	1	1	0	0	0	6	0	0	0	0
Premiere Towers	0	0	1	1	0	0	0	5	0	0	0	0
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	0	0
Miami River Development SAP	0	0	3	4	0	0	0	26	0	0	0	0
Brickell Bayview Center	0	0	0	0	0	0	0	1	0	0	0	0
Brickell CitiCentre	0	0	12	14	0	0	0	99	0	0	0	0
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	1	1	0	0	0	7	0	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	0	742	219	251	1,040	0	201	1,780	84	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**742**	**219**	**251**	**1,040**	**0**	**201**	**1,780**	**84**	**0**	**0**	**0**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	0	602	140	194	703	0	126	1487	104	0	0	0
Peak Season Volume	0	602	140	194	703	0	126	1,487	104	0	0	0
	0%	81%	19%	22%	78%	0%	7%	87%	6%			
			7%	10%				77%				
Committed Trips	*0*	*0*	*20*	*32*	*0*	*0*	*0*	*237*	*0*	*0*	*0*	*0*
Brickell CitiCentre North 2	0	0	2	3	0	0	0	20	0	0	0	0
Premiere Towers	0	0	0	1	0	0	0	4	0	0	0	0
600 Brickell	0	0	1	2	0	0	0	15	0	0	0	0
The Pointe at Brickell Village	0	0	1	1	0	0	0	6	0	0	0	0
Miami River Development SAP	0	0	3	5	0	0	0	35	0	0	0	0
Brickell Bayview Center	0	0	0	0	0	0	0	3	0	0	0	0
Brickell CitiCentre	0	0	8	12	0	0	0	90	0	0	0	0
Walgreens	0	0	1	1	0	0	0	7	0	0	0	0
1101 Brickell Avenue	0	0	0	1	0	0	0	6	0	0	0	0
The Beacon	0	0	1	1	0	0	0	7	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	1	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	1	0	0	0	0
TD Bank	0	0	1	2	0	0	0	13	0	0	0	0
Church of Jesus Christ LDS	0	0	2	4	0	0	0	29	0	0	0	0
Background	0	640	169	238	747	0	135	1,835	112	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**640**	**169**	**238**	**747**	**0**	**135**	**1,835**	**112**	**0**	**0**	**0**

INTERSECTION ANALYSIS SHEET

SW 8th St @ SW 19th Ave

	N-S	E-W
Growth Rate =	0.88%	1.03%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	0	69	85	44	73	0	57	1835	24	0	0	0
Peak Season Volume	0	69	85	44	73	0	57	1,835	24	0	0	0
	0%	45%	55%	38%	62%	0%	3%	96%	1%			
			4%	2%				93%				
Committed Trips	*0*	*0*	*7*	*3*	*0*	*0*	*0*	*134*	*0*	*0*	*0*	*0*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	5	0	0	0	0
Premiere Towers	0	0	0	0	0	0	0	5	0	0	0	0
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	0	0
Miami River Development SAP	0	0	1	1	0	0	0	24	0	0	0	0
Brickell Bayview Center	0	0	0	0	0	0	0	1	0	0	0	0
Brickell CitiCentre	0	0	5	2	0	0	0	92	0	0	0	0
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	0	0	0	0	0	7	0	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	0	73	97	50	78	0	61	2,105	26	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**73**	**97**	**50**	**78**	**0**	**61**	**2,105**	**26**	**0**	**0**	**0**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	0	67	63	120	79	0	89	1705	24	0	0	0
Peak Season Volume	0	67	63	120	79	0	89	1,705	24	0	0	0
	0%	52%	48%	60%	40%	0%	5%	94%	1%			
			3%	6%				87%				
Committed Trips	*0*	*0*	*9*	*14*	*0*	*0*	*0*	*213*	*0*	*0*	*0*	*0*
Brickell CitiCentre North 2	0	0	1	1	0	0	0	18	0	0	0	0
Premiere Towers	0	0	0	0	0	0	0	3	0	0	0	0
600 Brickell	0	0	1	1	0	0	0	14	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	5	0	0	0	0
Miami River Development SAP	0	0	1	2	0	0	0	32	0	0	0	0
Brickell Bayview Center	0	0	0	0	0	0	0	3	0	0	0	0
Brickell CitiCentre	0	0	4	5	0	0	0	81	0	0	0	0
Walgreens	0	0	0	0	0	0	0	7	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	5	0	0	0	0
The Beacon	0	0	0	0	0	0	0	6	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	1	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	1	0	0	0	0
TD Bank	0	0	1	1	0	0	0	12	0	0	0	0
Church of Jesus Christ LDS	0	0	1	2	0	0	0	26	0	0	0	0
Background	0	71	76	142	84	0	96	2,045	26	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**71**	**76**	**142**	**84**	**0**	**96**	**2,045**	**26**	**0**	**0**	**0**

INTERSECTION ANALYSIS SHEET

SW 8th St @ SW 22nd Ave

	N-S	E-W
Growth Rate =	0.88%	1.03%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	0	817	162	130	1010	0	97	1448	74	0	0	0
Peak Season Volume	0	817	162	130	1,010	0	97	1,448	74	0	0	0
	0%	83%	17%	11%	89%	0%	6%	89%	5%			
			9%	7%				83%				
Committed Trips	*0*	*0*	*12*	*11*	*0*	*0*	*0*	*111*	*0*	*0*	*0*	*0*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	4	0	0	0	0
Premiere Towers	0	0	0	0	0	0	0	4	0	0	0	0
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	0	0
Miami River Development SAP	0	0	2	2	0	0	0	20	0	0	0	0
Brickell Bayview Center	0	0	0	0	0	0	0	1	0	0	0	0
Brickell CitiCentre	0	0	8	7	0	0	0	76	0	0	0	0
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	1	1	0	0	0	5	0	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	0	869	184	149	1,074	0	104	1,667	80	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**869**	**184**	**149**	**1,074**	**0**	**104**	**1,667**	**80**	**0**	**0**	**0**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	0	614	126	54	1099	0	139	1395	62	0	0	0
Peak Season Volume	0	614	126	54	1,099	0	139	1,395	62	0	0	0
	0%	83%	17%	5%	95%	0%	9%	87%	4%			
			7%	3%				80%				
Committed Trips	*0*	*0*	*17*	*6*	*0*	*0*	*0*	*190*	*0*	*0*	*0*	*0*
Brickell CitiCentre North 2	0	0	1	1	0	0	0	16	0	0	0	0
Premiere Towers	0	0	0	0	0	0	0	3	0	0	0	0
600 Brickell	0	0	1	0	0	0	0	12	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	5	0	0	0	0
Miami River Development SAP	0	0	3	1	0	0	0	28	0	0	0	0
Brickell Bayview Center	0	0	0	0	0	0	0	3	0	0	0	0
Brickell CitiCentre	0	0	7	2	0	0	0	72	0	0	0	0
Walgreens	0	0	1	0	0	0	0	6	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	4	0	0	0	0
The Beacon	0	0	0	0	0	0	0	5	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	1	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	1	0	0	0	0
TD Bank	0	0	1	0	0	0	0	11	0	0	0	0
Church of Jesus Christ LDS	0	0	2	1	0	0	0	23	0	0	0	0
Background	0	653	151	63	1,169	0	149	1,689	67	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**653**	**151**	**63**	**1,169**	**0**	**149**	**1,689**	**67**	**0**	**0**	**0**

INTERSECTION ANALYSIS SHEET

SW 8th St @ SW 27th Ave

	N-S	E-W
Growth Rate =	0.88%	1.03%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	182	1559	317	190	1366	94	0	1119	60	0	1102	21
Peak Season Volume	182	1,559	317	190	1,366	94	0	1,119	60	0	1,102	21
	9%	76%	15%	12%	83%	6%	0%	95%	5%	0%	98%	2%
			19%	12%				69%				
Committed Trips	*0*	*0*	*20*	*12*	*0*	*0*	*0*	*71*	*0*	*0*	*0*	*0*
Brickell CitiCentre North 2	0	0	1	0	0	0	0	3	0	0	0	0
Premiere Towers	0	0	1	0	0	0	0	3	0	0	0	0
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	0	0
Miami River Development SAP	0	0	4	2	0	0	0	13	0	0	0	0
Brickell Bayview Center	0	0	0	0	0	0	0	1	0	0	0	0
Brickell CitiCentre	0	0	13	8	0	0	0	49	0	0	0	0
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	1	1	0	0	0	4	0	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	194	1,658	357	214	1,452	100	0	1,273	64	0	1,184	23
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**194**	**1,658**	**357**	**214**	**1,452**	**100**	**0**	**1,273**	**64**	**0**	**1,184**	**23**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	180	1329	223	262	1320	136	0	885	43	0	1265	38
Peak Season Volume	180	1,329	223	262	1,320	136	0	885	43	0	1,265	38
	10%	77%	13%	15%	77%	8%	0%	95%	5%	0%	97%	3%
			14%	16%				54%				
Committed Trips	*0*	*0*	*28*	*33*	*0*	*0*	*0*	*114*	*0*	*0*	*0*	*0*
Brickell CitiCentre North 2	0	0	2	3	0	0	0	10	0	0	0	0
Premiere Towers	0	0	0	1	0	0	0	2	0	0	0	0
600 Brickell	0	0	2	2	0	0	0	7	0	0	0	0
The Pointe at Brickell Village	0	0	1	1	0	0	0	3	0	0	0	0
Miami River Development SAP	0	0	4	5	0	0	0	17	0	0	0	0
Brickell Bayview Center	0	0	0	0	0	0	0	2	0	0	0	0
Brickell CitiCentre	0	0	11	13	0	0	0	43	0	0	0	0
Walgreens	0	0	1	1	0	0	0	4	0	0	0	0
1101 Brickell Avenue	0	0	1	1	0	0	0	3	0	0	0	0
The Beacon	0	0	1	1	0	0	0	3	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	1	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	2	2	0	0	0	6	0	0	0	0
Church of Jesus Christ LDS	0	0	3	4	0	0	0	14	0	0	0	0
Background	191	1,413	265	312	1,403	145	0	1,065	46	0	1,359	41
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**191**	**1,413**	**265**	**312**	**1,403**	**145**	**0**	**1,065**	**46**	**0**	**1,359**	**41**

INTERSECTION ANALYSIS SHEET

SW 8th St @ SW 3rd Ave

	N-S	E-W
Growth Rate =	0.88%	1.88%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	0	194	233	15	327	0	32	2063	180	0	0	0
Peak Season Volume	0	194	233	15	327	0	32	2,063	180	0	0	0
	0%	45%	55%	4%	96%	0%	1%	91%	8%			
Committed Trips	*0*	*49*	*5*	*137*	*87*	*0*	*121*	*424*	*0*	*0*	*0*	*0*
Brickell CitiCentre North 2	0	0	2	0	0	0	0	21	0	0	0	0
Premiere Towers	0	0	2	0	0	0	0	21	0	0	0	0
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	0	0
Miami River Development SAP		49		136	8		121					
Brickell Bayview Center	0	0	0	0	0	0	0	4	0	0	0	0
Brickell CitiCentre					79			377				
Walgreens												
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	0	0	0	0	0	1	0	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	0	255	253	153	435	0	157	2,774	205	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**255**	**253**	**153**	**435**	**0**	**157**	**2,774**	**205**	**0**	**0**	**0**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	0	180	176	15	466	0	88	1467	64	0	0	0
Peak Season Volume	0	180	176	15	466	0	88	1,467	64	0	0	0
	0%	51%	49%	3%	97%	0%	5%	91%	4%			
Committed Trips	*0*	*69*	*32*	*234*	*299*	*0*	*199*	*635*	*0*	*0*	*0*	*0*
Brickell CitiCentre North 2	0	0	10	1	0	0	0	81	0	0	0	0
Premiere Towers	0	0	2	0	0	0	0	15	0	0	0	0
600 Brickell	0	0	8	1	0	0	0	63	0	0	0	0
The Pointe at Brickell Village	0	0	3	0	0	0	0	25	0	0	0	0
Miami River Development SAP		66		192	11		168					
Brickell Bayview Center	0	0	2	0	0	0	0	13	0	0	0	0
Brickell CitiCentre					284			369				
Walgreens		3		39	4		30					
1101 Brickell Avenue	0	0	3	0	0	0	0	22	0	0	0	0
The Beacon	0	0	3	0	0	0	0	27	0	0	0	0
Brickell Station	0	0	1	0	0	0	0	4	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	4	0	0	0	0
TD Bank	0	0	0	0	0	0	0	3	0	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	8	0	0	0	0
Background	0	260	219	250	794	0	299	2,306	73	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**260**	**219**	**250**	**794**	**0**	**299**	**2,306**	**73**	**0**	**0**	**0**

INTERSECTION ANALYSIS SHEET

SW 8th St @ SW 4th Ave

	N-S	E-W
Growth Rate =	0.88%	1.88%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	0	0	0	2456	523	0	0	1608	75	0	0	0
Peak Season Volume	0	0	0	2,456	523	0	0	1,608	75	0	0	0
	#DIV/0!	#DIV/0!	#DIV/0!	82%	18%	0%	0%	96%	4%			
			0%	60%				40%				
Committed Trips	*0*	*0*	*0*	*347*	*51*	*0*	*0*	*247*	*17*	*0*	*0*	*0*
Brickell CitiCentre North 2	0	0	0	10	0	0	0	10	1	0	0	0
Premiere Towers	0	0	0	10	0	0	0	10	1	0	0	0
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	0	0
Miami River Development SAP				144	51			47				
Brickell Bayview Center	0	0	0	2	0	0	0	2	0	0	0	0
Brickell CitiCentre	0	0	0	181	0	0	0	177	15	0	0	0
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	0	0	0	0	0	2	0	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	0	0	0	2,958	607	0	0	2,079	102	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**0**	**0**	**2,958**	**607**	**0**	**0**	**2,079**	**102**	**0**	**0**	**0**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	0	0	0	1424	627	0	0	1574	129	0	0	0
Peak Season Volume	0	0	0	1,424	627	0	0	1,574	129	0	0	0
				69%	31%	0%	0%	92%	8%			
			0%	35%				39%				
Committed Trips	*0*	*0*	*0*	*475*	*72*	*0*	*0*	*379*	*61*	*0*	*0*	*0*
Brickell CitiCentre North 2	0	0	0	34	0	0	0	37	7	0	0	0
Premiere Towers	0	0	0	6	0	0	0	7	1	0	0	0
600 Brickell	0	0	0	26	0	0	0	29	6	0	0	0
The Pointe at Brickell Village	0	0	0	10	0	0	0	11	2	0	0	0
Miami River Development SAP				201	72			66				
Brickell Bayview Center	0	0	0	6	0	0	0	6	1	0	0	0
Brickell CitiCentre	0	0	0	155	0	0	0	170	33	0	0	0
Walgreens	0	0	0	13	0	0	0	14	3	0	0	0
1101 Brickell Avenue	0	0	0	9	0	0	0	10	2	0	0	0
The Beacon	0	0	0	11	0	0	0	12	2	0	0	0
Brickell Station	0	0	0	2	0	0	0	2	0	0	0	0
888 Brickell	0	0	0	2	0	0	0	2	0	0	0	0
TD Bank	0	0	0	0	0	0	0	3	1	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	9	2	0	0	0
Background	0	0	0	1,989	739	0	0	2,172	208	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**0**	**0**	**1,989**	**739**	**0**	**0**	**2,172**	**208**	**0**	**0**	**0**

INTERSECTION ANALYSIS SHEET

SW 7th St @ SW 4th Ave/SB I-95 Off-Ramp

	N-S	E-W
Growth Rate =	0.88%	1.88%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Southwestbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	0	0	0	0	279	12	0	952	281	0	0	0	316	454	0
Peak Season Volume	0	0	0	0	279	12	0	952	281	0	0	0	316	454	0
				0%	96%	4%	0%	77%	23%				41%	59%	0%
Committed Trips	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*183*	*42*	*0*	*0*	*0*	*61*	*85*	*0*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	0	0	0	10	14	0
Premiere Towers	0	0	0	0	0	0	0	0	0	0	0	0	6	8	0
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Miami River Development SAP								183	40				12	12	
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	0	0	0	5	8	0
Brickell CitiCentre	0	0	0	0	0	0	0	0	0	0	0	0	28	41	0
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Background	0	0	0	0	297	13	0	1,195	341	0	0	0	421	602	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**0**	**0**	**0**	**297**	**13**	**0**	**1,195**	**341**	**0**	**0**	**0**	**421**	**602**	**0**

PM Peak Hour

	Northbound			Southbound			Southwestbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	0	0	0	0	177	36	0	709	478	0	0	0	259	744	0
Peak Season Volume	0	0	0	0	177	36	0	709	478	0	0	0	259	744	0
				0%	83%	17%	0%	333%	224%				26%	74%	0%
Committed Trips	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*256*	*66*	*0*	*0*	*0*	*164*	*453*	*0*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	0	0	0	17	47	0
Premiere Towers	0	0	0	0	0	0	0	0	0	0	0	0	4	12	0
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0	42	119	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	0	0	5	15	0
Miami River Development SAP								256	55				17	17	
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Brickell CitiCentre	0	0	0	0	0	0	0	0	0	0	0	0	65	184	0
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0	8	21	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0	4	12	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0	1	3	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0	2	5	0
TD Bank	0	0	0	0	0	0	0	0	6	0	0	0	0	8	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	5	0	0	0	0	8	0
Background	0	0	0	0	188	38	0	1,010	574	0	0	0	459	1,301	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**0**	**0**	**0**	**188**	**38**	**0**	**1,010**	**574**	**0**	**0**	**0**	**459**	**1,301**	**0**

INTERSECTION ANALYSIS SHEET

SW 7th St @ SW 12th Ave

	N-S	E-W
Growth Rate =	0.88%	1.03%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	147	520	0	0	380	114	0	0	0	75	752	71
Peak Season Volume	147	520	0	0	380	114	0	0	0	75	752	71
	22%	78%	0%	0%	77%	23%				8%	84%	8%
										8%	84%	8%
Committed Trips	*7*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*12*	*86*	*9*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	1	10	1
Premiere Towers	0	0	0	0	0	0	0	0	0	0	6	1
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	0	0
Miami River Development SAP	0	0	0	0	0	0	0	0	0	3	37	4
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	0	5	1
Brickell CitiCentre	0	0	0	0	0	0	0	0	0	2	29	3
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	7									5		
Church of Jesus Christ LDS												
Background	163	553	0	0	404	121	0	0	0	93	894	85
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**163**	**553**	**0**	**0**	**404**	**121**	**0**	**0**	**0**	**93**	**894**	**85**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	173	497	0	0	534	108	0	0	0	120	1389	95
Peak Season Volume	173	497	0	0	534	108	0	0	0	120	1,389	95
	26%	74%	0%	0%	83%	17%				7%	87%	6%
Committed Trips	*18*	*0*	*0*	*0*	*0*	*9*	*0*	*0*	*0*	*47*	*404*	*27*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	3	37	3
Premiere Towers	0	0	0	0	0	0	0	0	0	1	9	1
600 Brickell	0	0	0	0	0	0	0	0	0	8	94	6
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	1	11	1
Miami River Development SAP	0	0	0	0	0	0	0	0	0	5	57	4
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	0	1	0
Brickell CitiCentre	0	0	0	0	0	0	0	0	0	12	146	10
Walgreens	0	0	0	0	0	0	0	0	0	1	17	1
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	1	9	1
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	3	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	4	0
TD Bank	9									16		
Church of Jesus Christ LDS	9					9					15	
Background	202	528	0	0	568	124	0	0	0	176	1,896	129
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**202**	**528**	**0**	**0**	**568**	**124**	**0**	**0**	**0**	**176**	**1,896**	**129**

INTERSECTION ANALYSIS SHEET

SW 7th St @ Beacom Blvd

	N-S	E-W
Growth Rate =	0.88%	1.03%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	165	248	0	0	297	367	0	0	0	430	515	0
Peak Season Volume	165	248	0	0	297	367	0	0	0	430	515	0
	40%	60%	0%	0%	45%	55%				46%	54%	0%
Committed Trips	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*27*	*23*	*0*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	3	2	0
Premiere Towers	0	0	0	0	0	0	0	0	0	2	1	0
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	0	0
Miami River Development SAP	0	0	0	0	0	0	0	0	0	11	9	0
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	2	1	0
Brickell CitiCentre	0	0	0	0	0	0	0	0	0	8	7	0
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	0	0	0	0	0	0	0	2	2	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	175	264	0	0	316	390	0	0	0	489	576	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**175**	**264**	**0**	**0**	**316**	**390**	**0**	**0**	**0**	**489**	**576**	**0**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	126	221	0	0	319	302	0	0	0	591	600	0
Peak Season Volume	126	221	0	0	319	302	0	0	0	591	600	0
										50%	50%	0%
Committed Trips	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*226*	*118*	*0*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	24	10	0
Premiere Towers	0	0	0	0	0	0	0	0	0	6	3	0
600 Brickell	0	0	0	0	0	0	0	0	0	59	26	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	7	3	0
Miami River Development SAP	0	0	0	0	0	0	0	0	0	9	16	0
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	1	0	0
Brickell CitiCentre	0	0	0	0	0	0	0	0	0	92	40	0
Walgreens	0	0	0	0	0	0	0	0	0	11	5	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	6	3	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	2	1	0
888 Brickell	0	0	0	0	0	0	0	0	0	2	1	0
TD Bank	0	0	0	0	0	0	0	0	0	4	2	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	4	9	0
Background	134	235	0	0	339	321	0	0	0	861	763	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**134**	**235**	**0**	**0**	**339**	**321**	**0**	**0**	**0**	**861**	**763**	**0**

INTERSECTION ANALYSIS SHEET

SW 7th St @ SW 17th Ave

	N-S	E-W
Growth Rate =	0.88%	1.03%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	96	661	0	0	922	118	0	0	0	122	808	129
Peak Season Volume	96	661	0	0	922	118	0	0	0	122	808	129
	13%	87%	0%	0%	89%	11%				12%	76%	12%
										12%	76%	12%
Committed Trips	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*11*	*68*	*11*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	1	7	1
Premiere Towers	0	0	0	0	0	0	0	0	0	1	4	1
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	0	0
Miami River Development SAP	0	0	0	0	0	0	0	0	0	4	27	4
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	1	4	1
Brickell CitiCentre	0	0	0	0	0	0	0	0	0	3	21	3
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	0	0	0	0	0	0	0	1	5	1
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	102	703	0	0	980	125	0	0	0	142	936	150
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**102**	**703**	**0**	**0**	**980**	**125**	**0**	**0**	**0**	**142**	**936**	**150**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	109	589	0	0	869	157	0	0	0	161	1237	97
Peak Season Volume	109	589	0	0	869	157	0	0	0	161	1,237	97
	16%	84%	0%	0%	85%	15%				11%	83%	6%
Committed Trips	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*46*	*343*	*25*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	4	30	2
Premiere Towers	0	0	0	0	0	0	0	0	0	1	7	1
600 Brickell	0	0	0	0	0	0	0	0	0	10	75	5
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	1	9	1
Miami River Development SAP	0	0	0	0	0	0	0	0	0	6	45	3
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	0	1	0
Brickell CitiCentre	0	0	0	0	0	0	0	0	0	15	116	8
Walgreens	0	0	0	0	0	0	0	0	0	2	14	1
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	1	7	1
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	2	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	3	0
TD Bank	0	0	0	0	0	0	0	0	0	1	7	1
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	3	26	2
Background	116	626	0	0	924	167	0	0	0	219	1,672	129
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**116**	**626**	**0**	**0**	**924**	**167**	**0**	**0**	**0**	**219**	**1,672**	**129**

INTERSECTION ANALYSIS SHEET

SW 7th St @ SW 19th Ave

	N-S	E-W
Growth Rate =	0.88%	1.03%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	55	52	0	0	105	47	0	0	0	46	858	16
Peak Season Volume	55	52	0	0	105	47	0	0	0	46	858	16
	51%	49%	0%	0%	69%	31%				5%	93%	2%
										5%	93%	2%
Committed Trips	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*3*	*63*	*1*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	0	7	0
Premiere Towers	0	0	0	0	0	0	0	0	0	0	4	0
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	0	0
Miami River Development SAP	0	0	0	0	0	0	0	0	0	1	25	1
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	0	4	0
Brickell CitiCentre	0	0	0	0	0	0	0	0	0	1	19	0
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	0	0	0	0	0	0	0	0	5	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	58	55	0	0	112	50	0	0	0	52	985	18
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**58**	**55**	**0**	**0**	**112**	**50**	**0**	**0**	**0**	**52**	**985**	**18**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	64	59	0	0	92	43	0	0	0	78	1222	34
Peak Season Volume	64	59	0	0	92	43	0	0	0	78	1,222	34
	52%	48%	0%	0%	68%	32%				6%	92%	3%
Committed Trips	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*21*	*316*	*7*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	2	27	1
Premiere Towers	0	0	0	0	0	0	0	0	0	0	7	0
600 Brickell	0	0	0	0	0	0	0	0	0	4	69	1
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	1	8	0
Miami River Development SAP	0	0	0	0	0	0	0	0	0	3	42	1
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	0	1	0
Brickell CitiCentre	0	0	0	0	0	0	0	0	0	7	107	2
Walgreens	0	0	0	0	0	0	0	0	0	1	12	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	7	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	2	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	3	0
TD Bank	0	0	0	0	0	0	0	0	0	0	7	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	2	24	1
Background	68	63	0	0	98	46	0	0	0	105	1,629	44
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**68**	**63**	**0**	**0**	**98**	**46**	**0**	**0**	**0**	**105**	**1,629**	**44**

INTERSECTION ANALYSIS SHEET

SW 7th St @ SW 22nd Ave

	N-S	E-W
Growth Rate =	0.88%	1.03%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	83	769	0	0	703	65	0	0	0	128	850	78
Peak Season Volume	83	769	0	0	703	65	0	0	0	128	850	78
	10%	90%	0%	0%	92%	8%				12%	80%	7%
										12%	80%	7%
Committed Trips	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*8*	*51*	*4*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	1	5	0
Premiere Towers	0	0	0	0	0	0	0	0	0	0	3	0
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	0	0
Miami River Development SAP	0	0	0	0	0	0	0	0	0	3	20	2
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	0	3	0
Brickell CitiCentre	0	0	0	0	0	0	0	0	0	3	16	1
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	0	0	0	0	0	0	0	1	4	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	88	818	0	0	747	69	0	0	0	146	964	88
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**88**	**818**	**0**	**0**	**747**	**69**	**0**	**0**	**0**	**146**	**964**	**88**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	95	724	0	0	781	75	0	0	0	215	1095	152
Peak Season Volume	95	724	0	0	781	75	0	0	0	215	1,095	152
	12%	88%	0%	0%	91%	9%				15%	75%	10%
Committed Trips	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*47*	*237*	*32*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	4	21	3
Premiere Towers	0	0	0	0	0	0	0	0	0	1	5	1
600 Brickell	0	0	0	0	0	0	0	0	0	10	52	7
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	1	6	1
Miami River Development SAP	0	0	0	0	0	0	0	0	0	6	31	4
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	0	1	0
Brickell CitiCentre	0	0	0	0	0	0	0	0	0	16	80	11
Walgreens	0	0	0	0	0	0	0	0	0	2	9	1
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	1	5	1
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	2	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	2	0
TD Bank	0	0	0	0	0	0	0	0	0	1	5	1
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	4	18	2
Background	101	770	0	0	830	80	0	0	0	278	1,413	195
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**101**	**770**	**0**	**0**	**830**	**80**	**0**	**0**	**0**	**278**	**1,413**	**195**

INTERSECTION ANALYSIS SHEET

SW 7th St @ SW 27th Ave

	N-S	E-W
Growth Rate =	0.88%	1.03%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	0	1281	0	0	1966	31	137	0	41	192	99	214
Peak Season Volume	0	1,281	0	0	1,966	31	137	0	41	192	99	214
	0%	100%	0%	0%	98%	2%	77%	0%	23%	38%	20%	42%
										38%	20%	42%
Committed Trips	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*9*	*5*	*10*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	1	0	1
Premiere Towers	0	0	0	0	0	0	0	0	0	1	0	1
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	0	0
Miami River Development SAP	0	0	0	0	0	0	0	0	0	3	2	4
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	1	0	1
Brickell CitiCentre	0	0	0	0	0	0	0	0	0	3	1	3
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	0	0	0	0	0	0	0	1	0	1
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	0	1,362	0	0	2,090	33	147	0	44	215	111	240
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**1,362**	**0**	**0**	**2,090**	**33**	**147**	**0**	**44**	**215**	**111**	**240**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	0	1272	0	0	1218	23	113	0	21	213	346	268
Peak Season Volume	0	1,272	0	0	1,218	23	113	0	21	213	346	268
	0%	100%	0%	0%	98%	2%	84%	0%	16%	26%	42%	32%
Committed Trips	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*31*	*50*	*38*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	3	4	3
Premiere Towers	0	0	0	0	0	0	0	0	0	1	1	1
600 Brickell	0	0	0	0	0	0	0	0	0	7	11	8
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	1	1	1
Miami River Development SAP	0	0	0	0	0	0	0	0	0	4	7	5
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	0	0	0
Brickell CitiCentre	0	0	0	0	0	0	0	0	0	10	17	13
Walgreens	0	0	0	0	0	0	0	0	0	1	2	1
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	1	1	1
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	0	0	0	0	0	0	0	1	1	1
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	2	4	3
Background	0	1,352	0	0	1,295	24	121	0	23	260	422	326
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**1,352**	**0**	**0**	**1,295**	**24**	**121**	**0**	**23**	**260**	**422**	**326**

2013 Node: 4130

INTERSECTION ANALYSIS SHEET

SW 7th St @ Brickell Ave

	N-S	E-W
Growth Rate =	0.88%	1.88%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	369	1308	256	205	1149	166	0	0	0	4	40	44
Peak Season Volume	369	1,308	256	205	1,149	166	0	0	0	4	40	44
	19%	68%	13%	13%	76%	11%				5%	45%	50%
Committed Trips	*78*	*39*	*0*	*0*	*23*	*126*	*0*	*0*	*0*	*0*	*2*	*0*
Brickell CitiCentre North 2		3			4	13						
Premiere Towers		8			9							
600 Brickell												
The Pointe at Brickell Village												
Miami River Development SAP	25	0	0	0	0	10	0	0	0	0	2	0
Brickell Bayview Center	3	8				2						
Brickell CitiCentre	50	20			10	100						
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue												
The Beacon												
Brickell Station												
888 Brickell												
TD Bank	0	0	0	0	0	0	0	0	0	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	470	1,430	272	218	1,245	302	0	0	0	5	48	50
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**470**	**1,430**	**272**	**218**	**1,245**	**302**	**0**	**0**	**0**	**5**	**48**	**50**

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PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	518	1195	11	23	1277	366	0	0	0	67	231	100
Peak Season Volume	518	1,195	11	23	1,277	366	0	0	0	67	231	100
	30%	69%	1%	1%	77%	22%				17%	58%	25%
Committed Trips	*110*	*97*	*0*	*0*	*226*	*134*	*0*	*0*	*0*	*0*	*15*	*0*
Brickell CitiCentre North 2		10			9	70						
Premiere Towers		9			7							
600 Brickell	48	10			117	10						
The Pointe at Brickell Village		6			6							
Miami River Development SAP	27	0	0	0	0	19	0	0	0	0	12	0
Brickell Bayview Center	2	2				5						
Brickell CitiCentre												
Walgreens	4	0	0	0	0	3	0	0	0	0	2	0
1101 Brickell Avenue	11	26			70	20						
The Beacon	1											
Brickell Station	7	15			8	2						
888 Brickell	8	19			9	3						
TD Bank	1	0	0	0	0	1	0	0	0	0	1	0
Church of Jesus Christ LDS	1	0	0	0	0	1	0	0	0	0	1	0
Background	661	1,368	12	24	1,584	523	0	0	0	76	278	114
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**661**	**1,368**	**12**	**24**	**1,584**	**523**	**0**	**0**	**0**	**76**	**278**	**114**

2013 Node: 4130

INTERSECTION ANALYSIS SHEET

SW 7th St @ Miami Ave

	N-S	E-W
Growth Rate =	0.88%	1.88%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	283	531	0	0	0	0	0	0	0	0	660	74
Peak Season Volume	283	531	0	0	0	0	0	0	0	0	660	74
	35%	65%	0%							0%	90%	10%
Committed Trips	*71*	*146*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*203*	*125*
Brickell CitiCentre North 2		38									13	
Premiere Towers		56									25	
600 Brickell												
The Pointe at Brickell Village												
Miami River Development SAP	16	0	0	0	0	0	0	0	0	0	37	0
Brickell Bayview Center	30	19									5	
Brickell CitiCentre	25	33									122	125
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue												
The Beacon												
Brickell Station												
888 Brickell												
TD Bank	0	0	0	0	0	0	0	0	0	0	1	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	372	711	0	0	0	0	0	0	0	0	955	209
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**372**	**711**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**955**	**209**

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PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	422	509	0	0	0	0	0	0	0	0	1011	113
Peak Season Volume	422	509	0	0	0	0	0	0	0	0	1,011	113
	45%	55%	0%							0%	90%	10%
Committed Trips	*295*	*545*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*779*	*321*
Brickell CitiCentre North 2		156									70	
Premiere Towers		60									26	
600 Brickell		76									95	
The Pointe at Brickell Village	28	30										
Miami River Development SAP	24	0	0	0	0	0	0	0	0	0	58	0
Brickell Bayview Center	8	4									7	
Brickell CitiCentre	230	219									456	321
Walgreens	3	0	0	0	0	0	0	0	0	0	8	0
1101 Brickell Avenue											31	
The Beacon											1	
Brickell Station											9	
888 Brickell											12	
TD Bank	1	0	0	0	0	0	0	0	0	0	3	0
Church of Jesus Christ LDS	1	0	0	0	0	0	0	0	0	0	3	0
Background	744	1,086	0	0	0	0	0	0	0	0	1,931	450
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**744**	**1,086**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,931**	**450**

INTERSECTION ANALYSIS SHEET

SW 7th St @ SW 3rd Ave

	N-S	E-W
Growth Rate =	0.88%	1.88%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	94	72	0	0	0	0	0	0	0	224	762	81
Peak Season Volume	94	72	0	0	0	0	0	0	0	224	762	81
	57%	43%	0%							21%	71%	8%
Committed Trips	*0*	*170*	*0*	*0*	*144*	*24*	*0*	*0*	*0*	*94*	*121*	*98*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	7	24	3
Premiere Towers	0	0	0	0	0	0	0	0	0	4	13	2
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	0	0
Miami River Development SAP		170			144	24						92
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	4	13	1
Brickell CitiCentre										79	69	
Walgreens												
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	0	0	0	0	0	0	0	0	2	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	100	247	0	0	144	24	0	0	0	349	989	190
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**100**	**247**	**0**	**0**	**144**	**24**	**0**	**0**	**0**	**349**	**989**	**190**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	122	156	0	0	0	0	0	0	0	266	992	164
Peak Season Volume	122	156	0	0	0	0	0	0	0	266	992	164
	44%	56%	0%							19%	70%	12%
Committed Trips	*9*	*238*	*0*	*0*	*203*	*34*	*0*	*0*	*0*	*358*	*574*	*177*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	16	64	11
Premiere Towers	0	0	0	0	0	0	0	0	0	4	16	3
600 Brickell	0	0	0	0	0	0	0	0	0	41	160	27
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	5	20	3
Miami River Development SAP		234			203	34						127
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	0	2	0
Brickell CitiCentre										284	249	
Walgreens	7	4									22	
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	4	16	3
The Beacon	0	0	0	0	0	0	0	0	0	0	1	0
Brickell Station	0	0	0	0	0	0	0	0	0	1	5	1
888 Brickell	0	0	0	0	0	0	0	0	0	2	6	1
TD Bank	1	0	0	0	0	0	0	0	0	0	7	0
Church of Jesus Christ LDS	1	0	0	0	0	0	0	0	0	0	7	0
Background	139	404	0	0	203	34	0	0	0	661	1,704	364
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**139**	**404**	**0**	**0**	**203**	**34**	**0**	**0**	**0**	**661**	**1,704**	**364**

INTERSECTION ANALYSIS SHEET

SW 7th St @ SW 16th Ave

	N-S	E-W
Growth Rate =	0.88%	1.03%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	0	0	0	0	36	17	0	0	0	42	911	0
Peak Season Volume	0	0	0	0	36	17	0	0	0	42	911	0
				0%	68%	32%				4%	96%	0%
										4%	96%	0%
Committed Trips	0	0	0	0	0	0	0	0	0	0	*90*	*0*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	0	9	0
Premiere Towers	0	0	0	0	0	0	0	0	0	0	5	0
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	0	0
Miami River Development SAP	0	0	0	0	0	0	0	0	0	1	35	0
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	0	5	0
Brickell CitiCentre	0	0	0	0	0	0	0	0	0	1	28	0
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	0	0	0	0	0	0	0	0	7	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	0	0	0	0	38	18	0	0	0	45	1,069	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**0**	**0**	**0**	**38**	**18**	**0**	**0**	**0**	**45**	**1,069**	**0**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	0	0	0	0	40	24	0	0	0	66	1459	0
Peak Season Volume	0	0	0	0	40	24	0	0	0	66	1,459	0
				0%	63%	38%				4%	96%	0%
Committed Trips	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*17*	*414*	*0*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	1	36	0
Premiere Towers	0	0	0	0	0	0	0	0	0	0	9	0
600 Brickell	0	0	0	0	0	0	0	0	0	4	90	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	11	0
Miami River Development SAP	0	0	0	0	0	0	0	0	0	2	55	0
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	0	1	0
Brickell CitiCentre	0	0	0	0	0	0	0	0	0	6	140	0
Walgreens	0	0	0	0	0	0	0	0	0	1	16	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	9	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	3	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	3	0
TD Bank	0	0	0	0	0	0	0	0	0	0	9	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	1	32	0
Background	0	0	0	0	43	26	0	0	0	88	1,982	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**0**	**0**	**0**	**43**	**26**	**0**	**0**	**0**	**88**	**1,982**	**0**

INTERSECTION ANALYSIS SHEET

SW 8th St @ SW 5th Ave

	N-S	E-W
Growth Rate =	0.88%	1.03%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	0	85	204	0	0	0	121	1593	16	0	0	0
Peak Season Volume	0	85	204	0	0	0	121	1,593	16	0	0	0
	0%	29%	71%				7%	92%	1%			
			11%	0%				89%				
Committed Trips	*0*	*0*	*27*	*0*	*0*	*0*	*0*	*222*	*0*	*0*	*0*	*0*
Brickell CitiCentre North 2	0	0	1	0	0	0	0	9	0	0	0	0
Premiere Towers	0	0	1	0	0	0	0	9	0	0	0	0
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	0	0
Miami River Development SAP	0	0	5	0	0	0	0	42	0	0	0	0
Brickell Bayview Center	0	0	0	0	0	0	0	2	0	0	0	0
Brickell CitiCentre	0	0	19	0	0	0	0	158	0	0	0	0
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	0	0	0	0	0	3	0	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	0	90	244	0	0	0	130	1,933	17	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**90**	**244**	**0**	**0**	**0**	**130**	**1,933**	**17**	**0**	**0**	**0**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	0	133	304	0	0	0	166	1494	66	0	0	0
Peak Season Volume	0	133	304	0	0	0	166	1,494	66	0	0	0
	0%	30%	70%				10%	87%	4%			
			17%	0%				83%				
Committed Trips	0	0	0	0	0	0	0	*331*	0	0	0	0
Brickell CitiCentre North 2	0	0	6	0	0	0	0	31	0	0	0	0
Premiere Towers	0	0	1	0	0	0	0	6	0	0	0	0
600 Brickell	0	0	5	0	0	0	0	24	0	0	0	0
The Pointe at Brickell Village	0	0	2	0	0	0	0	9	0	0	0	0
Miami River Development SAP	0	0	11	0	0	0	0	55	0	0	0	0
Brickell Bayview Center	0	0	1	0	0	0	0	5	0	0	0	0
Brickell CitiCentre	0	0	29	0	0	0	0	141	0	0	0	0
Walgreens	0	0	2	0	0	0	0	11	0	0	0	0
1101 Brickell Avenue	0	0	2	0	0	0	0	9	0	0	0	0
The Beacon	0	0	2	0	0	0	0	10	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	2	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	1	0	0	0	0
TD Bank	0	0	0	0	0	0	1	7	0	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	2	20	1	0	0	0
Background	0	141	323	0	0	0	178	1,936	71	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**141**	**323**	**0**	**0**	**0**	**178**	**1,936**	**71**	**0**	**0**	**0**

INTERSECTION ANALYSIS SHEET

SW 8th St @ SW 24th Ave

	N-S	E-W
Growth Rate =	0.88%	1.03%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	0	49	67	37	57	0	49	1378	37	0	0	0
Peak Season Volume	0	49	67	37	57	0	49	1,378	37	0	0	0
	0%	42%	58%	39%	61%	0%	3%	94%	3%			
			5%	2%				93%				
Committed Trips	*0*	*0*	*6*	*2*	*0*	*0*	*0*	*103*	*0*	*0*	*0*	*0*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	4	0	0	0	0
Premiere Towers	0	0	0	0	0	0	0	4	0	0	0	0
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	0	0
Miami River Development SAP	0	0	1	0	0	0	0	19	0	0	0	0
Brickell Bayview Center	0	0	0	0	0	0	0	1	0	0	0	0
Brickell CitiCentre	0	0	4	2	0	0	0	71	0	0	0	0
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	0	0	0	0	0	5	0	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	0	52	77	41	61	0	53	1,583	40	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**52**	**77**	**41**	**61**	**0**	**53**	**1,583**	**40**	**0**	**0**	**0**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	0	47	50	59	88	0	49	1342	32	0	0	0
Peak Season Volume	0	47	50	59	88	0	49	1,342	32	0	0	0
	0%	48%	52%	40%	60%	0%	3%	94%	2%			
			3%	4%				91%				
Committed Trips	0	0	0	0	0	0	0	*175*	0	0	0	0
Brickell CitiCentre North 2	0	0	0	1	0	0	0	15	0	0	0	0
Premiere Towers	0	0	0	0	0	0	0	3	0	0	0	0
600 Brickell	0	0	0	1	0	0	0	11	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	4	0	0	0	0
Miami River Development SAP	0	0	1	1	0	0	0	26	0	0	0	0
Brickell Bayview Center	0	0	0	0	0	0	0	2	0	0	0	0
Brickell CitiCentre	0	0	2	4	0	0	0	67	0	0	0	0
Walgreens	0	0	0	0	0	0	0	5	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	4	0	0	0	0
The Beacon	0	0	0	0	0	0	0	5	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	1	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	1	0	0	0	0
TD Bank	0	0	0	1	0	0	0	10	0	0	0	0
Church of Jesus Christ LDS	0	0	1	1	0	0	0	21	0	0	0	0
Background	0	50	53	63	94	0	53	1,617	34	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**50**	**53**	**63**	**94**	**0**	**53**	**1,617**	**34**	**0**	**0**	**0**

INTERSECTION ANALYSIS SHEET

SW 7th St @ SW 2nd Ave

	N-S	E-W
Growth Rate =	0.88%	1.88%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	252	632	0	0	214	85	0	0	0	96	655	106
Peak Season Volume	252	632	0	0	214	85	0	0	0	96	655	106
	29%	71%	0%	0%	72%	28%				11%	76%	12%
Committed Trips	*19*	*39*	*0*	*0*	*0*	*37*	*0*	*0*	*0*	*11*	*294*	*11*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	5	33	5
Premiere Towers	0	0	0	0	0	0	0	0	0	3	19	3
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village												
Miami River Development SAP	18	39				37					74	
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	3	18	3
Brickell CitiCentre											148	
Walgreens												
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	1	0	0	0	0	0	0	0	0	0	1	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	287	711	0	0	228	127	0	0	0	120	1,040	132
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**287**	**711**	**0**	**0**	**228**	**127**	**0**	**0**	**0**	**120**	**1,040**	**132**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	253	458	0	0	264	179	0	0	0	86	1148	84
Peak Season Volume	253	458	0	0	264	179	0	0	0	86	1,148	84
	36%	64%	0%	0%	60%	40%				7%	87%	6%
Committed Trips	*30*	*77*	*0*	*0*	*0*	*80*	*0*	*0*	*0*	*31*	*1,072*	*27*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	7	91	6
Premiere Towers	0	0	0	0	0	0	0	0	0	2	23	2
600 Brickell	0	0	0	0	0	0	0	0	0	18	229	16
The Pointe at Brickell Village											28	
Miami River Development SAP	25	55				52					102	
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	0	3	0
Brickell CitiCentre											533	
Walgreens	3	22				26					14	
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	2	23	2
The Beacon	0	0	0	0	0	0	0	0	0	0	1	0
Brickell Station	0	0	0	0	0	0	0	0	0	1	7	0
888 Brickell	0	0	0	0	0	0	0	0	0	1	9	1
TD Bank	1	0	0	0	0	1	0	0	0	0	5	0
Church of Jesus Christ LDS	1	0	0	0	0	1	0	0	0	0	5	0
Background	299	564	0	0	281	270	0	0	0	129	2,380	123
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**299**	**564**	**0**	**0**	**281**	**270**	**0**	**0**	**0**	**129**	**2,380**	**123**

INTERSECTION ANALYSIS SHEET

SW 7th St @ SW 8th Ave

	N-S	E-W
Growth Rate =	1.07%	0.94%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	65	286	0	0	256	88	0	0	0	47	563	62
Peak Season Volume	65	286	0	0	256	88	0	0	0	47	563	62
	19%	81%	0%	0%	74%	26%				7%	84%	9%
										7%	84%	9%
Committed Trips	*0*	*0*	*0*	*0*	*0*	*1*	*0*	*0*	*0*	*9*	*107*	*11*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	1	12	1
Premiere Towers	0	0	0	0	0	0	0	0	0	1	7	1
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	0	0
Miami River Development SAP	0	0	0	0	0	0	0	0	0	4	44	5
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	1	6	1
Brickell CitiCentre	0	0	0	0	0	0	0	0	0	3	34	4
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	0	0	0	1	0	0	0	0	4	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	70	308	0	0	276	96	0	0	0	59	708	77
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**70**	**308**	**0**	**0**	**276**	**96**	**0**	**0**	**0**	**59**	**708**	**77**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	92	193	0	0	173	66	0	0	0	64	1261	63
Peak Season Volume	92	193	0	0	173	66	0	0	0	64	1,261	63
	32%	68%	0%	0%	72%	28%				5%	91%	5%
Committed Trips	*2*	*0*	*0*	*0*	*0*	*2*	*0*	*0*	*0*	*23*	*475*	*20*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	2	43	2
Premiere Towers	0	0	0	0	0	0	0	0	0	2	11	0
600 Brickell	0	0	0	0	0	0	0	0	0	2	108	5
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	2	13	1
Miami River Development SAP	0	0	0	0	0	0	0	0	0	4	66	3
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	2	1	0
Brickell CitiCentre	0	0	0	0	0	0	0	0	0	2	168	7
Walgreens	0	0	0	0	0	0	0	0	0	2	20	1
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	1	11	0
The Beacon	0	0	0	0	0	0	0	0	0	1	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	1	3	0
888 Brickell	0	0	0	0	0	0	0	0	0	1	4	0
TD Bank	1	0	0	0	0	1	0	0	0	0	14	0
Church of Jesus Christ LDS	1	0	0	0	0	1	0	0	0	0	13	0
Background	101	208	0	0	186	73	0	0	0	91	1,821	87
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**101**	**208**	**0**	**0**	**186**	**73**	**0**	**0**	**0**	**91**	**1,821**	**87**

INTERSECTION ANALYSIS SHEET

SW 7th St @ SW 1st Ave

	N-S	E-W
Growth Rate =	0.88%	1.88%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	0	0	0	0	611	304	0	0	0	126	783	0
Peak Season Volume	0	0	0	0	611	304	0	0	0	126	783	0
				0%	67%	33%				14%	86%	0%
Committed Trips	*0*	*0*	*0*	*0*	*317*	*70*	*0*	*0*	*0*	*89*	*246*	*0*
Brickell CitiCentre North 2					12	33				2	11	
Premiere Towers					58						25	
600 Brickell												
The Pointe at Brickell Village												
Miami River Development SAP	0	0	0	0	0	21	0	0	0	0	53	0
Brickell Bayview Center					4					11	24	
Brickell CitiCentre					243	16				76	132	
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	0	0	0	0	0	0	0	0	1	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	0	0	0	0	967	393	0	0	0	233	1,138	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**0**	**0**	**0**	**967**	**393**	**0**	**0**	**0**	**233**	**1,138**	**0**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	0	0	0	0	646	286	0	0	0	203	1178	0
Peak Season Volume	0	0	0	0	646	286	0	0	0	203	1,178	0
				0%	69%	31%				15%	85%	0%
Committed Trips	*0*	*0*	*0*	*0*	*360*	*84*	*0*	*0*	*0*	*197*	*1,045*	*0*
Brickell CitiCentre North 2					32	47				12	58	
Premiere Towers					49						26	
600 Brickell										29	263	
The Pointe at Brickell Village					30						28	
Miami River Development SAP	0	0	0	0	0	20	0	0	0	0	82	0
Brickell Bayview Center					11					12	3	
Brickell CitiCentre					238	12				136	521	
Walgreens	0	0	0	0	0	3	0	0	0	0	11	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	5	26	0
The Beacon	0	0	0	0	0	0	0	0	0	0	1	0
Brickell Station	0	0	0	0	0	0	0	0	0	1	8	0
888 Brickell	0	0	0	0	0	0	0	0	0	2	10	0
TD Bank	0	0	0	0	0	1	0	0	0	0	4	0
Church of Jesus Christ LDS	0	0	0	0	0	1	0	0	0	0	4	0
Background	0	0	0	0	1,047	388	0	0	0	428	2,387	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**0**	**0**	**0**	**1,047**	**388**	**0**	**0**	**0**	**428**	**2,387**	**0**

2013 Node: 4130

INTERSECTION ANALYSIS SHEET

SW 8th St @ Brickell Ave

	N-S	E-W
Growth Rate =	1.07%	1.90%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	0	848	233	346	816	0	534	705	221	233	0	589
Peak Season Volume	0	848	233	346	816	0	534	705	221	233	0	589
	0%	78%	22%	30%	70%	0%	37%	48%	15%	28%	0%	72%
Committed Trips	*0*	*17*	*0*	*10*	*13*	*0*	*50*	*37*	*11*	*0*	*0*	*44*
Brickell CitiCentre North 2		1		3	1							2
Premiere Towers		8			9							
600 Brickell												
The Pointe at Brickell Village												
Miami River Development SAP	0	0	0	0	0	0	19	25	8	0	0	0
Brickell Bayview Center							11	2	3			
Brickell CitiCentre		8		7	3		20	10				42
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue												
The Beacon												
Brickell Station												
888 Brickell												
TD Bank	0	0	0	0	0	0	0	0	0	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	0	931	251	383	892	0	659	841	263	266	0	716
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**931**	**251**	**383**	**892**	**0**	**659**	**841**	**263**	**266**	**0**	**716**

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PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	0	921	191	313	1065	0	261	448	197	278	0	518
Peak Season Volume	0	921	191	313	1,065	0	261	448	197	278	0	518
	0%	83%	17%	23%	77%	0%	29%	49%	22%	35%	0%	65%
Committed Trips	*0*	*145*	*11*	*44*	*182*	*0*	*196*	*121*	*58*	*2*	*0*	*65*
Brickell CitiCentre North 2		3		7	2							7
Premiere Towers		9			7							
600 Brickell		38			117		19					
The Pointe at Brickell Village					6		6					
Miami River Development SAP	0	0	0	0	0	0	18	31	14	0	0	0
Brickell Bayview Center		1					2		1			1
Brickell CitiCentre		8					142	59	12			41
Walgreens	0	0	0	0	0	0	2	4	2	0	0	0
1101 Brickell Avenue		37		35	35			17	18			16
The Beacon							5	8	4			
Brickell Station		22	5	2	6							
888 Brickell		27	6		9				6	2		
TD Bank	0	0	0	0	0	0	0	1	0	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	1	1	1	0	0	0
Background	0	1,137	217	381	1,329	0	494	632	283	319	0	656
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**1,137**	**217**	**381**	**1,329**	**0**	**494**	**632**	**283**	**319**	**0**	**656**

2013 Node: 4130

INTERSECTION ANALYSIS SHEET

SW 8th St @ Miami Ave

	N-S	E-W
Growth Rate =	1.07%	1.90%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	0	597	69	0	0	0	231	1638	0	0	0	0
Peak Season Volume	0	597	69	0	0	0	231	1,638	0	0	0	0
	0%	90%	10%				12%	88%	0%			
Committed Trips	*0*	*81*	*42*	*0*	*0*	*0*	*122*	*658*	*0*	*0*	*0*	*0*
Brickell CitiCentre North 2		4					34					
Premiere Towers		51						26				
600 Brickell												
The Pointe at Brickell Village												
Miami River Development SAP	0	0	0	0	0	0	7	51	0	0	0	0
Brickell Bayview Center		1					48	16				
Brickell CitiCentre		25	42				33	564				
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue												
The Beacon												
Brickell Station												
888 Brickell												
TD Bank	0	0	0	0	0	0	0	1	0	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	0	724	116	0	0	0	386	2,527	0	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**724**	**116**	**0**	**0**	**0**	**386**	**2,527**	**0**	**0**	**0**	**0**

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PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	0	686	51	0	0	0	286	951	0	0	0	0
Peak Season Volume	0	686	51	0	0	0	286	951	0	0	0	0
	0%	93%	7%				23%	77%	0%			
Committed Trips	*0*	*192*	*43*	*0*	*0*	*0*	*667*	*434*	*0*	*0*	*0*	*0*
Brickell CitiCentre North 2		18					138					
Premiere Towers		43						21				
600 Brickell		10					67	19				
The Pointe at Brickell Village		58										
Miami River Development SAP	0	0	0	0	0	0	19	63	0	0	0	0
Brickell Bayview Center		3					9	3				
Brickell CitiCentre		25	41				424	233				
Walgreens	0	0	0	0	0	0	2	8	0	0	0	0
1101 Brickell Avenue								35				
The Beacon			2					42				
Brickell Station							7					
888 Brickell		35						6				
TD Bank	0	0	0	0	0	0	0	1	0	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	1	3	0	0	0	0
Background	0	931	98	0	0	0	993	1,519	0	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**931**	**98**	**0**	**0**	**0**	**993**	**1,519**	**0**	**0**	**0**	**0**

2013 Node: 4130

INTERSECTION ANALYSIS SHEET

SW 8th St @ SW 1st Ave

	N-S	E-W
Growth Rate =	1.07%	1.90%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	0	0	0	207	463	0	0	1554	493	0	0	0
Peak Season Volume	0	0	0	207	463	0	0	1,554	493	0	0	0
				31%	69%	0%	0%	76%	24%			
Committed Trips	*0*	*0*	*0*	*307*	*99*	*0*	*0*	*494*	*19*	*0*	*0*	*0*
Brickell CitiCentre North 2				7	7			27				
Premiere Towers					58			26				
600 Brickell												
The Pointe at Brickell Village												
Miami River Development SAP	0	0	0	0	0	0	0	59	18	0	0	0
Brickell Bayview Center				7	8			5				
Brickell CitiCentre				293	26			377				
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	0	0	0	0	0	1	0	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	0	0	0	530	598	0	0	2,267	581	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**0**	**0**	**530**	**598**	**0**	**0**	**2,267**	**581**	**0**	**0**	**0**

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PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	0	0	0	138	712	0	0	1044	340	0	0	0
Peak Season Volume	0	0	0	138	712	0	0	1,044	340	0	0	0
				16%	84%	0%	0%	75%	25%			
Committed Trips	*0*	*0*	*0*	*338*	*222*	*0*	*0*	*782*	*60*	*0*	*0*	*0*
Brickell CitiCentre North 2				27	17			111				
Premiere Towers					49			21				
600 Brickell					29			86				
The Pointe at Brickell Village					30				28			
Miami River Development SAP	0	0	0	0	0	0	0	82	27	0	0	0
Brickell Bayview Center				21	2			18				
Brickell CitiCentre				279	95			369				
Walgreens	0	0	0	0	0	0	0	11	4	0	0	0
1101 Brickell Avenue	0	0	0	4	0	0	0	31	0	0	0	0
The Beacon	0	0	0	5	0	0	0	37	0	0	0	0
Brickell Station	0	0	0	1	0	0	0	6	0	0	0	0
888 Brickell	0	0	0	1	0	0	0	5	0	0	0	0
TD Bank	0	0	0	0	0	0	0	1	0	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	4	1	0	0	0
Background	0	0	0	487	989	0	0	1,973	448	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**0**	**0**	**487**	**989**	**0**	**0**	**1,973**	**448**	**0**	**0**	**0**

INTERSECTION ANALYSIS SHEET

SW 8th St @ SW 2nd Ave

	N-S	E-W
Growth Rate =	1.07%	1.90%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	0	896	81	129	216	0	386	1651	248	0	0	0
Peak Season Volume	0	896	81	129	216	0	386	1,651	248	0	0	0
	0%	92%	8%	37%	63%	0%	17%	72%	11%			
Committed Trips	*0*	*18*	*2*	*4*	*0*	*0*	*39*	*507*	*20*	*0*	*0*	*0*
Brickell CitiCentre North 2	0	0	1	2	0	0	0	24	0	0	0	0
Premiere Towers	0	0	1	2	0	0	0	23	0	0	0	0
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village												
Miami River Development SAP		18					39	77	20			
Brickell Bayview Center	0	0	0	0	0	0	0	4	0	0	0	0
Brickell CitiCentre								377				
Walgreens												
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	0	0	0	0	0	1	0	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	0	983	89	143	233	0	479	2,391	303	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**983**	**89**	**143**	**233**	**0**	**479**	**2,391**	**303**	**0**	**0**	**0**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	0	869	82	146	351	0	316	1130	375	0	0	0
Peak Season Volume	0	869	82	146	351	0	316	1,130	375	0	0	0
	0%	91%	9%	29%	71%	0%	17%	62%	21%			
Committed Trips	*0*	*28*	*19*	*35*	*0*	*0*	*79*	*789*	*33*	*0*	*0*	*0*
Brickell CitiCentre North 2	0	0	7	12	0	0	0	92	0	0	0	0
Premiere Towers	0	0	1	2	0	0	0	17	0	0	0	0
600 Brickell	0	0	5	9	0	0	0	71	0	0	0	0
The Pointe at Brickell Village								28				
Miami River Development SAP		25					55	109	28			
Brickell Bayview Center	0	0	1	2	0	0	0	15	0	0	0	0
Brickell CitiCentre								369				
Walgreens		3					22	14	3			
1101 Brickell Avenue	0	0	2	3	0	0	0	26	0	0	0	0
The Beacon	0	0	2	4	0	0	0	31	0	0	0	0
Brickell Station	0	0	0	1	0	0	0	5	0	0	0	0
888 Brickell	0	0	0	1	0	0	0	4	0	0	0	0
TD Bank	0	0	0	0	0	0	0	2	1	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	1	5	2	0	0	0
Background	0	964	107	192	378	0	440	2,078	461	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**964**	**107**	**192**	**378**	**0**	**440**	**2,078**	**461**	**0**	**0**	**0**

INTERSECTION ANALYSIS SHEET

SW 8th St @ SW 8th Ave

	N-S	E-W
Growth Rate =	1.07%	0.94%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	0	146	49	164	115	0	148	1556	52	0	0	0
Peak Season Volume	0	146	49	164	115	0	148	1,556	52	0	0	0
	0%	75%	25%	59%	41%	0%	8%	89%	3%			
Committed Trips	*0*	*0*	*7*	*20*	*0*	*0*	*0*	*196*	*0*	*0*	*0*	*0*
Brickell CitiCentre North 2	0	0	0	1	0	0	0	8	0	0	0	0
Premiere Towers	0	0	0	1	0	0	0	8	0	0	0	0
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	0	0
Miami River Development SAP	0	0	1	4	0	0	0	37	0	0	0	0
Brickell Bayview Center	0	0	0	0	0	0	0	1	0	0	0	0
Brickell CitiCentre	0	0	5	14	0	0	0	139	0	0	0	0
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	0	0	0	0	0	4	0	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	0	157	60	197	124	0	158	1,857	56	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**157**	**60**	**197**	**124**	**0**	**158**	**1,857**	**56**	**0**	**0**	**0**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	0	128	35	100	142	0	168	1563	51	0	0	0
Peak Season Volume	0	128	35	100	142	0	168	1,563	51	0	0	0
	0%	79%	21%	41%	59%	0%	9%	88%	3%			
Committed Trips	*0*	*0*	*6*	*18*	*0*	*0*	*3*	*311*	*1*	*0*	*0*	*0*
Brickell CitiCentre North 2	0	0	1	2	0	0	0	28	0	0	0	0
Premiere Towers	0	0	0	0	0	0	0	5	0	0	0	0
600 Brickell	0	0	0	1	0	0	0	22	0	0	0	0
The Pointe at Brickell Village	0	0	0	1	0	0	0	9	0	0	0	0
Miami River Development SAP	0	0	1	3	0	0	0	50	0	0	0	0
Brickell Bayview Center	0	0	0	0	0	0	0	5	0	0	0	0
Brickell CitiCentre	0	0	3	8	0	0	0	130	0	0	0	0
Walgreens	0	0	0	1	0	0	0	11	0	0	0	0
1101 Brickell Avenue	0	0	0	1	0	0	0	8	0	0	0	0
The Beacon	0	0	0	1	0	0	0	9	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	2	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	1	0	0	0	0
TD Bank	0	0	0	0	0	0	1	8	0	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	2	23	1	0	0	0
Background	0	138	44	126	153	0	182	1,980	55	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**138**	**44**	**126**	**153**	**0**	**182**	**1,980**	**55**	**0**	**0**	**0**

INTERSECTION ANALYSIS SHEET

SW 8th St @ SW 12th Ave

	N-S	E-W
Growth Rate =	1.07%	0.94%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	0	452	88	124	333	0	193	1831	97	0	0	0
Peak Season Volume	0	452	88	124	333	0	193	1,831	97	0	0	0
	0%	84%	16%	27%	73%	0%	9%	86%	5%			
			4%	6%				90%				
Committed Trips	*0*	*7*	*12*	*12*	*5*	*0*	*0*	*173*	*9*	*0*	*0*	*0*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	7	0	0	0	0
Premiere Towers	0	0	0	0	0	0	0	7	0	0	0	0
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	0	0
Miami River Development SAP	0	0	1	2	0	0	0	33	0	0	0	0
Brickell Bayview Center	0	0	0	0	0	0	0	1	0	0	0	0
Brickell CitiCentre	0	0	6	8	0	0	0	125	0	0	0	0
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank		7	4		5				9			
Church of Jesus Christ LDS												
Background	0	494	107	146	364	0	206	2,128	113	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**494**	**107**	**146**	**364**	**0**	**206**	**2,128**	**113**	**0**	**0**	**0**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	0	452	87	163	516	0	174	1403	78	0	0	0
Peak Season Volume	0	452	87	163	516	0	174	1,403	78	0	0	0
	0%	84%	16%	24%	76%	0%	11%	85%	5%			
			4%	8%				69%				
Committed Trips	*0*	*16*	*23*	*28*	*9*	*0*	*9*	*264*	*16*	*0*	*0*	*0*
Brickell CitiCentre North 2	0	0	1	3	0	0	0	24	0	0	0	0
Premiere Towers	0	0	0	1	0	0	0	5	0	0	0	0
600 Brickell	0	0	1	2	0	0	0	19	0	0	0	0
The Pointe at Brickell Village	0	0	0	1	0	0	0	7	0	0	0	0
Miami River Development SAP	0	0	3	5	0	0	0	43	0	0	0	0
Brickell Bayview Center	0	0	0	0	0	0	0	4	0	0	0	0
Brickell CitiCentre	0	0	6	13	0	0	0	110	0	0	0	0
Walgreens	0	0	1	1	0	0	0	9	0	0	0	0
1101 Brickell Avenue	0	0	0	1	0	0	0	7	0	0	0	0
The Beacon	0	0	0	1	0	0	0	8	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	1	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	1	0	0	0	0
TD Bank		16	9		9				16			
Church of Jesus Christ LDS							9	26				
Background	0	503	117	204	565	0	195	1,762	99	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**503**	**117**	**204**	**565**	**0**	**195**	**1,762**	**99**	**0**	**0**	**0**

INTERSECTION ANALYSIS SHEET

SW 8th St @ SW 17th Ave

	N-S	E-W
Growth Rate =	1.07%	0.94%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	0	698	189	217	978	0	187	1523	78	0	0	0
Peak Season Volume	0	698	189	217	978	0	187	1,523	78	0	0	0
	0%	79%	21%	18%	82%	0%	10%	85%	4%			
			10%	11%				79%				
Committed Trips	*0*	*0*	*18*	*20*	*0*	*0*	*0*	*144*	*0*	*0*	*0*	*0*
Brickell CitiCentre North 2	0	0	1	1	0	0	0	6	0	0	0	0
Premiere Towers	0	0	1	1	0	0	0	5	0	0	0	0
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	0	0
Miami River Development SAP	0	0	3	4	0	0	0	26	0	0	0	0
Brickell Bayview Center	0	0	0	0	0	0	0	1	0	0	0	0
Brickell CitiCentre	0	0	12	14	0	0	0	99	0	0	0	0
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	1	1	0	0	0	7	0	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	0	752	222	254	1,054	0	200	1,770	83	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**752**	**222**	**254**	**1,054**	**0**	**200**	**1,770**	**83**	**0**	**0**	**0**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	0	602	140	194	703	0	126	1487	104	0	0	0
Peak Season Volume	0	602	140	194	703	0	126	1,487	104	0	0	0
	0%	81%	19%	22%	78%	0%	7%	87%	6%			
			7%	10%				77%				
Committed Trips	*0*	*0*	*20*	*32*	*0*	*0*	*0*	*237*	*0*	*0*	*0*	*0*
Brickell CitiCentre North 2	0	0	2	3	0	0	0	20	0	0	0	0
Premiere Towers	0	0	0	1	0	0	0	4	0	0	0	0
600 Brickell	0	0	1	2	0	0	0	15	0	0	0	0
The Pointe at Brickell Village	0	0	1	1	0	0	0	6	0	0	0	0
Miami River Development SAP	0	0	3	5	0	0	0	35	0	0	0	0
Brickell Bayview Center	0	0	0	0	0	0	0	3	0	0	0	0
Brickell CitiCentre	0	0	8	12	0	0	0	90	0	0	0	0
Walgreens	0	0	1	1	0	0	0	7	0	0	0	0
1101 Brickell Avenue	0	0	0	1	0	0	0	6	0	0	0	0
The Beacon	0	0	1	1	0	0	0	7	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	1	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	1	0	0	0	0
TD Bank	0	0	1	2	0	0	0	13	0	0	0	0
Church of Jesus Christ LDS	0	0	2	4	0	0	0	29	0	0	0	0
Background	0	649	171	241	757	0	135	1,825	111	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**649**	**171**	**241**	**757**	**0**	**135**	**1,825**	**111**	**0**	**0**	**0**

INTERSECTION ANALYSIS SHEET

SW 8th St @ SW 19th Ave

	N-S	E-W
Growth Rate =	1.07%	0.94%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	0	69	85	44	73	0	57	1835	24	0	0	0
Peak Season Volume	0	69	85	44	73	0	57	1,835	24	0	0	0
	0%	45%	55%	38%	62%	0%	3%	96%	1%			
			4%	2%				93%				
Committed Trips	*0*	*0*	*7*	*3*	*0*	*0*	*0*	*134*	*0*	*0*	*0*	*0*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	5	0	0	0	0
Premiere Towers	0	0	0	0	0	0	0	5	0	0	0	0
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	0	0
Miami River Development SAP	0	0	1	1	0	0	0	24	0	0	0	0
Brickell Bayview Center	0	0	0	0	0	0	0	1	0	0	0	0
Brickell CitiCentre	0	0	5	2	0	0	0	92	0	0	0	0
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	0	0	0	0	0	7	0	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	0	74	99	50	79	0	61	2,093	26	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**74**	**99**	**50**	**79**	**0**	**61**	**2,093**	**26**	**0**	**0**	**0**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	0	67	63	120	79	0	89	1705	24	0	0	0
Peak Season Volume	0	67	63	120	79	0	89	1,705	24	0	0	0
	0%	52%	48%	60%	40%	0%	5%	94%	1%			
			3%	6%				87%				
Committed Trips	*0*	*0*	*9*	*14*	*0*	*0*	*0*	*213*	*0*	*0*	*0*	*0*
Brickell CitiCentre North 2	0	0	1	1	0	0	0	18	0	0	0	0
Premiere Towers	0	0	0	0	0	0	0	3	0	0	0	0
600 Brickell	0	0	1	1	0	0	0	14	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	5	0	0	0	0
Miami River Development SAP	0	0	1	2	0	0	0	32	0	0	0	0
Brickell Bayview Center	0	0	0	0	0	0	0	3	0	0	0	0
Brickell CitiCentre	0	0	4	5	0	0	0	81	0	0	0	0
Walgreens	0	0	0	0	0	0	0	7	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	5	0	0	0	0
The Beacon	0	0	0	0	0	0	0	6	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	1	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	1	0	0	0	0
TD Bank	0	0	1	1	0	0	0	12	0	0	0	0
Church of Jesus Christ LDS	0	0	1	2	0	0	0	26	0	0	0	0
Background	0	72	77	143	85	0	95	2,033	26	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**72**	**77**	**143**	**85**	**0**	**95**	**2,033**	**26**	**0**	**0**	**0**

INTERSECTION ANALYSIS SHEET

SW 8th St @ SW 22nd Ave

	N-S	E-W
Growth Rate =	1.07%	0.94%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	0	817	162	130	1010	0	97	1448	74	0	0	0
Peak Season Volume	0	817	162	130	1,010	0	97	1,448	74	0	0	0
	0%	83%	17%	11%	89%	0%	6%	89%	5%			
			9%	7%				83%				
Committed Trips	*0*	*0*	*12*	*11*	*0*	*0*	*0*	*111*	*0*	*0*	*0*	*0*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	4	0	0	0	0
Premiere Towers	0	0	0	0	0	0	0	4	0	0	0	0
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	0	0
Miami River Development SAP	0	0	2	2	0	0	0	20	0	0	0	0
Brickell Bayview Center	0	0	0	0	0	0	0	1	0	0	0	0
Brickell CitiCentre	0	0	8	7	0	0	0	76	0	0	0	0
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	1	1	0	0	0	5	0	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	0	880	187	151	1,088	0	104	1,657	79	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**880**	**187**	**151**	**1,088**	**0**	**104**	**1,657**	**79**	**0**	**0**	**0**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	0	614	126	54	1099	0	139	1395	62	0	0	0
Peak Season Volume	0	614	126	54	1,099	0	139	1,395	62	0	0	0
	0%	83%	17%	5%	95%	0%	9%	87%	4%			
			7%	3%				80%				
Committed Trips	*0*	*0*	*17*	*6*	*0*	*0*	*0*	*190*	*0*	*0*	*0*	*0*
Brickell CitiCentre North 2	0	0	1	1	0	0	0	16	0	0	0	0
Premiere Towers	0	0	0	0	0	0	0	3	0	0	0	0
600 Brickell	0	0	1	0	0	0	0	12	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	5	0	0	0	0
Miami River Development SAP	0	0	3	1	0	0	0	28	0	0	0	0
Brickell Bayview Center	0	0	0	0	0	0	0	3	0	0	0	0
Brickell CitiCentre	0	0	7	2	0	0	0	72	0	0	0	0
Walgreens	0	0	1	0	0	0	0	6	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	4	0	0	0	0
The Beacon	0	0	0	0	0	0	0	5	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	1	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	1	0	0	0	0
TD Bank	0	0	1	0	0	0	0	11	0	0	0	0
Church of Jesus Christ LDS	0	0	2	1	0	0	0	23	0	0	0	0
Background	0	661	153	64	1,184	0	148	1,679	66	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**661**	**153**	**64**	**1,184**	**0**	**148**	**1,679**	**66**	**0**	**0**	**0**

INTERSECTION ANALYSIS SHEET

SW 8th St @ SW 27th Ave

	N-S	E-W
Growth Rate =	1.07%	0.94%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	182	1559	317	190	1366	94	0	1119	60	0	1102	21
Peak Season Volume	182	1,559	317	190	1,366	94	0	1,119	60	0	1,102	21
	9%	76%	15%	12%	83%	6%	0%	95%	5%	0%	98%	2%
			19%	12%				69%				
Committed Trips	*0*	*0*	*20*	*12*	*0*	*0*	*0*	*71*	*0*	*0*	*0*	*0*
Brickell CitiCentre North 2	0	0	1	0	0	0	0	3	0	0	0	0
Premiere Towers	0	0	1	0	0	0	0	3	0	0	0	0
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	0	0
Miami River Development SAP	0	0	4	2	0	0	0	13	0	0	0	0
Brickell Bayview Center	0	0	0	0	0	0	0	1	0	0	0	0
Brickell CitiCentre	0	0	13	8	0	0	0	49	0	0	0	0
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	1	1	0	0	0	4	0	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	196	1,680	362	217	1,472	101	0	1,266	64	0	1,177	22
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**196**	**1,680**	**362**	**217**	**1,472**	**101**	**0**	**1,266**	**64**	**0**	**1,177**	**22**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	180	1329	223	262	1320	136	0	885	43	0	1265	38
Peak Season Volume	180	1,329	223	262	1,320	136	0	885	43	0	1,265	38
	10%	77%	13%	15%	77%	8%	0%	95%	5%	0%	97%	3%
			14%	16%				54%				
Committed Trips	*0*	*0*	*28*	*33*	*0*	*0*	*0*	*114*	*0*	*0*	*0*	*0*
Brickell CitiCentre North 2	0	0	2	3	0	0	0	10	0	0	0	0
Premiere Towers	0	0	0	1	0	0	0	2	0	0	0	0
600 Brickell	0	0	2	2	0	0	0	7	0	0	0	0
The Pointe at Brickell Village	0	0	1	1	0	0	0	3	0	0	0	0
Miami River Development SAP	0	0	4	5	0	0	0	17	0	0	0	0
Brickell Bayview Center	0	0	0	0	0	0	0	2	0	0	0	0
Brickell CitiCentre	0	0	11	13	0	0	0	43	0	0	0	0
Walgreens	0	0	1	1	0	0	0	4	0	0	0	0
1101 Brickell Avenue	0	0	1	1	0	0	0	3	0	0	0	0
The Beacon	0	0	1	1	0	0	0	3	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	1	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	2	2	0	0	0	6	0	0	0	0
Church of Jesus Christ LDS	0	0	3	4	0	0	0	14	0	0	0	0
Background	194	1,432	268	315	1,422	147	0	1,059	46	0	1,351	41
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**194**	**1,432**	**268**	**315**	**1,422**	**147**	**0**	**1,059**	**46**	**0**	**1,351**	**41**

INTERSECTION ANALYSIS SHEET

SW 8th St @ SW 3rd Ave

	N-S	E-W
Growth Rate =	1.07%	1.90%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	0	194	233	15	327	0	32	2063	180	0	0	0
Peak Season Volume	0	194	233	15	327	0	32	2,063	180	0	0	0
	0%	45%	55%	4%	96%	0%	1%	91%	8%			
Committed Trips	*0*	*49*	*5*	*137*	*87*	*0*	*121*	*424*	*0*	*0*	*0*	*0*
Brickell CitiCentre North 2	0	0	2	0	0	0	0	21	0	0	0	0
Premiere Towers	0	0	2	0	0	0	0	21	0	0	0	0
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	0	0
Miami River Development SAP		49		136	8		121					
Brickell Bayview Center	0	0	0	0	0	0	0	4	0	0	0	0
Brickell CitiCentre					79			377				
Walgreens												
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	0	0	0	0	0	1	0	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	0	258	256	153	439	0	158	2,778	205	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**258**	**256**	**153**	**439**	**0**	**158**	**2,778**	**205**	**0**	**0**	**0**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	0	180	176	15	466	0	88	1467	64	0	0	0
Peak Season Volume	0	180	176	15	466	0	88	1,467	64	0	0	0
	0%	51%	49%	3%	97%	0%	5%	91%	4%			
Committed Trips	*0*	*69*	*32*	*234*	*299*	*0*	*199*	*635*	*0*	*0*	*0*	*0*
Brickell CitiCentre North 2	0	0	10	1	0	0	0	81	0	0	0	0
Premiere Towers	0	0	2	0	0	0	0	15	0	0	0	0
600 Brickell	0	0	8	1	0	0	0	63	0	0	0	0
The Pointe at Brickell Village	0	0	3	0	0	0	0	25	0	0	0	0
Miami River Development SAP		66		192	11		168					
Brickell Bayview Center	0	0	2	0	0	0	0	13	0	0	0	0
Brickell CitiCentre					284			369				
Walgreens		3		39	4		30					
1101 Brickell Avenue	0	0	3	0	0	0	0	22	0	0	0	0
The Beacon	0	0	3	0	0	0	0	27	0	0	0	0
Brickell Station	0	0	1	0	0	0	0	4	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	4	0	0	0	0
TD Bank	0	0	0	0	0	0	0	3	0	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	8	0	0	0	0
Background	0	263	222	250	801	0	299	2,309	73	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**263**	**222**	**250**	**801**	**0**	**299**	**2,309**	**73**	**0**	**0**	**0**

INTERSECTION ANALYSIS SHEET

SW 8th St @ SW 4th Ave

	N-S	E-W
Growth Rate =	1.07%	1.90%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	0	0	0	2456	523	0	0	1608	75	0	0	0
Peak Season Volume	0	0	0	2,456	523	0	0	1,608	75	0	0	0
	#DIV/0!	#DIV/0!	#DIV/0!	82%	18%	0%	0%	96%	4%			
			0%	60%				40%				
Committed Trips	*0*	*0*	*0*	*347*	*51*	*0*	*0*	*247*	*17*	*0*	*0*	*0*
Brickell CitiCentre North 2	0	0	0	10	0	0	0	10	1	0	0	0
Premiere Towers	0	0	0	10	0	0	0	10	1	0	0	0
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	0	0
Miami River Development SAP				144	51			47				
Brickell Bayview Center	0	0	0	2	0	0	0	2	0	0	0	0
Brickell CitiCentre	0	0	0	181	0	0	0	177	15	0	0	0
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	0	0	0	0	0	2	0	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	0	0	0	2,993	614	0	0	2,081	103	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**0**	**0**	**2,993**	**614**	**0**	**0**	**2,081**	**103**	**0**	**0**	**0**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	0	0	0	1424	627	0	0	1574	129	0	0	0
Peak Season Volume	0	0	0	1,424	627	0	0	1,574	129	0	0	0
				69%	31%	0%	0%	92%	8%			
			0%	35%				39%				
Committed Trips	*0*	*0*	*0*	*475*	*72*	*0*	*0*	*379*	*61*	*0*	*0*	*0*
Brickell CitiCentre North 2	0	0	0	34	0	0	0	37	7	0	0	0
Premiere Towers	0	0	0	6	0	0	0	7	1	0	0	0
600 Brickell	0	0	0	26	0	0	0	29	6	0	0	0
The Pointe at Brickell Village	0	0	0	10	0	0	0	11	2	0	0	0
Miami River Development SAP				201	72			66				
Brickell Bayview Center	0	0	0	6	0	0	0	6	1	0	0	0
Brickell CitiCentre	0	0	0	155	0	0	0	170	33	0	0	0
Walgreens	0	0	0	13	0	0	0	14	3	0	0	0
1101 Brickell Avenue	0	0	0	9	0	0	0	10	2	0	0	0
The Beacon	0	0	0	11	0	0	0	12	2	0	0	0
Brickell Station	0	0	0	2	0	0	0	2	0	0	0	0
888 Brickell	0	0	0	2	0	0	0	2	0	0	0	0
TD Bank	0	0	0	0	0	0	0	3	1	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	9	2	0	0	0
Background	0	0	0	2,009	747	0	0	2,175	208	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**0**	**0**	**2,009**	**747**	**0**	**0**	**2,175**	**208**	**0**	**0**	**0**

INTERSECTION ANALYSIS SHEET

SW 7th St @ SW 4th Ave/SB I-95 Off-Ramp

	N-S	E-W
Growth Rate =	1.07%	1.90%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Southwestbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	0	0	0	0	279	12	0	952	281	0	0	0	316	454	0
Peak Season Volume	0	0	0	0	279	12	0	952	281	0	0	0	316	454	0
				0%	96%	4%	0%	77%	23%				41%	59%	0%
Committed Trips	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*183*	*42*	*0*	*0*	*0*	*61*	*85*	*0*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	0	0	0	10	14	0
Premiere Towers	0	0	0	0	0	0	0	0	0	0	0	0	6	8	0
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Miami River Development SAP								183	40				12	12	
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	0	0	0	5	8	0
Brickell CitiCentre	0	0	0	0	0	0	0	0	0	0	0	0	28	41	0
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Background	0	0	0	0	301	13	0	1,209	345	0	0	0	422	603	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**0**	**0**	**0**	**301**	**13**	**0**	**1,209**	**345**	**0**	**0**	**0**	**422**	**603**	**0**

PM Peak Hour

	Northbound			Southbound			Southwestbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	0	0	0	0	177	36	0	709	478	0	0	0	259	744	0
Peak Season Volume	0	0	0	0	177	36	0	709	478	0	0	0	259	744	0
				0%	83%	17%	0%	333%	224%				26%	74%	0%
Committed Trips	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*256*	*66*	*0*	*0*	*0*	*164*	*453*	*0*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	0	0	0	17	47	0
Premiere Towers	0	0	0	0	0	0	0	0	0	0	0	0	4	12	0
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0	42	119	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	0	0	5	15	0
Miami River Development SAP								256	55				17	17	
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Brickell CitiCentre	0	0	0	0	0	0	0	0	0	0	0	0	65	184	0
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0	8	21	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0	4	12	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0	1	3	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0	2	5	0
TD Bank	0	0	0	0	0	0	0	0	6	0	0	0	0	8	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	5	0	0	0	0	8	0
Background	0	0	0	0	191	39	0	1,020	581	0	0	0	459	1,302	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**0**	**0**	**0**	**191**	**39**	**0**	**1,020**	**581**	**0**	**0**	**0**	**459**	**1,302**	**0**

INTERSECTION ANALYSIS SHEET

SW 7th St @ SW 12th Ave

	N-S	E-W
Growth Rate =	1.07%	0.94%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	147	520	0	0	380	114	0	0	0	75	752	71
Peak Season Volume	147	520	0	0	380	114	0	0	0	75	752	71
	22%	78%	0%	0%	77%	23%				8%	84%	8%
										8%	84%	8%
Committed Trips	*7*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*12*	*86*	*9*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	1	10	1
Premiere Towers	0	0	0	0	0	0	0	0	0	0	6	1
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	0	0
Miami River Development SAP	0	0	0	0	0	0	0	0	0	3	37	4
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	0	5	1
Brickell CitiCentre	0	0	0	0	0	0	0	0	0	2	29	3
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	7									5		
Church of Jesus Christ LDS												
Background	165	560	0	0	409	123	0	0	0	92	889	85
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**165**	**560**	**0**	**0**	**409**	**123**	**0**	**0**	**0**	**92**	**889**	**85**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	173	497	0	0	534	108	0	0	0	120	1389	95
Peak Season Volume	173	497	0	0	534	108	0	0	0	120	1,389	95
	26%	74%	0%	0%	83%	17%				7%	87%	6%
Committed Trips	*18*	*0*	*0*	*0*	*0*	*9*	*0*	*0*	*0*	*47*	*404*	*27*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	3	37	3
Premiere Towers	0	0	0	0	0	0	0	0	0	1	9	1
600 Brickell	0	0	0	0	0	0	0	0	0	8	94	6
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	1	11	1
Miami River Development SAP	0	0	0	0	0	0	0	0	0	5	57	4
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	0	1	0
Brickell CitiCentre	0	0	0	0	0	0	0	0	0	12	146	10
Walgreens	0	0	0	0	0	0	0	0	0	1	17	1
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	1	9	1
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	3	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	4	0
TD Bank	9									16		
Church of Jesus Christ LDS	9					9					15	
Background	204	535	0	0	575	125	0	0	0	175	1,887	128
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**204**	**535**	**0**	**0**	**575**	**125**	**0**	**0**	**0**	**175**	**1,887**	**128**

INTERSECTION ANALYSIS SHEET

SW 7th St @ Beacom Blvd

	N-S	E-W
Growth Rate =	1.07%	0.94%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	165	248	0	0	297	367	0	0	0	430	515	0
Peak Season Volume	165	248	0	0	297	367	0	0	0	430	515	0
	40%	60%	0%	0%	45%	55%				46%	54%	0%
Committed Trips	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*27*	*23*	*0*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	3	2	0
Premiere Towers	0	0	0	0	0	0	0	0	0	2	1	0
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	0	0
Miami River Development SAP	0	0	0	0	0	0	0	0	0	11	9	0
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	2	1	0
Brickell CitiCentre	0	0	0	0	0	0	0	0	0	8	7	0
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	0	0	0	0	0	0	0	2	2	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	178	267	0	0	320	395	0	0	0	486	573	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**178**	**267**	**0**	**0**	**320**	**395**	**0**	**0**	**0**	**486**	**573**	**0**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	126	221	0	0	319	302	0	0	0	591	600	0
Peak Season Volume	126	221	0	0	319	302	0	0	0	591	600	0
										50%	50%	0%
Committed Trips	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*226*	*118*	*0*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	24	10	0
Premiere Towers	0	0	0	0	0	0	0	0	0	6	3	0
600 Brickell	0	0	0	0	0	0	0	0	0	59	26	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	7	3	0
Miami River Development SAP	0	0	0	0	0	0	0	0	0	9	16	0
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	1	0	0
Brickell CitiCentre	0	0	0	0	0	0	0	0	0	92	40	0
Walgreens	0	0	0	0	0	0	0	0	0	11	5	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	6	3	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	2	1	0
888 Brickell	0	0	0	0	0	0	0	0	0	2	1	0
TD Bank	0	0	0	0	0	0	0	0	0	4	2	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	4	9	0
Background	136	238	0	0	344	325	0	0	0	857	759	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**136**	**238**	**0**	**0**	**344**	**325**	**0**	**0**	**0**	**857**	**759**	**0**

INTERSECTION ANALYSIS SHEET

SW 7th St @ SW 17th Ave

	N-S	E-W
Growth Rate =	1.07%	0.94%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	96	661	0	0	922	118	0	0	0	122	808	129
Peak Season Volume	96	661	0	0	922	118	0	0	0	122	808	129
	13%	87%	0%	0%	89%	11%				12%	76%	12%
										12%	76%	12%
Committed Trips	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*11*	*68*	*11*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	1	7	1
Premiere Towers	0	0	0	0	0	0	0	0	0	1	4	1
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	0	0
Miami River Development SAP	0	0	0	0	0	0	0	0	0	4	27	4
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	1	4	1
Brickell CitiCentre	0	0	0	0	0	0	0	0	0	3	21	3
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	0	0	0	0	0	0	0	1	5	1
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	103	712	0	0	993	127	0	0	0	141	931	149
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**103**	**712**	**0**	**0**	**993**	**127**	**0**	**0**	**0**	**141**	**931**	**149**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	109	589	0	0	869	157	0	0	0	161	1237	97
Peak Season Volume	109	589	0	0	869	157	0	0	0	161	1,237	97
	16%	84%	0%	0%	85%	15%				11%	83%	6%
Committed Trips	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*46*	*343*	*25*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	4	30	2
Premiere Towers	0	0	0	0	0	0	0	0	0	1	7	1
600 Brickell	0	0	0	0	0	0	0	0	0	10	75	5
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	1	9	1
Miami River Development SAP	0	0	0	0	0	0	0	0	0	6	45	3
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	0	1	0
Brickell CitiCentre	0	0	0	0	0	0	0	0	0	15	116	8
Walgreens	0	0	0	0	0	0	0	0	0	2	14	1
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	1	7	1
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	2	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	3	0
TD Bank	0	0	0	0	0	0	0	0	0	1	7	1
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	3	26	2
Background	117	635	0	0	936	169	0	0	0	218	1,664	129
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**117**	**635**	**0**	**0**	**936**	**169**	**0**	**0**	**0**	**218**	**1,664**	**129**

INTERSECTION ANALYSIS SHEET

SW 7th St @ SW 19th Ave

	N-S	E-W
Growth Rate =	1.07%	0.94%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	55	52	0	0	105	47	0	0	0	46	858	16
Peak Season Volume	55	52	0	0	105	47	0	0	0	46	858	16
	51%	49%	0%	0%	69%	31%				5%	93%	2%
										5%	93%	2%
Committed Trips	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*3*	*63*	*1*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	0	7	0
Premiere Towers	0	0	0	0	0	0	0	0	0	0	4	0
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	0	0
Miami River Development SAP	0	0	0	0	0	0	0	0	0	1	25	1
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	0	4	0
Brickell CitiCentre	0	0	0	0	0	0	0	0	0	1	19	0
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	0	0	0	0	0	0	0	0	5	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	59	56	0	0	113	51	0	0	0	52	979	18
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**59**	**56**	**0**	**0**	**113**	**51**	**0**	**0**	**0**	**52**	**979**	**18**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	64	59	0	0	92	43	0	0	0	78	1222	34
Peak Season Volume	64	59	0	0	92	43	0	0	0	78	1,222	34
	52%	48%	0%	0%	68%	32%				6%	92%	3%
Committed Trips	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*21*	*316*	*7*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	2	27	1
Premiere Towers	0	0	0	0	0	0	0	0	0	0	7	0
600 Brickell	0	0	0	0	0	0	0	0	0	4	69	1
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	1	8	0
Miami River Development SAP	0	0	0	0	0	0	0	0	0	3	42	1
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	0	1	0
Brickell CitiCentre	0	0	0	0	0	0	0	0	0	7	107	2
Walgreens	0	0	0	0	0	0	0	0	0	1	12	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	7	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	2	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	3	0
TD Bank	0	0	0	0	0	0	0	0	0	0	7	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	2	24	1
Background	69	64	0	0	99	46	0	0	0	104	1,621	43
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**69**	**64**	**0**	**0**	**99**	**46**	**0**	**0**	**0**	**104**	**1,621**	**43**

INTERSECTION ANALYSIS SHEET

SW 7th St @ SW 22nd Ave

	N-S	E-W
Growth Rate =	1.07%	0.94%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	83	769	0	0	703	65	0	0	0	128	850	78
Peak Season Volume	83	769	0	0	703	65	0	0	0	128	850	78
	10%	90%	0%	0%	92%	8%				12%	80%	7%
										12%	80%	7%
Committed Trips	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*8*	*51*	*4*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	1	5	0
Premiere Towers	0	0	0	0	0	0	0	0	0	0	3	0
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	0	0
Miami River Development SAP	0	0	0	0	0	0	0	0	0	3	20	2
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	0	3	0
Brickell CitiCentre	0	0	0	0	0	0	0	0	0	3	16	1
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	0	0	0	0	0	0	0	1	4	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	89	828	0	0	757	70	0	0	0	145	959	87
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**89**	**828**	**0**	**0**	**757**	**70**	**0**	**0**	**0**	**145**	**959**	**87**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	95	724	0	0	781	75	0	0	0	215	1095	152
Peak Season Volume	95	724	0	0	781	75	0	0	0	215	1,095	152
	12%	88%	0%	0%	91%	9%				15%	75%	10%
Committed Trips	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*47*	*237*	*32*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	4	21	3
Premiere Towers	0	0	0	0	0	0	0	0	0	1	5	1
600 Brickell	0	0	0	0	0	0	0	0	0	10	52	7
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	1	6	1
Miami River Development SAP	0	0	0	0	0	0	0	0	0	6	31	4
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	0	1	0
Brickell CitiCentre	0	0	0	0	0	0	0	0	0	16	80	11
Walgreens	0	0	0	0	0	0	0	0	0	2	9	1
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	1	5	1
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	2	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	2	0
TD Bank	0	0	0	0	0	0	0	0	0	1	5	1
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	4	18	2
Background	102	780	0	0	841	81	0	0	0	277	1,406	194
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**102**	**780**	**0**	**0**	**841**	**81**	**0**	**0**	**0**	**277**	**1,406**	**194**

INTERSECTION ANALYSIS SHEET

SW 7th St @ SW 27th Ave

	N-S	E-W
Growth Rate =	1.07%	0.94%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	0	1281	0	0	1966	31	137	0	41	192	99	214
Peak Season Volume	0	1,281	0	0	1,966	31	137	0	41	192	99	214
	0%	100%	0%	0%	98%	2%	77%	0%	23%	38%	20%	42%
										38%	20%	42%
Committed Trips	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*9*	*5*	*10*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	1	0	1
Premiere Towers	0	0	0	0	0	0	0	0	0	1	0	1
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	0	0
Miami River Development SAP	0	0	0	0	0	0	0	0	0	3	2	4
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	1	0	1
Brickell CitiCentre	0	0	0	0	0	0	0	0	0	3	1	3
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	0	0	0	0	0	0	0	1	0	1
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	0	1,380	0	0	2,118	33	146	0	44	214	111	238
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**1,380**	**0**	**0**	**2,118**	**33**	**146**	**0**	**44**	**214**	**111**	**238**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	0	1272	0	0	1218	23	113	0	21	213	346	268
Peak Season Volume	0	1,272	0	0	1,218	23	113	0	21	213	346	268
	0%	100%	0%	0%	98%	2%	84%	0%	16%	26%	42%	32%
Committed Trips	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*31*	*50*	*38*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	3	4	3
Premiere Towers	0	0	0	0	0	0	0	0	0	1	1	1
600 Brickell	0	0	0	0	0	0	0	0	0	7	11	8
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	1	1	1
Miami River Development SAP	0	0	0	0	0	0	0	0	0	4	7	5
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	0	0	0
Brickell CitiCentre	0	0	0	0	0	0	0	0	0	10	17	13
Walgreens	0	0	0	0	0	0	0	0	0	1	2	1
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	1	1	1
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	0	0	0	0	0	0	0	1	1	1
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	2	4	3
Background	0	1,370	0	0	1,312	25	121	0	22	258	419	324
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**1,370**	**0**	**0**	**1,312**	**25**	**121**	**0**	**22**	**258**	**419**	**324**

2013 Node: 4130

INTERSECTION ANALYSIS SHEET

SW 7th St @ Brickell Ave

	N-S	E-W
Growth Rate =	0.88%	1.88%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	369	1308	256	205	1149	166	0	0	0	4	40	44
Peak Season Volume	369	1,308	256	205	1,149	166	0	0	0	4	40	44
	19%	68%	13%	13%	76%	11%				5%	45%	50%
Committed Trips	*78*	*39*	*0*	*0*	*23*	*126*	*0*	*0*	*0*	*0*	*2*	*0*
Brickell CitiCentre North 2		3			4	13						
Premiere Towers		8			9							
600 Brickell												
The Pointe at Brickell Village												
Miami River Development SAP	25	0	0	0	0	10	0	0	0	0	2	0
Brickell Bayview Center	3	8				2						
Brickell CitiCentre	50	20			10	100						
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue												
The Beacon												
Brickell Station												
888 Brickell												
TD Bank	0	0	0	0	0	0	0	0	0	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	470	1,430	272	218	1,245	302	0	0	0	5	48	50
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**470**	**1,430**	**272**	**218**	**1,245**	**302**	**0**	**0**	**0**	**5**	**48**	**50**

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PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	518	1195	11	23	1277	366	0	0	0	67	231	100
Peak Season Volume	518	1,195	11	23	1,277	366	0	0	0	67	231	100
	30%	69%	1%	1%	77%	22%				17%	58%	25%
Committed Trips	*110*	*97*	*0*	*0*	*226*	*134*	*0*	*0*	*0*	*0*	*15*	*0*
Brickell CitiCentre North 2		10			9	70						
Premiere Towers		9			7							
600 Brickell	48	10			117	10						
The Pointe at Brickell Village		6			6							
Miami River Development SAP	27	0	0	0	0	19	0	0	0	0	12	0
Brickell Bayview Center	2	2				5						
Brickell CitiCentre												
Walgreens	4	0	0	0	0	3	0	0	0	0	2	0
1101 Brickell Avenue	11	26			70	20						
The Beacon	1											
Brickell Station	7	15			8	2						
888 Brickell	8	19			9	3						
TD Bank	1	0	0	0	0	1	0	0	0	0	1	0
Church of Jesus Christ LDS	1	0	0	0	0	1	0	0	0	0	1	0
Background	661	1,368	12	24	1,584	523	0	0	0	76	278	114
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**661**	**1,368**	**12**	**24**	**1,584**	**523**	**0**	**0**	**0**	**76**	**278**	**114**

2013 Node: 4130

INTERSECTION ANALYSIS SHEET

SW 7th St @ Miami Ave

	N-S	E-W
Growth Rate =	1.07%	1.90%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	283	531	0	0	0	0	0	0	0	0	660	74
Peak Season Volume	283	531	0	0	0	0	0	0	0	0	660	74
	35%	65%	0%							0%	90%	10%
Committed Trips	*71*	*146*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*203*	*125*
Brickell CitiCentre North 2		38									13	
Premiere Towers		56									25	
600 Brickell												
The Pointe at Brickell Village												
Miami River Development SAP	16	0	0	0	0	0	0	0	0	0	37	0
Brickell Bayview Center	30	19									5	
Brickell CitiCentre	25	33									122	125
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue												
The Beacon												
Brickell Station												
888 Brickell												
TD Bank	0	0	0	0	0	0	0	0	0	0	1	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	376	718	0	0	0	0	0	0	0	0	956	209
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**376**	**718**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**956**	**209**

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PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	422	509	0	0	0	0	0	0	0	0	1011	113
Peak Season Volume	422	509	0	0	0	0	0	0	0	0	1,011	113
	45%	55%	0%							0%	90%	10%
Committed Trips	*295*	*545*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*779*	*321*
Brickell CitiCentre North 2		156									70	
Premiere Towers		60									26	
600 Brickell		76									95	
The Pointe at Brickell Village	28	30										
Miami River Development SAP	24	0	0	0	0	0	0	0	0	0	58	0
Brickell Bayview Center	8	4									7	
Brickell CitiCentre	230	219									456	321
Walgreens	3	0	0	0	0	0	0	0	0	0	8	0
1101 Brickell Avenue											31	
The Beacon											1	
Brickell Station											9	
888 Brickell											12	
TD Bank	1	0	0	0	0	0	0	0	0	0	3	0
Church of Jesus Christ LDS	1	0	0	0	0	0	0	0	0	0	3	0
Background	750	1,093	0	0	0	0	0	0	0	0	1,932	450
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**750**	**1,093**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,932**	**450**

INTERSECTION ANALYSIS SHEET

SW 7th St @ SW 3rd Ave

	N-S	E-W
Growth Rate =	1.07%	1.90%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	94	72	0	0	0	0	0	0	0	224	762	81
Peak Season Volume	94	72	0	0	0	0	0	0	0	224	762	81
	57%	43%	0%							21%	71%	8%
Committed Trips	*0*	*170*	*0*	*0*	*144*	*24*	*0*	*0*	*0*	*94*	*121*	*98*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	7	24	3
Premiere Towers	0	0	0	0	0	0	0	0	0	4	13	2
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	0	0
Miami River Development SAP		170			144	24						92
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	4	13	1
Brickell CitiCentre										79	69	
Walgreens												
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	0	0	0	0	0	0	0	0	2	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	101	248	0	0	144	24	0	0	0	350	990	190
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**101**	**248**	**0**	**0**	**144**	**24**	**0**	**0**	**0**	**350**	**990**	**190**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	122	156	0	0	0	0	0	0	0	266	992	164
Peak Season Volume	122	156	0	0	0	0	0	0	0	266	992	164
	44%	56%	0%							19%	70%	12%
Committed Trips	*9*	*238*	*0*	*0*	*203*	*34*	*0*	*0*	*0*	*358*	*574*	*177*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	16	64	11
Premiere Towers	0	0	0	0	0	0	0	0	0	4	16	3
600 Brickell	0	0	0	0	0	0	0	0	0	41	160	27
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	5	20	3
Miami River Development SAP		234			203	34						127
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	0	2	0
Brickell CitiCentre										284	249	
Walgreens	7	4									22	
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	4	16	3
The Beacon	0	0	0	0	0	0	0	0	0	0	1	0
Brickell Station	0	0	0	0	0	0	0	0	0	1	5	1
888 Brickell	0	0	0	0	0	0	0	0	0	2	6	1
TD Bank	1	0	0	0	0	0	0	0	0	0	7	0
Church of Jesus Christ LDS	1	0	0	0	0	0	0	0	0	0	7	0
Background	140	406	0	0	203	34	0	0	0	661	1,706	364
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**140**	**406**	**0**	**0**	**203**	**34**	**0**	**0**	**0**	**661**	**1,706**	**364**

INTERSECTION ANALYSIS SHEET

SW 7th St @ SW 16th Ave

	N-S	E-W
Growth Rate =	1.07%	0.94%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	0	0	0	0	36	17	0	0	0	42	911	0
Peak Season Volume	0	0	0	0	36	17	0	0	0	42	911	0
				0%	68%	32%				4%	96%	0%
										4%	96%	0%
Committed Trips	0	0	0	0	0	0	0	0	0	0	*90*	*0*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	0	9	0
Premiere Towers	0	0	0	0	0	0	0	0	0	0	5	0
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	0	0
Miami River Development SAP	0	0	0	0	0	0	0	0	0	1	35	0
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	0	5	0
Brickell CitiCentre	0	0	0	0	0	0	0	0	0	1	28	0
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	0	0	0	0	0	0	0	0	7	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	0	0	0	0	39	18	0	0	0	45	1,063	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**0**	**0**	**0**	**39**	**18**	**0**	**0**	**0**	**45**	**1,063**	**0**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Base Year (2013) Volume	0	0	0	0	40	24	0	0	0	66	1459	0
Peak Season Volume	0	0	0	0	40	24	0	0	0	66	1,459	0
				0%	63%	38%				4%	96%	0%
Committed Trips	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*17*	*414*	*0*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	0	0	1	36	0
Premiere Towers	0	0	0	0	0	0	0	0	0	0	9	0
600 Brickell	0	0	0	0	0	0	0	0	0	4	90	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	11	0
Miami River Development SAP	0	0	0	0	0	0	0	0	0	2	55	0
Brickell Bayview Center	0	0	0	0	0	0	0	0	0	0	1	0
Brickell CitiCentre	0	0	0	0	0	0	0	0	0	6	140	0
Walgreens	0	0	0	0	0	0	0	0	0	1	16	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	9	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	3	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	3	0
TD Bank	0	0	0	0	0	0	0	0	0	0	9	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	1	32	0
Background	0	0	0	0	43	26	0	0	0	87	1,972	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**0**	**0**	**0**	**43**	**26**	**0**	**0**	**0**	**87**	**1,972**	**0**

INTERSECTION ANALYSIS SHEET

SW 8th St @ SW 5th Ave

	N-S	E-W
Growth Rate =	1.07%	0.94%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	0	85	204	0	0	0	121	1593	16	0	0	0
Peak Season Volume	0	85	204	0	0	0	121	1,593	16	0	0	0
	0%	29%	71%				7%	92%	1%			
			11%	0%				89%				
Committed Trips	*0*	*0*	*27*	*0*	*0*	*0*	*0*	*222*	*0*	*0*	*0*	*0*
Brickell CitiCentre North 2	0	0	1	0	0	0	0	9	0	0	0	0
Premiere Towers	0	0	1	0	0	0	0	9	0	0	0	0
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	0	0
Miami River Development SAP	0	0	5	0	0	0	0	42	0	0	0	0
Brickell Bayview Center	0	0	0	0	0	0	0	2	0	0	0	0
Brickell CitiCentre	0	0	19	0	0	0	0	158	0	0	0	0
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	0	0	0	0	0	3	0	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	0	92	247	0	0	0	129	1,923	17	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**92**	**247**	**0**	**0**	**0**	**129**	**1,923**	**17**	**0**	**0**	**0**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	0	133	304	0	0	0	166	1494	66	0	0	0
Peak Season Volume	0	133	304	0	0	0	166	1,494	66	0	0	0
	0%	30%	70%				10%	87%	4%			
			17%	0%				83%				
Committed Trips	0	0	0	0	0	0	0	*331*	0	0	0	0
Brickell CitiCentre North 2	0	0	6	0	0	0	0	31	0	0	0	0
Premiere Towers	0	0	1	0	0	0	0	6	0	0	0	0
600 Brickell	0	0	5	0	0	0	0	24	0	0	0	0
The Pointe at Brickell Village	0	0	2	0	0	0	0	9	0	0	0	0
Miami River Development SAP	0	0	11	0	0	0	0	55	0	0	0	0
Brickell Bayview Center	0	0	1	0	0	0	0	5	0	0	0	0
Brickell CitiCentre	0	0	29	0	0	0	0	141	0	0	0	0
Walgreens	0	0	2	0	0	0	0	11	0	0	0	0
1101 Brickell Avenue	0	0	2	0	0	0	0	9	0	0	0	0
The Beacon	0	0	2	0	0	0	0	10	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	2	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	1	0	0	0	0
TD Bank	0	0	0	0	0	0	1	7	0	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	2	20	1	0	0	0
Background	0	143	328	0	0	0	177	1,926	70	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**143**	**328**	**0**	**0**	**0**	**177**	**1,926**	**70**	**0**	**0**	**0**

INTERSECTION ANALYSIS SHEET

SW 8th St @ SW 24th Ave

	N-S	E-W
Growth Rate =	1.07%	0.94%
Peak Season =	1.00	
Buildout Year =	2020	
Years =	7	

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	0	49	67	37	57	0	49	1378	37	0	0	0
Peak Season Volume	0	49	67	37	57	0	49	1,378	37	0	0	0
	0%	42%	58%	39%	61%	0%	3%	94%	3%			
			5%	2%				93%				
Committed Trips	*0*	*0*	*6*	*2*	*0*	*0*	*0*	*103*	*0*	*0*	*0*	*0*
Brickell CitiCentre North 2	0	0	0	0	0	0	0	4	0	0	0	0
Premiere Towers	0	0	0	0	0	0	0	4	0	0	0	0
600 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	0	0	0	0	0
Miami River Development SAP	0	0	1	0	0	0	0	19	0	0	0	0
Brickell Bayview Center	0	0	0	0	0	0	0	1	0	0	0	0
Brickell CitiCentre	0	0	4	2	0	0	0	71	0	0	0	0
Walgreens	0	0	0	0	0	0	0	0	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	0	0	0	0	0
The Beacon	0	0	0	0	0	0	0	0	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	0	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	0	0	0	0	0
TD Bank	0	0	0	0	0	0	0	5	0	0	0	0
Church of Jesus Christ LDS	0	0	0	0	0	0	0	0	0	0	0	0
Background	0	53	78	42	61	0	52	1,574	40	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**53**	**78**	**42**	**61**	**0**	**52**	**1,574**	**40**	**0**	**0**	**0**

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**	**LT**	**Thru**	**RT**
Base Year (2013) Volume	0	47	50	59	88	0	49	1342	32	0	0	0
Peak Season Volume	0	47	50	59	88	0	49	1,342	32	0	0	0
	0%	48%	52%	40%	60%	0%	3%	94%	2%			
			3%	4%				91%				
Committed Trips	0	0	0	0	0	0	0	*175*	0	0	0	0
Brickell CitiCentre North 2	0	0	0	1	0	0	0	15	0	0	0	0
Premiere Towers	0	0	0	0	0	0	0	3	0	0	0	0
600 Brickell	0	0	0	1	0	0	0	11	0	0	0	0
The Pointe at Brickell Village	0	0	0	0	0	0	0	4	0	0	0	0
Miami River Development SAP	0	0	1	1	0	0	0	26	0	0	0	0
Brickell Bayview Center	0	0	0	0	0	0	0	2	0	0	0	0
Brickell CitiCentre	0	0	2	4	0	0	0	67	0	0	0	0
Walgreens	0	0	0	0	0	0	0	5	0	0	0	0
1101 Brickell Avenue	0	0	0	0	0	0	0	4	0	0	0	0
The Beacon	0	0	0	0	0	0	0	5	0	0	0	0
Brickell Station	0	0	0	0	0	0	0	1	0	0	0	0
888 Brickell	0	0	0	0	0	0	0	1	0	0	0	0
TD Bank	0	0	0	1	0	0	0	10	0	0	0	0
Church of Jesus Christ LDS	0	0	1	1	0	0	0	21	0	0	0	0
Background	0	51	54	64	95	0	52	1,608	34	0	0	0
% Diverted Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Diverted Traffic Volume	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**51**	**54**	**64**	**95**	**0**	**52**	**1,608**	**34**	**0**	**0**	**0**

Appendix C

PART 3: TMTOOL

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD-FORCED AND BALANCED
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	WB SW 8 St. at SR 9		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	46,590	40,760	40,230	38,440
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**0.9%**	**CGR**	**1.0%**	**CGR**	**0.9%**	**CGR**	**1.0%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
				1		**1**		**1**		**1**
		2013		46,590		40,760		40,230		38,440
NO. YEARS	7	2020	1.063	49,500	1.074	43,800	1.063	43,000	1.074	41,300
NO. YEARS	17	2030	1.161	54,000	1.190	48,500	1.161	46,500	1.190	45,800
NO. YEARS	27	2040	1.267	59,000	1.319	53,800	1.267	51,000	1.319	50,700

Percent Turns Calculated From Base Year AADTs:

JKTURNS	FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	46,590			40,760			40,230			38,440		
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
38,440	40,230	40,760	46,590	38,440	40,230	40,760	46,590	38,440	40,230	40,760	46,590
32%	34%	34%	37%	31%	32%	32%	37%	31%	32%	32%	37%
2020 2-WAY ADT	49,500			43,800			43,000			41,300	
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
41,300	43,000	43,800	49,500	41,300	43,000	43,800	49,500	41,300	43,000	43,800	49,500
32%	34%	34%	37%	31%	32%	33%	37%	31%	32%	32%	36%
2030 2-WAY ADT	54,000			48,500			46,500			45,800	
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
45,800	46,500	48,500	54,000	45,800	46,500	48,500	54,000	45,800	46,500	48,500	54,000
33%	33%	34%	37%	31%	32%	33%	36%	31%	31%	33%	36%
2040 2-WAY ADT	59,000			53,800			51,000			50,700	
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
50,700	51,000	53,800	59,000	50,700	51,000	53,800	59,000	50,700	51,000	53,800	59,000
33%	33%	35%	37%	32%	32%	33%	36%	31%	31%	33%	36%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	3,629			506			3,482			309			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	31	1,966	0	214	99	192	1	1,281	1	41	0	137	3,963
% TURNS:	2%	98%	0%	42%	20%	38%	0%	100%	0%	23%	0%	77%	
P.M.	2-Way Pk Hr Vol:	2,894			828			2,726			504			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	23	1,218	0	268	346	213	1	1,272	1	21	0	113	3,476
% TURNS:	2%	98%	0%	32%	42%	26%	0%	100%	0%	16%	0%	84%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	2%	98%	0%	42%	20%	38%	0%	100%	0%	23%	0%	77%
	2020	5%	92%	3%	42%	21%	37%	3%	94%	3%	24%	3%	73%
	2030	5%	90%	4%	42%	21%	37%	4%	92%	4%	24%	4%	72%
	2040	7%	88%	6%	41%	22%	37%	6%	89%	5%	24%	5%	70%
P.M.													
	2013	2%	98%	0%	32%	42%	26%	0%	100%	0%	16%	0%	84%
	2020	5%	92%	3%	33%	41%	26%	3%	94%	3%	17%	3%	80%
	2030	6%	90%	4%	33%	41%	27%	4%	92%	4%	18%	4%	78%
	2040	7%	87%	6%	33%	40%	27%	6%	89%	5%	18%	5%	76%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: WB SW 8 St. at SR 9
PREPARED BY: NC
FILE: BUILD-FORCED AND BALANCED

DATE: 12/30/2014
NOTES:

0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	46,590	40,760	40,230	38,440
24 HR EST. AADT	2020	49,500	43,800	43,000	41,300
24 HR EST. AADT	2030	54,000	48,500	46,500	45,800
24 HR EST. AADT	2040	59,000	53,800	51,000	50,700

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	55.0%	42.9%	58.9%	41.1%	36.8%	46.7%	41.1%	58.9%
2020	Approach D30 Factor	55.0%	42.9%	58.9%	41.1%	36.8%	46.7%	41.1%	58.9%
2030	Approach D30 Factor	55.0%	42.9%	58.9%	41.1%	36.8%	46.7%	41.1%	58.9%
2040	Approach D30 Factor	55.0%	42.9%	58.9%	41.1%	36.8%	46.7%	41.1%	58.9%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	100	2,000	0	180	430	150	0	1,490	200	60	0	890
2030	EST. TURNS												
2040	EST. TURNS	130	2,380	0	230	630	180	0	1780	230	80	0	1,090
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	150	1,430	0	260	1080	180	0	1340	190	50	0	1,060
2030	EST. TURNS												
2040	EST. TURNS	180	1,700	0	320	1360	220	0	1610	240	60	0	1,310

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		2307	1883	4190	2161	1509	3670	1334	2286	3620	1422	2038	3460
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		2452	2008	4460	2322	1618	3940	1426	2444	3870	1528	2192	3720
2020	TURN SUMMARY	2100	2560	4660	760	0	760	1690	2210	3900	950	730	1680
CONTROL LINK VOLUMES		2674	2186	4860	2571	1799	4370	1542	2648	4190	1694	2426	4120
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		2922	2388	5310	2852	1988	4840	1691	2899	4590	1875	2685	4560
2040	TURN SUMMARY	2510	3100	5610	1040	0	1040	2010	2640	4650	1170	990	2160
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		1798	2392	4190	1508	2162	3670	1692	1928	3620	2038	1422	3460
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		1910	2550	4460	1620	2320	3940	1809	2061	3870	2189	1531	3720
2020	TURN SUMMARY	1580	2660	4240	1520	0	1520	1530	1660	3190	1110	1420	2530
CONTROL LINK VOLUMES		2084	2776	4860	1794	2576	4370	1956	2234	4190	2428	1692	4120
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		2277	3033	5310	1990	2850	4840	2145	2445	4590	2688	1872	4560
2040	TURN SUMMARY	1880	3240	5120	1900	0	1900	1850	1980	3830	1370	1780	3150

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD-FORCED AND BALANCED
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	WB SW 8 St. at SW 24 Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	1,410	14,860	1,410	14,860
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**0.9%**	**CGR**	**1.0%**	**CGR**	**0.9%**	**CGR**	**1.0%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

			NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
			1		**1**		**1**		**1**	
		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
		2013		1,410		14,860		1,410		14,860
NO. YEARS	7	2020	1.063	1,500	1.074	16,000	1.063	1,500	1.074	16,000
NO. YEARS	17	2030	1.161	1,500	1.190	17,700	1.161	1,500	1.190	17,700
NO. YEARS	27	2040	1.267	2,000	1.319	19,600	1.267	2,000	1.319	19,600

Percent Turns Calculated From Base Year AADTs:

JKTURNS		FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013	2-WAY ADT	1,410			14,860			1,410			14,860		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	14,860	1,410	14,860	1,410	14,860	1,410	14,860	1,410	14,860	1,410	14,860	1,410
	48%	5%	48%	8%	84%	8%	48%	5%	48%	8%	84%	8%
2020	2-WAY ADT	1,500			16,000			1,500			16,000		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	16,000	1,500	16,000	1,500	16,000	1,500	16,000	1,500	16,000	1,500	16,000	1,500
	48%	4%	48%	8%	84%	8%	48%	4%	48%	8%	84%	8%
2030	2-WAY ADT	1,500			17,700			1,500			17,700		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	17,700	1,500	17,700	1,500	17,700	1,500	17,700	1,500	17,700	1,500	17,700	1,500
	48%	4%	48%	7%	86%	7%	48%	4%	48%	7%	86%	7%
2040	2-WAY ADT	2,000			19,600			2,000			19,600		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	19,600	2,000	19,600	2,000	19,600	2,000	19,600	2,000	19,600	2,000	19,600	2,000
	48%	5%	48%	8%	83%	8%	48%	5%	48%	8%	83%	8%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	1,616			1,057			1,684			1,001			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	65	703	0	78	850	128	0	769	83	1	1	1	2,679
% TURNS:	8%	92%	0%	7%	80%	12%	0%	90%	10%	33%	33%	33%	
P.M.	2-Way Pk Hr Vol:	1,733			1,463			1,816			1,268			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	75	781	0	152	1,095	215	0	724	95	1	1	1	3,140
% TURNS:	9%	91%	0%	10%	75%	15%	0%	88%	12%	33%	33%	33%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	8%	92%	0%	7%	80%	12%	0%	90%	10%	33%	33%	33%
	2020	12%	83%	5%	7%	81%	12%	5%	82%	14%	31%	38%	31%
	2030	13%	81%	6%	7%	81%	12%	6%	79%	15%	30%	40%	30%
	2040	15%	77%	8%	8%	81%	12%	8%	76%	16%	29%	42%	29%
P.M.													
	2013	9%	91%	0%	10%	75%	15%	0%	88%	12%	33%	33%	33%
	2020	13%	83%	5%	10%	76%	14%	5%	80%	15%	31%	38%	31%
	2030	14%	80%	6%	10%	76%	14%	6%	78%	16%	30%	40%	30%
	2040	15%	77%	8%	10%	76%	14%	8%	74%	18%	29%	42%	29%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: WB SW 8 St. at SW 24 Ave.
PREPARED BY: NC
FILE: BUILD-FORCED AND BALANCED

DATE: 12/30/2014
NOTES:

0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	1,410	14,860	1,410	14,860
24 HR EST. AADT	2020	1,500	16,000	1,500	16,000
24 HR EST. AADT	2030	1,500	17,700	1,500	17,700
24 HR EST. AADT	2040	2,000	19,600	2,000	19,600

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	47.5%	49.4%	99.9%	99.9%	50.6%	45.1%	0.1%	0.1%
2020	Approach D30 Factor	47.5%	49.4%	99.9%	99.9%	50.6%	45.1%	0.1%	0.1%
2030	Approach D30 Factor	47.5%	49.4%	99.9%	99.9%	50.6%	45.1%	0.1%	0.1%
2040	Approach D30 Factor	47.5%	49.4%	99.9%	99.9%	50.6%	45.1%	0.1%	0.1%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	30	50	0	30	630	30	0	40	40	0	0	0
2030	EST. TURNS												
2040	EST. TURNS	40	70	0	40	920	40	0	50	50	0	0	0
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	50	100	0	40	1300	30	0	50	40	0	0	0
2030	EST. TURNS												
2040	EST. TURNS	60	110	0	50	1650	30	0	60	0	0	0	0

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		60	70	130	1336	4	1340	64	66	130	1	1339	1340
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		64	76	140	1439	1	1440	68	72	140	1	1439	1440
2020	TURN SUMMARY	80	70	150	690	0	690	80	80	160	0	700	700
CONTROL LINK VOLUMES		64	76	140	1591	-1	1590	68	72	140	2	1588	1590
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		86	94	180	1762	-2	1760	91	89	180	2	1758	1760
2040	TURN SUMMARY	110	90	200	1000	0	1000	100	110	210	0	1010	1010
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		63	67	130	1336	4	1340	57	73	130	1	1339	1340
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		67	73	140	1439	1	1440	61	79	140	1	1439	1440
2020	TURN SUMMARY	150	90	240	1370	0	1370	90	130	220	0	1390	1390
CONTROL LINK VOLUMES		67	73	140	1592	-2	1590	61	79	140	2	1588	1590
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		89	91	180	1763	-3	1760	81	99	180	2	1758	1760
2040	TURN SUMMARY	170	110	280	1730	0	1730	60	140	200	0	1710	1710

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD-FORCED AND BALANCED
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	WB SW 8 St. at SW 22 Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	28,970	17,360	35,850	14,860
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**0.9%**	**CGR**	**1.0%**	**CGR**	**0.9%**	**CGR**	**1.0%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
		2013		28,970		17,360		35,850		14,860
NO. YEARS	7	2020	1.063	31,000	1.074	18,700	1.063	38,000	1.074	16,000
NO. YEARS	17	2030	1.161	33,500	1.190	20,700	1.161	41,500	1.190	17,700
NO. YEARS	27	2040	1.267	36,500	1.319	22,900	1.267	45,500	1.319	19,600

Percent Turns Calculated From Base Year AADTs:

JKTURNS	FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	28,970			17,360			35,850			14,860		
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
14,860	35,850	17,360	28,970	14,860	35,850	17,360	28,970	14,860	35,850	17,360	28,970
22%	53%	26%	36%	19%	45%	28%	47%	24%	44%	21%	35%
2020 2-WAY ADT	31,000			18,700			38,000			16,000	
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
16,000	38,000	18,700	31,000	16,000	38,000	18,700	31,000	16,000	38,000	18,700	31,000
22%	52%	26%	36%	19%	45%	28%	47%	24%	43%	21%	35%
2030 2-WAY ADT	33,500			20,700			41,500			17,700	
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
17,700	41,500	20,700	33,500	17,700	41,500	20,700	33,500	17,700	41,500	20,700	33,500
22%	52%	26%	36%	19%	45%	29%	47%	25%	43%	22%	35%
2040 2-WAY ADT	36,500			22,900			45,500			19,600	
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
19,600	45,500	22,900	36,500	19,600	45,500	22,900	36,500	19,600	45,500	22,900	36,500
22%	52%	26%	36%	19%	45%	29%	46%	25%	43%	22%	35%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	1,616			1,057			1,684			1,001			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	65	703	0	78	850	128	0	769	83	1	1	1	2,679
% TURNS:	8%	92%	0%	7%	80%	12%	0%	90%	10%	33%	33%	33%	
P.M.	2-Way Pk Hr Vol:	1,733			1,463			1,816			1,268			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	75	781	0	152	1,095	215	0	724	95	1	1	1	3,140
% TURNS:	9%	91%	0%	10%	75%	15%	0%	88%	12%	33%	33%	33%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	8%	92%	0%	7%	80%	12%	0%	90%	10%	33%	33%	33%
	2020	10%	88%	3%	10%	74%	15%	3%	86%	11%	34%	32%	34%
	2030	10%	87%	3%	11%	73%	16%	4%	85%	12%	35%	32%	34%
	2040	11%	85%	4%	12%	70%	18%	5%	83%	12%	35%	31%	34%
P.M.													
	2013	9%	91%	0%	10%	75%	15%	0%	88%	12%	33%	33%	33%
	2020	10%	87%	3%	13%	69%	18%	3%	84%	13%	34%	32%	34%
	2030	10%	86%	3%	14%	68%	18%	4%	83%	13%	35%	32%	34%
	2040	11%	85%	4%	15%	66%	20%	5%	81%	14%	35%	31%	34%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: WB SW 8 St. at SW 22 Ave.
PREPARED BY: NC
FILE: BUILD-FORCED AND BALANCED

DATE: 12/30/2014
NOTES:

0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	28,970	17,360	35,850	14,860
24 HR EST. AADT	2020	31,000	18,700	38,000	16,000
24 HR EST. AADT	2030	33,500	20,700	41,500	17,700
24 HR EST. AADT	2040	36,500	22,900	45,500	19,600

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	47.5%	49.4%	99.9%	99.9%	50.6%	45.1%	0.1%	0.1%
2020	Approach D30 Factor	47.5%	49.4%	99.9%	99.9%	50.6%	45.1%	0.1%	0.1%
2030	Approach D30 Factor	47.5%	49.4%	99.9%	99.9%	50.6%	45.1%	0.1%	0.1%
2040	Approach D30 Factor	47.5%	49.4%	99.9%	99.9%	50.6%	45.1%	0.1%	0.1%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	70	1,060	0	70	620	100	0	850	60	0	0	0
2030	EST. TURNS												
2040	EST. TURNS	100	1,260	0	90	900	130	0	1010	70	0	0	0
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	70	1,170	0	140	1200	190	0	700	70	0	0	0
2030	EST. TURNS												
2040	EST. TURNS	90	1,450	0	170	1550	240	0	830	90	0	0	0

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		1239	1371	2610	1561	-1	1560	1632	1598	3230	1	1339	1340
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		1326	1464	2790	1681	-1	1680	1730	1690	3420	1	1439	1440
2020	TURN SUMMARY	1130	920	2050	790	0	790	910	1160	2070	0	750	750
CONTROL LINK VOLUMES		1433	1587	3020	1861	-1	1860	1890	1850	3740	2	1588	1590
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		1561	1729	3290	2059	1	2060	2072	2028	4100	2	1758	1760
2040	TURN SUMMARY	1360	1100	2460	1120	0	1120	1080	1390	2470	0	1070	1070
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		1288	1322	2610	1561	-1	1560	1455	1775	3230	1	1339	1340
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		1378	1412	2790	1681	-1	1680	1542	1878	3420	1	1439	1440
2020	TURN SUMMARY	1240	840	2080	1530	0	1530	770	1360	2130	0	1340	1340
CONTROL LINK VOLUMES		1489	1531	3020	1861	-1	1860	1684	2056	3740	2	1588	1590
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		1623	1667	3290	2059	1	2060	1847	2253	4100	2	1758	1760
2040	TURN SUMMARY	1540	1000	2540	1960	0	1960	920	1690	2610	0	1730	1730

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD-FORCED AND BALANCED
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	WB SR 90 at SW 17 Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	11,910	19,160	13,020	17,360
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**0.9%**	**CGR**	**1.0%**	**CGR**	**0.9%**	**CGR**	**1.0%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

				1		**1**		**1**		**1**
		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
		2013		11,910		19,160		13,020		17,360
NO. YEARS	7	2020	1.063	12,500	1.074	20,600	1.063	14,000	1.074	18,700
NO. YEARS	17	2030	1.161	14,000	1.190	22,800	1.161	15,000	1.190	20,700
NO. YEARS	27	2040	1.267	15,000	1.319	25,300	1.267	16,500	1.319	22,900

Percent Turns Calculated From Base Year AADTs:

JKTURNS	FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	11,910			19,160			13,020			17,360		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	17,360	13,020	19,160	11,910	17,360	13,020	19,160	11,910	17,360	13,020	19,160	11,910
	35%	26%	39%	28%	41%	31%	40%	25%	36%	30%	43%	27%
2020 2-WAY ADT	12,500			20,600			14,000			18,700		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	18,700	14,000	20,600	12,500	18,700	14,000	20,600	12,500	18,700	14,000	20,600	12,500
	35%	26%	39%	28%	41%	31%	40%	24%	36%	30%	44%	27%
2030 2-WAY ADT	14,000			22,800			15,000			20,700		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	20,700	15,000	22,800	14,000	20,700	15,000	22,800	14,000	20,700	15,000	22,800	14,000
	35%	26%	39%	28%	42%	30%	40%	24%	36%	29%	44%	27%
2040 2-WAY ADT	15,000			25,300			16,500			22,900		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	22,900	16,500	25,300	15,000	22,900	16,500	25,300	15,000	22,900	16,500	25,300	15,000
	35%	26%	39%	28%	42%	30%	40%	24%	36%	29%	45%	26%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	1,831			1,060			1,802			1,025			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	118	922	0	129	808	122	0	661	96	1	1	1	2,859
% TURNS:	11%	89%	0%	12%	76%	12%	0%	87%	13%	33%	33%	33%	
P.M.	2-Way Pk Hr Vol:	1,713			1,496			1,729			1,506			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	157	869	0	97	1,237	161	0	589	109	1	1	1	3,222
% TURNS:	15%	85%	0%	6%	83%	11%	0%	84%	16%	33%	33%	33%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	11%	89%	0%	12%	76%	12%	0%	87%	13%	33%	33%	33%
	2020	14%	82%	4%	14%	73%	13%	4%	81%	15%	33%	34%	33%
	2030	14%	81%	5%	14%	72%	14%	5%	79%	16%	33%	35%	33%
	2040	15%	78%	7%	15%	71%	15%	7%	77%	17%	33%	35%	32%
P.M.													
	2013	15%	85%	0%	6%	83%	11%	0%	84%	16%	33%	33%	33%
	2020	17%	79%	4%	9%	79%	13%	4%	78%	18%	33%	34%	33%
	2030	18%	77%	5%	9%	78%	13%	5%	77%	18%	33%	35%	33%
	2040	19%	75%	7%	10%	76%	14%	7%	74%	19%	33%	35%	32%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: WB SR 90 at SW 17 Ave.
PREPARED BY: NC
FILE: BUILD-FORCED AND BALANCED

DATE: 12/30/2014
NOTES:

0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	11,910	19,160	13,020	17,360
24 HR EST. AADT	2020	12,500	20,600	14,000	18,700
24 HR EST. AADT	2030	14,000	22,800	15,000	20,700
24 HR EST. AADT	2040	15,000	25,300	16,500	22,900

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	56.8%	59.9%	99.9%	99.9%	42.0%	40.4%	0.1%	0.1%
2020	Approach D30 Factor	56.8%	59.9%	99.9%	99.9%	42.0%	40.4%	0.1%	0.1%
2030	Approach D30 Factor	56.8%	59.9%	99.8%	99.8%	42.0%	40.4%	0.2%	0.2%
2040	Approach D30 Factor	56.8%	59.9%	99.9%	99.9%	42.0%	40.4%	0.1%	0.1%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	90	1,050	0	100	620	120	0	710	90	0	0	0
2030	EST. TURNS												
2040	EST. TURNS	110	1,250	0	130	900	150	0	850	110	0	0	0
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	120	940	0	90	1200	150	0	640	80	0	0	0
2030	EST. TURNS												
2040	EST. TURNS	140	1,120	0	110	1550	190	0	760	100	0	0	0

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		609	461	1070	1723	-3	1720	492	678	1170	2	1558	1560
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		639	491	1130	1852	-2	1850	529	731	1260	2	1678	1680
2020	TURN SUMMARY	1140	810	1950	840	0	840	800	1170	1970	0	800	800
CONTROL LINK VOLUMES		716	544	1260	2048	2	2050	567	783	1350	4	1856	1860
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		767	583	1350	2275	5	2280	624	866	1490	2	2058	2060
2040	TURN SUMMARY	1360	980	2340	1180	0	1180	960	1400	2360	0	1120	1120
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		642	428	1070	1723	-3	1720	473	697	1170	2	1558	1560
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		674	456	1130	1853	-3	1850	509	751	1260	2	1678	1680
2020	TURN SUMMARY	1060	730	1790	1440	0	1440	720	1090	1810	0	1400	1400
CONTROL LINK VOLUMES		755	505	1260	2048	2	2050	545	805	1350	4	1856	1860
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		809	541	1350	2275	5	2280	599	891	1490	2	2058	2060
2040	TURN SUMMARY	1260	870	2130	1850	0	1850	860	1310	2170	0	1790	1790

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD-FORCED AND BALANCED
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	WB SW 8 St. at SW 12 Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	10,880	17,330	13,610	19,160
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**0.9%**	**CGR**	**1.0%**	**CGR**	**0.9%**	**CGR**	**1.0%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
		2013		10,880		17,330		13,610		19,160
NO. YEARS	7	2020	1.063	11,500	1.074	18,600	1.063	14,500	1.074	20,600
NO. YEARS	17	2030	1.161	12,500	1.190	20,600	1.161	16,000	1.190	22,800
NO. YEARS	27	2040	1.267	14,000	1.319	22,900	1.267	17,000	1.319	25,300

Percent Turns Calculated From Base Year AADTs:

JKTURNS		FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013	2-WAY ADT	10,880			17,330			13,610			19,160		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	
	19,160	13,610	17,330	10,880	19,160	13,610	17,330	10,880	19,160	13,610	17,330	10,880	
	38%	27%	35%	25%	44%	31%	37%	23%	40%	33%	41%	26%	
2020	2-WAY ADT	11,500			18,600			14,500			20,600		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	
	20,600	14,500	18,600	11,500	20,600	14,500	18,600	11,500	20,600	14,500	18,600	11,500	
	38%	27%	35%	25%	44%	31%	37%	23%	41%	33%	42%	26%	
2030	2-WAY ADT	12,500			20,600			16,000			22,800		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	
	22,800	16,000	20,600	12,500	22,800	16,000	20,600	12,500	22,800	16,000	20,600	12,500	
	38%	27%	35%	24%	44%	31%	37%	22%	41%	33%	42%	25%	
2040	2-WAY ADT	14,000			22,900			17,000			25,300		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	
	25,300	17,000	22,900	14,000	25,300	17,000	22,900	14,000	25,300	17,000	22,900	14,000	
	39%	26%	35%	25%	45%	30%	37%	23%	41%	32%	42%	26%	

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	1,086			899			1,123			1,016			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	114	380	0	71	752	75	0	520	147	1	1	1	2,062
% TURNS:	23%	77%	0%	8%	84%	8%	0%	78%	22%	33%	33%	33%	
P.M.	2-Way Pk Hr Vol:	1,235			1,605			1,325			1,673			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	108	534	0	95	1,389	120	0	497	173	1	1	1	2,919
% TURNS:	17%	83%	0%	6%	87%	7%	0%	74%	26%	33%	33%	33%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	23%	77%	0%	8%	84%	8%	0%	78%	22%	33%	33%	33%
	2020	25%	72%	3%	10%	80%	11%	4%	72%	24%	33%	34%	33%
	2030	25%	71%	4%	10%	79%	11%	5%	71%	24%	33%	34%	32%
	2040	26%	68%	6%	11%	77%	12%	6%	69%	25%	33%	35%	32%
P.M.													
	2013	17%	83%	0%	6%	87%	7%	0%	74%	26%	33%	33%	33%
	2020	19%	78%	3%	8%	82%	10%	4%	69%	27%	33%	34%	33%
	2030	20%	76%	4%	8%	81%	10%	5%	68%	28%	33%	34%	32%
	2040	20%	74%	6%	9%	80%	11%	6%	66%	28%	33%	35%	32%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: WB SW 8 St. at SW 12 Ave.
PREPARED BY: NC
FILE: BUILD-FORCED AND BALANCED

DATE: 12/30/2014
NOTES:

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ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	10,880	17,330	13,610	19,160
24 HR EST. AADT	2020	11,500	18,600	14,500	20,600
24 HR EST. AADT	2030	12,500	20,600	16,000	22,800
24 HR EST. AADT	2040	14,000	22,900	17,000	25,300

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	45.5%	52.0%	99.9%	99.9%	59.4%	50.6%	0.1%	0.1%
2020	Approach D30 Factor	45.5%	52.0%	99.9%	99.9%	59.4%	50.6%	0.1%	0.1%
2030	Approach D30 Factor	45.5%	52.0%	99.8%	99.9%	59.4%	50.6%	0.2%	0.2%
2040	Approach D30 Factor	45.5%	52.0%	99.8%	99.8%	59.4%	50.6%	0.2%	0.2%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	90	410	0	60	630	60	0	560	120	0	0	0
2030	EST. TURNS												
2040	EST. TURNS	110	490	0	80	950	70	0	670	140	0	0	0
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	90	570	0	90	1100	150	0	540	140	0	0	0
2030	EST. TURNS												
2040	EST. TURNS	110	680	0	110	1500	190	0	640	180	0	0	0

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		445	535	980	1558	2	1560	728	492	1220	2	1718	1720
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		471	569	1040	1672	-2	1670	775	535	1310	2	1848	1850
2020	TURN SUMMARY	500	620	1120	750	0	750	680	470	1150	0	840	840
CONTROL LINK VOLUMES		512	618	1130	1851	-1	1850	855	585	1440	3	2047	2050
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		573	687	1260	2057	3	2060	909	621	1530	5	2275	2280
2040	TURN SUMMARY	600	750	1350	1100	0	1100	810	560	1370	0	1200	1200
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		509	471	980	1559	1	1560	619	601	1220	2	1718	1720
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		538	502	1040	1672	-2	1670	660	650	1310	2	1848	1850
2020	TURN SUMMARY	660	630	1290	1340	0	1340	680	720	1400	0	1330	1330
CONTROL LINK VOLUMES		585	545	1130	1851	-1	1850	728	712	1440	3	2047	2050
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		655	605	1260	2057	3	2060	774	756	1530	5	2275	2280
2040	TURN SUMMARY	790	750	1540	1800	0	1800	820	870	1690	0	1790	1790

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD-FORCED AND BALANCED
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	WB SW 8 St. at SR 90/SW 8 Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	3,780	20,420	3,780	17,330
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**0.9%**	**CGR**	**1.0%**	**CGR**	**0.9%**	**CGR**	**1.0%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
			1		**1**		**1**		**1**	
		2013		3,780		20,420		3,780		17,330
NO. YEARS	7	2020	1.063	4,000	1.074	21,900	1.063	4,000	1.074	18,600
NO. YEARS	17	2030	1.161	4,500	1.190	24,300	1.161	4,500	1.190	20,600
NO. YEARS	27	2040	1.267	5,000	1.319	26,900	1.267	5,000	1.319	22,900

Percent Turns Calculated From Base Year AADTs:

JKTURNS	FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT		3,780			20,420			3,780			17,330	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	17,330	3,780	20,420	3,780	17,330	3,780	20,420	3,780	17,330	3,780	20,420	3,780
	42%	9%	49%	15%	70%	15%	49%	9%	42%	14%	73%	14%
2020 2-WAY ADT		4,000			21,900			4,000			18,600	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	18,600	4,000	21,900	4,000	18,600	4,000	21,900	4,000	18,600	4,000	21,900	4,000
	42%	9%	49%	15%	70%	15%	49%	9%	42%	13%	73%	13%
2030 2-WAY ADT		4,500			24,300			4,500			20,600	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	20,600	4,500	24,300	4,500	20,600	4,500	24,300	4,500	20,600	4,500	24,300	4,500
	42%	9%	49%	15%	70%	15%	49%	9%	42%	14%	73%	14%
2040 2-WAY ADT		5,000			26,900			5,000			22,900	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	22,900	5,000	26,900	5,000	22,900	5,000	26,900	5,000	22,900	5,000	26,900	5,000
	42%	9%	49%	15%	70%	15%	49%	9%	42%	14%	73%	14%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	693			673			655			719			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	88	256	0	62	563	47	0	286	65	1	1	1	1,370
% TURNS:	26%	74%	0%	9%	84%	7%	0%	81%	19%	33%	33%	33%	
P.M.	2-Way Pk Hr Vol:	496			1,389			523			1,422			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	66	173	0	63	1,261	64	0	193	92	1	1	1	1,915
% TURNS:	28%	72%	0%	5%	91%	5%	0%	68%	32%	33%	33%	33%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	26%	74%	0%	9%	84%	7%	0%	81%	19%	33%	33%	33%
	2020	27%	68%	5%	10%	82%	8%	5%	74%	21%	31%	37%	31%
	2030	28%	66%	6%	10%	82%	8%	6%	72%	21%	31%	38%	31%
	2040	28%	64%	8%	10%	81%	8%	8%	69%	22%	30%	40%	30%
P.M.													
	2013	28%	72%	0%	5%	91%	5%	0%	68%	32%	33%	33%	33%
	2020	29%	66%	5%	6%	89%	6%	5%	62%	33%	31%	37%	31%
	2030	29%	64%	6%	6%	88%	6%	6%	60%	33%	31%	38%	31%
	2040	30%	62%	8%	6%	87%	6%	8%	58%	34%	30%	40%	30%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: WB SW 8 St. at SR 90/SW 8 Ave.
PREPARED BY: NC
FILE: BUILD-FORCED AND BALANCED

DATE: 12/30/2014
NOTES:

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ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	3,780	20,420	3,780	17,330
24 HR EST. AADT	2020	4,000	21,900	4,000	18,600
24 HR EST. AADT	2030	4,500	24,300	4,500	20,600
24 HR EST. AADT	2040	5,000	26,900	5,000	22,900

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	49.6%	48.2%	99.9%	99.9%	53.6%	54.5%	0.1%	0.1%
2020	Approach D30 Factor	49.6%	48.2%	99.8%	99.8%	53.6%	54.5%	0.2%	0.2%
2030	Approach D30 Factor	49.6%	48.2%	99.9%	99.9%	53.6%	54.5%	0.1%	0.1%
2040	Approach D30 Factor	49.6%	48.2%	99.9%	99.9%	53.6%	54.5%	0.1%	0.1%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	70	280	0	60	650	40	0	310	50	0	0	0
2030	EST. TURNS												
2040	EST. TURNS	80	330	0	70	950	50	0	370	60	0	0	0
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	50	160	0	60	1100	90	0	210	70	0	0	0
2030	EST. TURNS												
2040	EST. TURNS	60	190	0	80	1500	110	0	250	90	0	0	0

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		169	171	340	1835	5	1840	182	158	340	2	1558	1560
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		179	181	360	1967	3	1970	193	167	360	3	1667	1670
2020	TURN SUMMARY	350	370	720	750	0	750	360	320	680	0	770	770
CONTROL LINK VOLUMES		201	209	410	2184	6	2190	217	193	410	2	1848	1850
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		223	227	450	2417	3	2420	241	209	450	2	2058	2060
2040	TURN SUMMARY	410	440	850	1070	0	1070	430	380	810	0	1090	1090
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		164	176	340	1836	4	1840	185	155	340	2	1558	1560
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		173	187	360	1967	3	1970	196	164	360	3	1667	1670
2020	TURN SUMMARY	210	270	480	1250	0	1250	280	250	530	0	1220	1220
CONTROL LINK VOLUMES		195	215	410	2185	5	2190	221	189	410	2	1848	1850
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		217	233	450	2419	1	2420	245	205	450	2	2058	2060
2040	TURN SUMMARY	250	330	580	1690	0	1690	340	300	640	0	1650	1650

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD-FORCED AND BALANCED
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	WB SW 8 St. at SW 5 Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	3,000	20,420	3,000	20,420
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**0.9%**	**CGR**	**1.0%**	**CGR**	**0.9%**	**CGR**	**1.0%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
			1		**1**		**1**		**1**	
		2013		3,000		20,420		3,000		20,420
NO. YEARS	7	2020	1.063	3,000	1.074	21,900	1.063	3,000	1.074	21,900
NO. YEARS	17	2030	1.161	3,500	1.190	24,300	1.161	3,500	1.190	24,300
NO. YEARS	27	2040	1.267	4,000	1.319	26,900	1.267	4,000	1.319	26,900

Percent Turns Calculated From Base Year AADTs:

JKTURNS	FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	3,000			20,420			3,000			20,420		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	20,420	3,000	20,420	3,000	20,420	3,000	20,420	3,000	20,420	3,000	20,420	3,000
	47%	7%	47%	11%	77%	11%	47%	7%	47%	11%	77%	11%
2020 2-WAY ADT	3,000			21,900			3,000			21,900		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	21,900	3,000	21,900	3,000	21,900	3,000	21,900	3,000	21,900	3,000	21,900	3,000
	47%	6%	47%	11%	78%	11%	47%	6%	47%	11%	78%	11%
2030 2-WAY ADT	3,500			24,300			3,500			24,300		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	24,300	3,500	24,300	3,500	24,300	3,500	24,300	3,500	24,300	3,500	24,300	3,500
	47%	7%	47%	11%	78%	11%	47%	7%	47%	11%	78%	11%
2040 2-WAY ADT	4,000			26,900			4,000			26,900		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	26,900	4,000	26,900	4,000	26,900	4,000	26,900	4,000	26,900	4,000	26,900	4,000
	47%	7%	47%	11%	77%	11%	47%	7%	47%	11%	77%	11%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	329			1,732			307			1,682			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	1	1	1	121	1,593	16	0	204	85	1	1	1	2,025
% TURNS:	33%	33%	33%	7%	92%	1%	0%	71%	29%	33%	33%	33%	
P.M.	2-Way Pk Hr Vol:	474			1,728			505			1,631			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	1	1	1	166	1,494	66	0	304	133	1	1	1	2,169
% TURNS:	33%	33%	33%	10%	87%	4%	0%	70%	30%	33%	33%	33%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	33%	33%	33%	7%	92%	1%	0%	71%	29%	33%	33%	33%
	2020	35%	31%	35%	7%	91%	2%	5%	64%	31%	31%	38%	31%
	2030	35%	30%	35%	8%	90%	2%	6%	63%	32%	31%	39%	31%
	2040	36%	29%	36%	8%	90%	3%	8%	60%	32%	30%	41%	30%
P.M.													
	2013	33%	33%	33%	10%	87%	4%	0%	70%	30%	33%	33%	33%
	2020	35%	31%	35%	10%	86%	5%	5%	63%	32%	31%	38%	31%
	2030	35%	30%	35%	10%	85%	5%	6%	62%	32%	31%	39%	31%
	2040	36%	29%	36%	10%	85%	5%	8%	59%	33%	30%	41%	30%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: WB SW 8 St. at SW 5 Ave.
PREPARED BY: NC
FILE: BUILD-FORCED AND BALANCED

DATE: 12/30/2014
NOTES:

0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	3,000	20,420	3,000	20,420
24 HR EST. AADT	2020	3,000	21,900	3,000	21,900
24 HR EST. AADT	2030	3,500	24,300	3,500	24,300
24 HR EST. AADT	2040	4,000	26,900	4,000	26,900

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	0.9%	0.6%	99.9%	99.9%	94.1%	86.5%	0.1%	0.1%
2020	Approach D30 Factor	0.9%	0.6%	99.9%	99.9%	94.1%	86.5%	0.1%	0.1%
2030	Approach D30 Factor	0.9%	0.6%	99.9%	99.9%	94.1%	86.5%	0.1%	0.1%
2040	Approach D30 Factor	0.9%	0.6%	99.9%	99.9%	94.1%	86.5%	0.1%	0.1%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	0	0	0	80	720	0	0	250	100	0	0	0
2030	EST. TURNS												
2040	EST. TURNS	0	0	0	110	1020	0	0	290	120	0	0	0
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	0	0	0	120	1150	0	0	330	110	0	0	0
2030	EST. TURNS												
2040	EST. TURNS	0	0	0	150	1560	0	0	390	150	0	0	0

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		2	268	270	1836	4	1840	254	16	270	2	1838	1840
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		2	268	270	1969	1	1970	254	16	270	2	1968	1970
2020	TURN SUMMARY	0	330	330	800	0	800	350	0	350	0	820	820
CONTROL LINK VOLUMES		3	317	320	2184	6	2190	297	23	320	2	2188	2190
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		3	357	360	2418	2	2420	339	21	360	2	2418	2420
2040	TURN SUMMARY	0	400	400	1130	0	1130	410	0	410	0	1140	1140
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		2	268	270	1836	4	1840	234	36	270	2	1838	1840
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		2	268	270	1969	1	1970	234	36	270	2	1968	1970
2020	TURN SUMMARY	0	450	450	1270	0	1270	440	0	440	0	1260	1260
CONTROL LINK VOLUMES		2	318	320	2184	6	2190	273	47	320	2	2188	2190
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		2	358	360	2418	2	2420	312	48	360	2	2418	2420
2040	TURN SUMMARY	0	540	540	1710	0	1710	540	0	540	0	1710	1710

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD-FORCED AND BALANCED
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	WB SW 8 St. at SW 4 Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	12,940	25,070	980	20,420
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**0.9%**	**CGR**	**1.9%**	**CGR**	**0.9%**	**CGR**	**1.9%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
		2013		12,940		25,070		980		20,420
NO. YEARS	7	2020	1.063	14,000	1.139	28,600	1.063	1,000	1.139	23,300
NO. YEARS	17	2030	1.161	15,000	1.372	34,400	1.161	1,000	1.372	28,000
NO. YEARS	27	2040	1.267	16,500	1.653	41,500	1.267	1,000	1.653	33,800

Percent Turns Calculated From Base Year AADTs:

JKTURNS	FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	12,940			25,070			980			20,420		
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
20,420	980	25,070	12,940	20,420	980	25,070	12,940	20,420	980	25,070	12,940
44%	2%	54%	38%	59%	3%	43%	22%	35%	3%	64%	33%
2020 2-WAY ADT	14,000			28,600			1,000			23,300	
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
23,300	1,000	28,600	14,000	23,300	1,000	28,600	14,000	23,300	1,000	28,600	14,000
44%	2%	54%	37%	61%	3%	43%	21%	35%	2%	66%	32%
2030 2-WAY ADT	15,000			34,400			1,000			28,000	
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
28,000	1,000	34,400	15,000	28,000	1,000	34,400	15,000	28,000	1,000	34,400	15,000
44%	2%	54%	34%	64%	2%	44%	19%	36%	2%	68%	30%
2040 2-WAY ADT	16,500			41,500			1,000			33,800	
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
33,800	1,000	41,500	16,500	33,800	1,000	41,500	16,500	33,800	1,000	41,500	16,500
44%	1%	54%	32%	66%	2%	45%	18%	37%	2%	70%	28%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	1,334			871			1,569			838			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	281	952	0	0	454	316	100	100	100	1	1	1	2,306
% TURNS:	23%	77%	0%	0%	59%	41%	33%	33%	33%	33%	33%	33%	
P.M.	2-Way Pk Hr Vol:	1,288			1,104			1,269			1,325			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	478	709	0	0	744	259	100	100	100	1	1	1	2,493
% TURNS:	40%	60%	0%	0%	74%	26%	33%	33%	33%	33%	33%	33%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		SB			WB			NB			EB	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
A.M.												
2013	23%	77%	0%	0%	59%	41%	33%	33%	33%	33%	33%	33%
2020	25%	70%	5%	4%	59%	37%	34%	32%	34%	30%	37%	33%
2030	25%	68%	7%	4%	60%	36%	35%	32%	34%	29%	38%	33%
2040	26%	65%	9%	5%	60%	35%	35%	31%	34%	28%	40%	32%
P.M.												
2013	40%	60%	0%	0%	74%	26%	33%	33%	33%	33%	33%	33%
2020	41%	54%	5%	4%	73%	24%	34%	32%	34%	30%	37%	33%
2030	41%	52%	7%	4%	73%	23%	35%	32%	34%	29%	38%	33%
2040	41%	50%	9%	5%	73%	22%	35%	31%	34%	28%	40%	32%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: WB SW 8 St. at SW 4 Ave.
PREPARED BY: NC
FILE: BUILD-FORCED AND BALANCED

DATE: 12/30/2014
NOTES:

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ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	12,940	25,070	980	20,420
24 HR EST. AADT	2020	14,000	28,600	1,000	23,300
24 HR EST. AADT	2030	15,000	34,400	1,000	28,000
24 HR EST. AADT	2040	16,500	41,500	1,000	33,800

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	92.4%	92.2%	99.9%	99.9%	19.1%	23.6%	0.1%	0.1%
2020	Approach D30 Factor	92.4%	92.2%	99.9%	99.9%	19.1%	23.6%	0.1%	0.1%
2030	Approach D30 Factor	92.4%	92.2%	99.9%	99.9%	19.1%	23.6%	0.1%	0.1%
2040	Approach D30 Factor	92.4%	92.2%	99.9%	99.9%	19.1%	23.6%	0.1%	0.1%

A.M. DESIGN HR. TURNS		NORTH LEG RIGHT	NORTH LEG THRU	NORTH LEG LEFT	EAST LEG RIGHT	EAST LEG THRU	EAST LEG LEFT	SOUTH LEG RIGHT	SOUTH LEG THRU	SOUTH LEG LEFT	WEST LEG RIGHT	WEST LEG THRU	WEST LEG LEFT
2013	EST. TURNS												
2020	EST. TURNS	390	70	0	0	500	0	0	0	0	0	0	0
2030	EST. TURNS												
2040	EST. TURNS	470	90	0	0	730	0	0	0	0	0	0	0
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	430	240	0	0	900	0	0	0	0	0	0	0
2030	EST. TURNS												
2040	EST. TURNS	540	290	0	0	1200	0	0	0	0	0	0	0

LINK VOLUME CHECK

		NORTH LEG FROM	NORTH LEG TO	NORTH LEG LINK	EAST LEG FROM	EAST LEG TO	EAST LEG LINK	SOUTH LEG FROM	SOUTH LEG TO	SOUTH LEG LINK	WEST LEG FROM	WEST LEG TO	WEST LEG LINK
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		1076	84	1160	2254	6	2260	17	73	90	2	1838	1840
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		1165	95	1260	2571	-1	2570	17	73	90	2	2098	2100
2020	TURN SUMMARY	460	0	460	500	0	500	0	70	70	0	890	890
CONTROL LINK VOLUMES		1248	102	1350	3093	7	3100	17	73	90	3	2517	2520
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		1373	117	1490	3731	9	3740	17	73	90	3	3037	3040
2040	TURN SUMMARY	560	0	560	730	0	730	0	90	90	0	1200	1200
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		1073	87	1160	2254	6	2260	21	69	90	2	1838	1840
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		1161	99	1260	2571	-1	2570	21	69	90	2	2098	2100
2020	TURN SUMMARY	670	0	670	900	0	900	0	240	240	0	1330	1330
CONTROL LINK VOLUMES		1244	106	1350	3093	7	3100	21	69	90	3	2517	2520
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		1369	121	1490	3731	9	3740	21	69	90	3	3037	3040
2040	TURN SUMMARY	830	0	830	1200	0	1200	0	290	290	0	1740	1740

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD-FORCED AND BALANCED
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	WB SW 8 St. at SW 3 Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	2,950	24,100	3,600	25,070
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**0.9%**	**CGR**	**1.9%**	**CGR**	**0.9%**	**CGR**	**1.9%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

			NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG		
					1		**1**		**1**		**1**
		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
		2013		2,950		24,100		3,600		25,070
NO. YEARS	7	2020	1.063	3,000	1.139	27,500	1.063	4,000	1.139	28,600
NO. YEARS	17	2030	1.161	3,500	1.372	33,100	1.161	4,000	1.372	34,400
NO. YEARS	27	2040	1.267	3,500	1.653	39,800	1.267	4,500	1.653	41,500

Percent Turns Calculated From Base Year AADTs:

JKTURNS	FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	2,950			24,100			3,600			25,070		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	25,070	3,600	24,100	2,950	25,070	3,600	24,100	2,950	25,070	3,600	24,100	2,950
	48%	7%	46%	9%	79%	11%	46%	6%	48%	12%	79%	10%
2020 2-WAY ADT	3,000			27,500			4,000			28,600		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	28,600	4,000	27,500	3,000	28,600	4,000	27,500	3,000	28,600	4,000	27,500	3,000
	48%	7%	46%	8%	80%	11%	47%	5%	48%	12%	80%	9%
2030 2-WAY ADT	3,500			33,100			4,000			34,400		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	34,400	4,000	33,100	3,500	34,400	4,000	33,100	3,500	34,400	4,000	33,100	3,500
	48%	6%	46%	8%	82%	10%	47%	5%	48%	10%	82%	9%
2040 2-WAY ADT	3,500			39,800			4,500			41,500		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	41,500	4,500	39,800	3,500	41,500	4,500	39,800	3,500	41,500	4,500	39,800	3,500
	48%	5%	46%	7%	84%	9%	47%	4%	49%	9%	83%	7%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	157			1,069			392			860			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	1	1	1	81	762	224	0	72	94	1	1	1	1,239
% TURNS:	33%	33%	33%	8%	71%	21%	0%	43%	57%	33%	33%	33%	
P.M.	2-Way Pk Hr Vol:	324			1,424			546			1,118			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	1	1	1	164	992	266	0	156	122	1	1	1	1,706
% TURNS:	33%	33%	33%	12%	70%	19%	0%	56%	44%	33%	33%	33%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	33%	33%	33%	8%	71%	21%	0%	43%	57%	33%	33%	33%
	2020	35%	31%	35%	8%	72%	20%	5%	40%	56%	31%	38%	31%
	2030	35%	30%	35%	8%	73%	20%	6%	39%	56%	30%	39%	30%
	2040	36%	29%	36%	8%	73%	19%	8%	37%	55%	29%	42%	29%
P.M.													
	2013	33%	33%	33%	12%	70%	19%	0%	56%	44%	33%	33%	33%
	2020	35%	31%	35%	11%	71%	18%	5%	51%	44%	31%	38%	31%
	2030	35%	30%	35%	11%	71%	18%	6%	50%	44%	30%	39%	30%
	2040	36%	29%	36%	11%	72%	17%	8%	47%	45%	29%	42%	29%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: WB SW 8 St. at SW 3 Ave.
PREPARED BY: NC
FILE: BUILD-FORCED AND BALANCED

DATE: 12/30/2014
NOTES:

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ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	2,950	24,100	3,600	25,070
24 HR EST. AADT	2020	3,000	27,500	4,000	28,600
24 HR EST. AADT	2030	3,500	33,100	4,000	34,400
24 HR EST. AADT	2040	3,500	39,800	4,500	41,500

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	1.9%	0.9%	99.9%	99.9%	42.3%	50.9%	0.1%	0.1%
2020	Approach D30 Factor	1.9%	0.9%	99.9%	99.9%	42.3%	50.9%	0.1%	0.1%
2030	Approach D30 Factor	1.9%	0.9%	99.9%	99.9%	42.3%	50.9%	0.1%	0.1%
2040	Approach D30 Factor	1.9%	0.9%	99.9%	99.9%	42.3%	50.9%	0.1%	0.1%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	120	0	0	230	1700	0	0	270	70	0	0	0
2030	EST. TURNS												
2040	EST. TURNS	140	0	0	340	2470	0	0	320	80	0	0	0
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	200	0	0	260	1820	0	0	410	100	0	0	0
2030	EST. TURNS												
2040	EST. TURNS	240	0	0	320	2300	0	0	480	120	0	0	0

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		5	265	270	2167	3	2170	137	183	320	2	2258	2260
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		5	265	270	2473	7	2480	152	208	360	3	2567	2570
2020	TURN SUMMARY	120	500	620	1930	0	1930	340	0	340	0	1890	1890
CONTROL LINK VOLUMES		6	314	320	2976	4	2980	152	208	360	3	3097	3100
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		6	314	320	3578	2	3580	172	238	410	4	3736	3740
2040	TURN SUMMARY	140	660	800	2810	0	2810	400	0	400	0	2690	2690
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		2	268	270	2166	4	2170	165	155	320	2	2258	2260
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		3	267	270	2472	8	2480	183	177	360	3	2567	2570
2020	TURN SUMMARY	200	670	870	2080	0	2080	510	0	510	0	2120	2120
CONTROL LINK VOLUMES		3	317	320	2975	5	2980	183	177	360	3	3097	3100
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		3	317	320	3577	3	3580	206	204	410	4	3736	3740
2040	TURN SUMMARY	240	800	1040	2620	0	2620	600	0	600	0	2660	2660

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD-FORCED AND BALANCED
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	WB SR 90 at SW 2 Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	11,880	23,960	11,800	24,100
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**0.9%**	**CGR**	**1.9%**	**CGR**	**0.9%**	**CGR**	**1.9%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
			1		**1**		**1**		**1**	
		2013		11,880		23,960		11,800		24,100
NO. YEARS	7	2020	1.063	12,500	1.139	27,300	1.063	12,500	1.139	27,500
NO. YEARS	17	2030	1.161	14,000	1.372	32,900	1.161	13,500	1.372	33,100
NO. YEARS	27	2040	1.267	15,000	1.653	39,600	1.267	15,000	1.653	39,800

Percent Turns Calculated From Base Year AADTs:

JKTURNS	FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	11,880			23,960			11,800			24,100		
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
24,100	11,800	23,960	11,880	24,100	11,800	23,960	11,880	24,100	11,800	23,960	11,880
40%	20%	40%	25%	50%	25%	40%	20%	40%	25%	50%	25%
2020 2-WAY ADT	12,500			27,300			12,500			27,500	
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
27,500	12,500	27,300	12,500	27,500	12,500	27,300	12,500	27,500	12,500	27,300	12,500
41%	19%	41%	24%	52%	24%	41%	19%	41%	24%	52%	24%
2030 2-WAY ADT	14,000			32,900			13,500			33,100	
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
33,100	13,500	32,900	14,000	33,100	13,500	32,900	14,000	33,100	13,500	32,900	14,000
42%	17%	41%	23%	55%	22%	41%	18%	41%	22%	54%	23%
2040 2-WAY ADT	15,000			39,600			15,000			39,800	
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
39,800	15,000	39,600	15,000	39,800	15,000	39,600	15,000	39,800	15,000	39,600	15,000
42%	16%	42%	21%	57%	21%	42%	16%	42%	22%	57%	22%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	1,038			858			1,195			995			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	85	214	0	106	655	96	0	632	252	1	1	1	2,043
% TURNS:	28%	72%	0%	12%	76%	11%	0%	71%	29%	33%	33%	33%	
P.M.	2-Way Pk Hr Vol:	986			1,319			1,062			1,583			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	179	264	0	84	1,148	86	0	458	253	1	1	1	2,475
% TURNS:	40%	60%	0%	6%	87%	7%	0%	64%	36%	33%	33%	33%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	28%	72%	0%	12%	76%	11%	0%	71%	29%	33%	33%	33%
	2020	30%	66%	4%	14%	74%	12%	4%	66%	30%	32%	35%	32%
	2030	30%	65%	5%	14%	74%	13%	5%	65%	30%	32%	36%	32%
	2040	31%	62%	7%	14%	73%	13%	7%	62%	31%	31%	37%	31%
P.M.													
	2013	40%	60%	0%	6%	87%	7%	0%	64%	36%	33%	33%	33%
	2020	40%	55%	4%	8%	84%	8%	4%	60%	36%	32%	35%	32%
	2030	41%	54%	5%	8%	83%	8%	5%	59%	36%	32%	36%	32%
	2040	41%	52%	7%	9%	82%	9%	7%	56%	37%	31%	37%	31%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: WB SR 90 at SW 2 Ave.
PREPARED BY: NC
FILE: BUILD-FORCED AND BALANCED

DATE: 12/30/2014
NOTES:

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ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	11,880	23,960	11,800	24,100
24 HR EST. AADT	2020	12,500	27,300	12,500	27,500
24 HR EST. AADT	2030	14,000	32,900	13,500	33,100
24 HR EST. AADT	2040	15,000	39,600	15,000	39,800

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	28.8%	44.9%	99.9%	99.9%	74.0%	66.9%	0.1%	0.1%
2020	Approach D30 Factor	28.8%	44.9%	99.9%	99.9%	74.0%	66.9%	0.1%	0.1%
2030	Approach D30 Factor	28.8%	44.9%	99.8%	99.8%	74.0%	66.9%	0.2%	0.2%
2040	Approach D30 Factor	28.8%	44.9%	99.8%	99.8%	74.0%	66.9%	0.2%	0.2%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	90	330	0	90	1700	100	0	720	200	0	0	0
2030	EST. TURNS												
2040	EST. TURNS	110	420	0	130	2470	140	0	850	240	0	0	0
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	200	510	0	90	1900	90	0	570	210	0	0	0
2030	EST. TURNS												
2040	EST. TURNS	240	610	0	110	2400	110	0	680	260	0	0	0

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		308	762	1070	2154	6	2160	786	274	1060	2	2168	2170
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		324	806	1130	2454	6	2460	832	298	1130	3	2477	2480
2020	TURN SUMMARY	420	810	1230	1890	0	1890	920	430	1350	0	1990	1990
CONTROL LINK VOLUMES		363	897	1260	2956	4	2960	899	321	1220	5	2975	2980
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		389	961	1350	3557	3	3560	999	351	1350	7	3573	3580
2040	TURN SUMMARY	530	980	1510	2740	0	2740	1090	560	1650	0	2820	2820
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		480	590	1070	2155	5	2160	711	349	1060	2	2168	2170
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		505	625	1130	2454	6	2460	753	377	1130	3	2477	2480
2020	TURN SUMMARY	710	660	1370	2080	0	2080	780	600	1380	0	2310	2310
CONTROL LINK VOLUMES		566	694	1260	2956	4	2960	813	407	1220	5	2975	2980
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		607	743	1350	3557	3	3560	904	446	1350	7	3573	3580
2040	TURN SUMMARY	850	790	1640	2620	0	2620	940	720	1660	0	2900	2900

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD-FORCED AND BALANCED
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	WB SW 8 St. at SW 1 Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	6,990	23,960	8,650	23,960
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**0.9%**	**CGR**	**1.9%**	**CGR**	**0.9%**	**CGR**	**1.9%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

			NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG		
			1		**1**		**1**		**1**		
		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
		2013		6,990		23,960		8,650		23,960
NO. YEARS	7	2020	1.063	7,500	1.139	27,300	1.063	9,000	1.139	27,300
NO. YEARS	17	2030	1.161	8,000	1.372	32,900	1.161	10,000	1.372	32,900
NO. YEARS	27	2040	1.267	9,000	1.653	39,600	1.267	11,000	1.653	39,600

Percent Turns Calculated From Base Year AADTs:

JKTURNS	FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	6,990			23,960			8,650			23,960		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	23,960	8,650	23,960	6,990	23,960	8,650	23,960	6,990	23,960	8,650	23,960	6,990
	42%	15%	42%	18%	61%	22%	44%	13%	44%	22%	61%	18%
2020 2-WAY ADT	7,500			27,300			9,000			27,300		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	27,300	9,000	27,300	7,500	27,300	9,000	27,300	7,500	27,300	9,000	27,300	7,500
	43%	14%	43%	17%	62%	21%	44%	12%	44%	21%	62%	17%
2030 2-WAY ADT	8,000			32,900			10,000			32,900		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	32,900	10,000	32,900	8,000	32,900	10,000	32,900	8,000	32,900	10,000	32,900	8,000
	43%	13%	43%	16%	65%	20%	45%	11%	45%	20%	65%	16%
2040 2-WAY ADT	9,000			39,600			11,000			39,600		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	39,600	11,000	39,600	9,000	39,600	11,000	39,600	9,000	39,600	11,000	39,600	9,000
	44%	12%	44%	15%	66%	18%	45%	10%	45%	18%	66%	15%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	917			911			741			1,091			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	304	611	0	0	783	126	1	1	1	1	1	1	1,830
% TURNS:	33%	67%	0%	0%	86%	14%	33%	33%	33%	33%	33%	33%	
P.M.	2-Way Pk Hr Vol:	934			1,383			853			1,468			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	286	646	0	0	1,178	203	1	1	1	1	1	1	2,319
% TURNS:	31%	69%	0%	0%	85%	15%	33%	33%	33%	33%	33%	33%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		SB			WB			NB			EB	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
A.M.												
2013	33%	67%	0%	0%	86%	14%	33%	33%	33%	33%	33%	33%
2020	34%	62%	4%	2%	84%	15%	34%	31%	34%	32%	36%	32%
2030	34%	60%	5%	2%	83%	15%	35%	31%	35%	32%	37%	31%
2040	35%	58%	7%	3%	83%	15%	35%	29%	35%	31%	39%	30%
P.M.												
2013	31%	69%	0%	0%	85%	15%	33%	33%	33%	33%	33%	33%
2020	32%	64%	4%	2%	83%	15%	34%	31%	34%	32%	36%	32%
2030	32%	62%	5%	2%	83%	15%	35%	31%	35%	32%	37%	31%
2040	33%	60%	7%	3%	82%	15%	35%	29%	35%	31%	39%	30%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: WB SW 8 St. at SW 1 Ave.
PREPARED BY: NC
FILE: BUILD-FORCED AND BALANCED

DATE: 12/30/2014
NOTES:

0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	6,990	23,960	8,650	23,960
24 HR EST. AADT	2020	7,500	27,300	9,000	27,300
24 HR EST. AADT	2030	8,000	32,900	10,000	32,900
24 HR EST. AADT	2040	9,000	39,600	11,000	39,600

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	99.8%	99.9%	99.9%	99.9%	0.4%	0.4%	0.1%	0.1%
2020	Approach D30 Factor	99.8%	99.9%	99.9%	99.9%	0.4%	0.4%	0.1%	0.1%
2030	Approach D30 Factor	99.8%	99.8%	99.8%	99.9%	0.4%	0.4%	0.2%	0.2%
2040	Approach D30 Factor	99.8%	99.8%	99.8%	99.9%	0.4%	0.4%	0.2%	0.2%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	280	800	0	0	1500	180	0	0	0	0	0	0
2030	EST. TURNS												
2040	EST. TURNS	340	950	0	0	2200	250	0	0	0	0	0	0
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	270	990	0	0	1800	300	0	0	0	0	0	0
2030	EST. TURNS												
2040	EST. TURNS	340	1,180	0	0	2300	370	0	0	0	0	0	0

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		628	2	630	2154	6	2160	3	777	780	2	2158	2160
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		674	6	680	2454	6	2460	3	807	810	3	2457	2460
2020	TURN SUMMARY	1080	0	1080	1680	0	1680	0	980	980	0	1780	1780
CONTROL LINK VOLUMES		718	2	720	2956	4	2960	4	896	900	5	2955	2960
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		808	2	810	3557	3	3560	4	986	990	7	3553	3560
2040	TURN SUMMARY	1290	0	1290	2450	0	2450	0	1200	1200	0	2540	2540
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		628	2	630	2153	7	2160	3	777	780	2	2158	2160
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		674	6	680	2453	7	2460	3	807	810	3	2457	2460
2020	TURN SUMMARY	1260	0	1260	2100	0	2100	0	1290	1290	0	2070	2070
CONTROL LINK VOLUMES		719	1	720	2957	3	2960	3	897	900	5	2955	2960
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		808	2	810	3559	1	3560	3	987	990	7	3553	3560
2040	TURN SUMMARY	1520	0	1520	2670	0	2670	0	1550	1550	0	2640	2640

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD-FORCED AND BALANCED
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	WB SR 90 at S. Miami Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	9,010	19,590	13,880	23,960
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**0.9%**	**CGR**	**1.9%**	**CGR**	**0.9%**	**CGR**	**1.9%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
		2013		9,010		19,590		13,880		23,960
NO. YEARS	7	2020	1.063	9,500	1.139	22,300	1.063	15,000	1.139	27,300
NO. YEARS	17	2030	1.161	10,500	1.372	26,900	1.161	16,000	1.372	32,900
NO. YEARS	27	2040	1.267	11,500	1.653	32,400	1.267	17,500	1.653	39,600

Percent Turns Calculated From Base Year AADTs:

JKTURNS		FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG	
2013 2-WAY ADT		9,010			19,590			13,880			23,960	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	23,960	13,880	19,590	9,010	23,960	13,880	19,590	9,010	23,960	13,880	19,590	9,010
	42%	24%	34%	19%	51%	30%	37%	17%	46%	33%	46%	21%
2020 2-WAY ADT		9,500			22,300			15,000			27,300	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	27,300	15,000	22,300	9,500	27,300	15,000	22,300	9,500	27,300	15,000	22,300	9,500
	42%	23%	35%	18%	53%	29%	38%	16%	46%	32%	48%	20%
2030 2-WAY ADT		10,500			26,900			16,000			32,900	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	32,900	16,000	26,900	10,500	32,900	16,000	26,900	10,500	32,900	16,000	26,900	10,500
	43%	21%	35%	18%	55%	27%	38%	15%	47%	30%	50%	20%
2040 2-WAY ADT		11,500			32,400			17,500			39,600	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	39,600	17,500	32,400	11,500	39,600	17,500	32,400	11,500	39,600	17,500	32,400	11,500
	44%	20%	36%	17%	58%	26%	39%	14%	47%	29%	53%	19%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	609			736			816			947			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	1	1	1	74	660	0	0	531	283	1	1	1	1,554
% TURNS:	33%	33%	33%	10%	90%	0%	0%	65%	35%	33%	33%	33%	
P.M.	2-Way Pk Hr Vol:	626			1,126			933			1,437			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	1	1	1	113	1,011	0	0	509	422	1	1	1	2,061
% TURNS:	33%	33%	33%	10%	90%	0%	0%	55%	45%	33%	33%	33%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

			SB			WB			NB			EB	
		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
A.M.													
	2013	33%	33%	33%	10%	90%	0%	0%	65%	35%	33%	33%	33%
	2020	34%	32%	33%	11%	86%	3%	4%	60%	36%	33%	35%	32%
	2030	35%	32%	34%	11%	86%	3%	5%	59%	36%	33%	35%	32%
	2040	35%	31%	34%	11%	85%	4%	6%	57%	37%	33%	37%	31%
P.M.													
	2013	33%	33%	33%	10%	90%	0%	0%	55%	45%	33%	33%	33%
	2020	34%	32%	33%	11%	86%	3%	4%	51%	45%	33%	35%	32%
	2030	35%	32%	34%	11%	86%	3%	5%	50%	46%	33%	35%	32%
	2040	35%	31%	34%	11%	85%	4%	6%	48%	46%	33%	37%	31%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: WB SR 90 at S. Miami Ave.
PREPARED BY: NC
FILE: BUILD-FORCED AND BALANCED

DATE: 12/30/2014
NOTES:

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ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	9,010	19,590	13,880	23,960
24 HR EST. AADT	2020	9,500	22,300	15,000	27,300
24 HR EST. AADT	2030	10,500	26,900	16,000	32,900
24 HR EST. AADT	2040	11,500	32,400	17,500	39,600

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	0.5%	0.5%	99.9%	99.9%	99.8%	99.8%	0.1%	0.1%
2020	Approach D30 Factor	0.5%	0.5%	99.9%	99.9%	99.8%	99.8%	0.1%	0.1%
2030	Approach D30 Factor	0.5%	0.5%	99.9%	99.9%	99.8%	99.8%	0.1%	0.1%
2040	Approach D30 Factor	0.5%	0.5%	99.9%	99.9%	99.8%	99.8%	0.1%	0.1%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	0	0	0	150	1500	0	0	700	260	0	0	0
2030	EST. TURNS												
2040	EST. TURNS	0	0	0	210	2180	0	0	830	310	0	0	0
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	0	0	0	320	1450	0	0	1000	510	0	0	0
2030	EST. TURNS												
2040	EST. TURNS	0	0	0	390	2000	0	0	1190	630	0	0	0

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		4	806	810	1761	-1	1760	1246	4	1250	2	2158	2160
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		4	856	860	2005	5	2010	1347	3	1350	2	2458	2460
2020	TURN SUMMARY	0	850	850	1650	0	1650	960	0	960	0	1760	1760
CONTROL LINK VOLUMES		5	945	950	2419	1	2420	1436	4	1440	3	2957	2960
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		5	1035	1040	2913	7	2920	1571	9	1580	4	3556	3560
2040	TURN SUMMARY	0	1040	1040	2390	0	2390	1140	0	1140	0	2490	2490
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		4	806	810	1761	-1	1760	1247	3	1250	2	2158	2160
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		4	856	860	2005	5	2010	1347	3	1350	2	2458	2460
2020	TURN SUMMARY	0	1320	1320	1770	0	1770	1510	0	1510	0	1960	1960
CONTROL LINK VOLUMES		5	945	950	2419	1	2420	1437	3	1440	3	2957	2960
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		5	1035	1040	2913	7	2920	1572	8	1580	4	3556	3560
2040	TURN SUMMARY	0	1580	1580	2390	0	2390	1820	0	1820	0	2630	2630

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD-FORCED AND BALANCED
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	WB SW 8 St. at Brickell Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	42,390	15,290	40,950	19,590
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**0.9%**	**CGR**	**1.9%**	**CGR**	**0.9%**	**CGR**	**1.9%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
		2013		42,390		15,290		40,950		19,590
NO. YEARS	7	2020	1.063	45,000	1.139	17,400	1.063	43,500	1.139	22,300
NO. YEARS	17	2030	1.161	49,000	1.372	21,000	1.161	47,500	1.372	26,900
NO. YEARS	27	2040	1.267	53,500	1.653	25,300	1.267	52,000	1.653	32,400

Percent Turns Calculated From Base Year AADTs:

JKTURNS	FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	42,390			15,290			40,950			19,590		
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
19,590	40,950	15,290	42,390	19,590	40,950	15,290	42,390	19,590	40,950	15,290	42,390
26%	54%	20%	41%	19%	40%	20%	55%	25%	42%	16%	43%
2020 2-WAY ADT	45,000			17,400			43,500			22,300	
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
22,300	43,500	17,400	45,000	22,300	43,500	17,400	45,000	22,300	43,500	17,400	45,000
27%	52%	21%	41%	20%	39%	21%	53%	26%	41%	16%	42%
2030 2-WAY ADT	49,000			21,000			47,500			26,900	
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
26,900	47,500	21,000	49,000	26,900	47,500	21,000	49,000	26,900	47,500	21,000	49,000
28%	50%	22%	40%	22%	38%	22%	51%	28%	40%	18%	42%
2040 2-WAY ADT	53,500			25,300			52,000			32,400	
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
32,400	52,000	25,300	53,500	32,400	52,000	25,300	53,500	32,400	52,000	25,300	53,500
30%	47%	23%	39%	23%	38%	23%	48%	29%	40%	19%	41%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	3,559			2,130			2,983			990			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	206	816	1,051	177	412	233	256	1,308	369	1	1	1	4,831
% TURNS:	10%	39%	51%	22%	50%	28%	13%	68%	19%	33%	33%	33%	
P.M.	2-Way Pk Hr Vol:	3,774			1,569			3,068			1,481			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	597	1,065	761	155	363	278	11	1,195	518	1	1	1	4,946
% TURNS:	25%	44%	31%	19%	46%	35%	1%	69%	30%	33%	33%	33%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	10%	39%	51%	22%	50%	28%	13%	68%	19%	33%	33%	33%
	2020	12%	41%	48%	23%	47%	29%	14%	66%	20%	34%	32%	34%
	2030	12%	41%	47%	24%	47%	30%	14%	66%	20%	34%	31%	34%
	2040	13%	41%	46%	24%	46%	30%	15%	64%	21%	34%	31%	35%
P.M.													
	2013	25%	44%	31%	19%	46%	35%	1%	69%	30%	33%	33%	33%
	2020	25%	45%	30%	22%	43%	35%	3%	68%	30%	34%	32%	34%
	2030	25%	45%	30%	22%	43%	35%	3%	67%	30%	34%	31%	34%
	2040	25%	45%	30%	23%	42%	35%	4%	66%	30%	34%	31%	35%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: WB SW 8 St. at Brickell Ave.
PREPARED BY: NC
FILE: BUILD-FORCED AND BALANCED

DATE: 12/30/2014
NOTES:

0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	42,390	15,290	40,950	19,590
24 HR EST. AADT	2020	45,000	17,400	43,500	22,300
24 HR EST. AADT	2030	49,000	21,000	47,500	26,900
24 HR EST. AADT	2040	53,500	25,300	52,000	32,400

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	58.2%	64.2%	99.9%	99.9%	64.8%	56.2%	0.1%	0.1%
2020	Approach D30 Factor	58.2%	64.2%	99.9%	99.9%	64.8%	56.2%	0.1%	0.1%
2030	Approach D30 Factor	58.2%	64.2%	99.9%	99.9%	64.8%	56.2%	0.1%	0.1%
2040	Approach D30 Factor	58.2%	64.2%	99.9%	99.9%	64.8%	56.2%	0.1%	0.1%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	410	1,200	380	180	710	310	250	930	550	0	0	0
2030	EST. TURNS												
2040	EST. TURNS	510	1,490	450	290	1030	400	300	1110	660	0	0	0
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	570	1,410	850	190	560	480	210	1380	610	0	0	0
2030	EST. TURNS												
2040	EST. TURNS	700	1,680	1,050	310	940	620	260	1650	750	0	0	0

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		2222	1598	3820	1375	5	1380	2388	1302	3690	2	1758	1760
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		2359	1691	4050	1564	6	1570	2537	1383	3920	2	2008	2010
2020	TURN SUMMARY	1990	1110	3100	1200	630	1830	1730	1510	3240	0	1670	1670
CONTROL LINK VOLUMES		2569	1841	4410	1888	2	1890	2770	1510	4280	2	2418	2420
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		2805	2015	4820	2275	5	2280	3033	1647	4680	3	2917	2920
2040	TURN SUMMARY	2450	1400	3850	1720	750	2470	2070	1890	3960	0	2200	2200
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		2449	1371	3820	1375	5	1380	2071	1619	3690	2	1758	1760
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		2600	1450	4050	1564	6	1570	2200	1720	3920	2	2008	2010
2020	TURN SUMMARY	2830	1570	4400	1230	1060	2290	2200	1890	4090	0	1740	1740
CONTROL LINK VOLUMES		2831	1579	4410	1888	2	1890	2402	1878	4280	2	2418	2420
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		3091	1729	4820	2275	5	2280	2630	2050	4680	3	2917	2920
2040	TURN SUMMARY	3430	1960	5390	1870	1310	3180	2660	2300	4960	0	2390	2390

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD-FORCED AND BALANCED
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	EB SW 7 St. at SR 9		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	42,880	23,200	46,590	100
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**0.9%**	**CGR**	**1.0%**	**CGR**	**0.9%**	**CGR**	**1.0%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

			NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
			1		**1**		**1**		**1**	
		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
		2013		42,880		23,200		46,590		100
NO. YEARS	7	2020	1.063	45,500	1.074	24,900	1.063	49,500	1.074	100
NO. YEARS	17	2030	1.161	50,000	1.190	27,600	1.161	54,000	1.190	100
NO. YEARS	27	2040	1.267	54,500	1.319	30,600	1.267	59,000	1.319	100

Percent Turns Calculated From Base Year AADTs:

JKTURNS		FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG	
2013 2-WAY ADT		42,880			23,200			46,590			100	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	100	46,590	23,200	42,880	100	46,590	23,200	42,880	100	46,590	23,200	42,880
	0%	67%	33%	48%	0%	52%	35%	65%	0%	41%	21%	38%
2020 2-WAY ADT		45,500			24,900			49,500			100	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	100	49,500	24,900	45,500	100	49,500	24,900	45,500	100	49,500	24,900	45,500
	0%	66%	33%	48%	0%	52%	35%	65%	0%	41%	21%	38%
2030 2-WAY ADT		50,000			27,600			54,000			100	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	100	54,000	27,600	50,000	100	54,000	27,600	50,000	100	54,000	27,600	50,000
	0%	66%	34%	48%	0%	52%	36%	64%	0%	41%	21%	38%
2040 2-WAY ADT		54,500			30,600			59,000			100	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	100	59,000	30,600	54,500	100	59,000	30,600	54,500	100	59,000	30,600	54,500
	0%	66%	34%	48%	0%	52%	36%	64%	0%	41%	21%	38%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)		
A.M.	2-Way Pk Hr Vol:	3,230			2,749			3,484			2,557		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	94	1,366	190	21	1,102	0	317	1,559	182	60	1,119	0	6,010
% TURNS:	6%	83%	12%	2%	98%	0%	15%	76%	9%	5%	95%	0%	
P.M.	2-Way Pk Hr Vol:	3,085			2,673			3,095			2,509		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	136	1,320	262	38	1,265	0	223	1,329	180	43	885	0	5,681
% TURNS:	8%	77%	15%	3%	97%	0%	13%	77%	10%	5%	95%	0%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		SB			WB			NB			EB	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
A.M.												
2013	6%	83%	12%	2%	98%	0%	15%	76%	9%	5%	95%	0%
2020	5%	81%	14%	6%	88%	5%	17%	75%	8%	9%	87%	4%
2030	5%	81%	14%	8%	86%	6%	18%	74%	8%	10%	86%	5%
2040	5%	80%	15%	10%	82%	9%	19%	74%	7%	11%	83%	6%
P.M.												
2013	8%	77%	15%	3%	97%	0%	13%	77%	10%	5%	95%	0%
2020	7%	76%	17%	7%	87%	5%	15%	76%	9%	8%	88%	4%
2030	7%	75%	18%	9%	85%	6%	16%	75%	9%	9%	86%	5%
2040	7%	75%	18%	10%	81%	9%	17%	75%	9%	11%	83%	6%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: EB SW 7 St. at SR 9
PREPARED BY: NC
FILE: BUILD-FORCED AND BALANCED

DATE: 12/30/2014
NOTES:

0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	42,880	23,200	46,590	100
24 HR EST. AADT	2020	45,500	24,900	49,500	100
24 HR EST. AADT	2030	50,000	27,600	54,000	100
24 HR EST. AADT	2040	54,500	30,600	59,000	100

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	51.1%	55.7%	41.1%	58.9%	59.1%	56.0%	58.9%	41.1%
2020	Approach D30 Factor	51.1%	55.7%	41.1%	58.9%	59.1%	56.0%	58.9%	41.1%
2030	Approach D30 Factor	51.1%	55.7%	41.1%	58.9%	59.1%	56.0%	58.9%	41.1%
2040	Approach D30 Factor	51.1%	55.7%	41.1%	58.9%	59.1%	56.0%	58.9%	41.1%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	0	2,120	220	0	0	0	1,140	1,680	0	40	0	150
2030	EST. TURNS												
2040	EST. TURNS	0	2,520	260	0	0	0	1360	2000	0	50	0	180
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	0	1,430	320	0	0	0	1300	1340	0	20	0	120
2030	EST. TURNS												
2040	EST. TURNS	0	1,710	420	0	0	0	1900	1650	0	30	0	150

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		1971	1889	3860	858	1232	2090	2477	1713	4190	5	5	10
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		2092	2008	4100	921	1319	2240	2632	1828	4460	5	5	10
2020	TURN SUMMARY	2340	1830	4170	0	1360	1360	2820	2160	4980	190	0	190
CONTROL LINK VOLUMES		2299	2201	4500	1021	1459	2480	2871	1989	4860	5	5	10
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		2506	2404	4910	1132	1618	2750	3137	2173	5310	5	5	10
2040	TURN SUMMARY	2780	2180	4960	0	1620	1620	3360	2570	5930	230	0	230
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		2149	1711	3860	1230	860	2090	2347	1843	4190	4	6	10
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		2280	1820	4100	1320	920	2240	2493	1967	4460	4	6	10
2020	TURN SUMMARY	1750	1460	3210	0	1620	1620	2640	1450	4090	140	0	140
CONTROL LINK VOLUMES		2506	1994	4500	1463	1017	2480	2720	2140	4860	4	6	10
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		2732	2178	4910	1622	1128	2750	2972	2338	5310	4	6	10
2040	TURN SUMMARY	2130	1800	3930	0	2320	2320	3550	1740	5290	180	0	180

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD-FORCED AND BALANCED
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	EB SW 7 St. at SW 24 Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	24,910	17,680	1,410	23,200
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**0.9%**	**CGR**	**1.0%**	**CGR**	**0.9%**	**CGR**	**1.0%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
		2013		24,910		17,680		1,410		23,200
NO. YEARS	7	2020	1.063	26,500	1.074	19,000	1.063	1,500	1.074	24,900
NO. YEARS	17	2030	1.161	29,000	1.190	21,000	1.161	1,500	1.190	27,600
NO. YEARS	27	2040	1.267	31,500	1.319	23,300	1.267	2,000	1.319	30,600

Percent Turns Calculated From Base Year AADTs:

JKTURNS		FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG	
2013 2-WAY ADT		24,910			17,680			1,410			23,200	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	23,200	1,410	17,680	24,910	23,200	1,410	17,680	24,910	23,200	1,410	17,680	24,910
	55%	3%	42%	50%	47%	3%	27%	38%	35%	3%	40%	57%
2020 2-WAY ADT		26,500			19,000			1,500			24,900	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	24,900	1,500	19,000	26,500	24,900	1,500	19,000	26,500	24,900	1,500	19,000	26,500
	55%	3%	42%	50%	47%	3%	27%	38%	35%	3%	40%	56%
2030 2-WAY ADT		29,000			21,000			1,500			27,600	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	27,600	1,500	21,000	29,000	27,600	1,500	21,000	29,000	27,600	1,500	21,000	29,000
	55%	3%	42%	50%	48%	3%	27%	37%	36%	3%	41%	56%
2040 2-WAY ADT		31,500			23,300			2,000			30,600	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	30,600	2,000	23,300	31,500	30,600	2,000	23,300	31,500	30,600	2,000	23,300	31,500
	55%	4%	42%	49%	48%	3%	27%	37%	36%	4%	41%	55%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)		
A.M.	2-Way Pk Hr Vol:	334			1,757			174			1,841		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	0	57	37	1	1	1	67	49	0	0	1,650	190	2,053
% TURNS:	0%	61%	39%	33%	33%	33%	58%	42%	0%	0%	90%	10%	
P.M.	2-Way Pk Hr Vol:	325			1,562			186			1,581		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	0	88	59	1	1	1	50	47	0	0	1,450	130	1,827
% TURNS:	0%	60%	40%	33%	33%	33%	52%	48%	0%	0%	92%	8%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	0%	61%	39%	33%	33%	33%	58%	42%	0%	0%	90%	10%
	2020	5%	55%	40%	35%	35%	30%	55%	42%	4%	0%	85%	15%
	2030	7%	53%	40%	35%	35%	29%	54%	42%	4%	0%	84%	16%
	2040	9%	51%	40%	36%	36%	28%	53%	41%	6%	1%	82%	18%
P.M.													
	2013	0%	60%	40%	33%	33%	33%	52%	48%	0%	0%	92%	8%
	2020	5%	54%	40%	35%	35%	30%	49%	47%	4%	0%	87%	13%
	2030	7%	53%	40%	35%	35%	29%	48%	47%	4%	0%	85%	14%
	2040	9%	50%	40%	36%	36%	28%	48%	47%	6%	1%	83%	16%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: EB SW 7 St. at SW 24 Ave.
PREPARED BY: NC
FILE: BUILD-FORCED AND BALANCED

DATE: 12/30/2014
NOTES:

0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	24,910	17,680	1,410	23,200
24 HR EST. AADT	2020	26,500	19,000	1,500	24,900
24 HR EST. AADT	2030	29,000	21,000	1,500	27,600
24 HR EST. AADT	2040	31,500	23,300	2,000	30,600

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	28.1%	45.2%	0.1%	0.1%	66.7%	52.2%	99.9%	99.9%
2020	Approach D30 Factor	28.1%	45.2%	0.2%	0.2%	66.7%	52.2%	99.8%	99.8%
2030	Approach D30 Factor	28.1%	45.2%	0.1%	0.1%	66.7%	52.2%	99.9%	99.9%
2040	Approach D30 Factor	28.1%	45.2%	0.1%	0.1%	66.7%	52.2%	99.9%	99.9%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	0	50	380	0	0	0	70	100	0	40	1,200	40
2030	EST. TURNS												
2040	EST. TURNS	0	60	460	0	0	0	80	120	0	40	1,480	40
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	0	340	230	0	0	0	100	240	0	50	1,500	120
2030	EST. TURNS												
2040	EST. TURNS	0	410	270	0	0	0	120	280	0	60	2,300	150

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		631	1609	2240	2	1588	1590	85	45	130	2087	3	2090
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		671	1719	2390	3	1707	1710	90	50	140	2237	3	2240
2020	TURN SUMMARY	430	140	570	0	1650	1650	170	90	260	1280	0	1280
CONTROL LINK VOLUMES		735	1875	2610	2	1888	1890	90	50	140	2483	-3	2480
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		798	2042	2840	2	2098	2100	120	60	180	2753	-3	2750
2040	TURN SUMMARY	520	160	680	0	2020	2020	200	100	300	1560	0	1560
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		1014	1226	2240	2	1588	1590	66	64	130	2087	3	2090
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		1079	1311	2390	3	1707	1710	70	70	140	2237	3	2240
2020	TURN SUMMARY	570	360	930	0	1830	1830	340	390	730	1670	0	1670
CONTROL LINK VOLUMES		1181	1429	2610	2	1888	1890	70	70	140	2482	-2	2480
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		1282	1558	2840	2	2098	2100	94	86	180	2752	-2	2750
2040	TURN SUMMARY	680	430	1110	0	2690	2690	400	470	870	2510	0	2510

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD-FORCED AND BALANCED
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	EB SW 7 St. at SW 22 Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	27,420	22,890	28,970	17,680
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**0.9%**	**CGR**	**1.0%**	**CGR**	**0.9%**	**CGR**	**1.0%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
			1		**1**		**1**		**1**	
		2013		27,420		22,890		28,970		17,680
NO. YEARS	7	2020	1.063	29,000	1.074	24,600	1.063	31,000	1.074	19,000
NO. YEARS	17	2030	1.161	32,000	1.190	27,200	1.161	33,500	1.190	21,000
NO. YEARS	27	2040	1.267	34,500	1.319	30,200	1.267	36,500	1.319	23,300

Percent Turns Calculated From Base Year AADTs:

JKTURNS	FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	27,420			22,890			28,970			17,680		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	17,680	28,970	22,890	27,420	17,680	28,970	22,890	27,420	17,680	28,970	22,890	27,420
	25%	42%	33%	37%	24%	39%	34%	40%	26%	37%	29%	35%
2020 2-WAY ADT	29,000			24,600			31,000			19,000		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	19,000	31,000	24,600	29,000	19,000	31,000	24,600	29,000	19,000	31,000	24,600	29,000
	25%	42%	33%	37%	24%	39%	34%	40%	26%	37%	29%	34%
2030 2-WAY ADT	32,000			27,200			33,500			21,000		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	21,000	33,500	27,200	32,000	21,000	33,500	27,200	32,000	21,000	33,500	27,200	32,000
	26%	41%	33%	37%	24%	39%	34%	40%	26%	36%	29%	35%
2040 2-WAY ADT	34,500			30,200			36,500			23,300		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	23,300	36,500	30,200	34,500	23,300	36,500	30,200	34,500	23,300	36,500	30,200	34,500
	26%	41%	34%	37%	25%	39%	34%	39%	26%	36%	30%	34%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	2,055			1,743			2,064			1,620			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	0	1,010	130	1	1	1	162	817	0	74	1,448	97	3,741
% TURNS:	0%	89%	11%	33%	33%	33%	17%	83%	0%	5%	89%	6%	
P.M.	2-Way Pk Hr Vol:	2,007			1,678			1,902			1,597			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	0	1,099	154	1	1	1	126	614	0	62	1,395	139	3,592
% TURNS:	0%	88%	12%	33%	33%	33%	17%	83%	0%	4%	87%	9%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	0%	89%	11%	33%	33%	33%	17%	83%	0%	5%	89%	6%
	2020	3%	84%	14%	34%	32%	34%	18%	79%	3%	8%	83%	9%
	2030	3%	83%	14%	34%	32%	34%	19%	78%	3%	9%	82%	10%
	2040	4%	81%	15%	34%	32%	34%	20%	76%	4%	10%	80%	11%
P.M.													
	2013	0%	88%	12%	33%	33%	33%	17%	83%	0%	4%	87%	9%
	2020	3%	83%	14%	34%	32%	34%	19%	79%	3%	7%	82%	11%
	2030	3%	82%	15%	34%	32%	34%	19%	78%	3%	8%	80%	12%
	2040	4%	80%	16%	34%	32%	34%	20%	76%	4%	9%	78%	13%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: EB SW 7 St. at SW 22 Ave.
PREPARED BY: NC
FILE: BUILD-FORCED AND BALANCED

DATE: 12/30/2014
NOTES:

0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	27,420	22,890	28,970	17,680
24 HR EST. AADT	2020	29,000	24,600	31,000	19,000
24 HR EST. AADT	2030	32,000	27,200	33,500	21,000
24 HR EST. AADT	2040	34,500	30,200	36,500	23,300

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	55.5%	62.4%	0.2%	0.2%	47.4%	38.9%	99.8%	99.8%
2020	Approach D30 Factor	55.5%	62.4%	0.1%	0.1%	47.4%	38.9%	99.9%	99.9%
2030	Approach D30 Factor	55.5%	62.4%	0.2%	0.2%	47.4%	38.9%	99.9%	99.9%
2040	Approach D30 Factor	55.5%	62.4%	0.2%	0.2%	47.4%	38.9%	99.9%	99.9%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	0	1,010	130	0	0	0	130	880	0	60	1,400	70
2030	EST. TURNS												
2040	EST. TURNS	0	1,200	150	0	0	0	160	1050	0	70	2,030	90
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	0	1,200	50	0	0	0	110	750	0	50	1,620	100
2030	EST. TURNS												
2040	EST. TURNS	0	1,430	60	0	0	0	130	900	0	60	2,400	120

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		1369	1101	2470	4	2056	2060	1237	1373	2610	1588	2	1590
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		1448	1162	2610	2	2208	2210	1323	1467	2790	1708	2	1710
2020	TURN SUMMARY	1140	950	2090	0	1660	1660	1010	1070	2080	1530	0	1530
CONTROL LINK VOLUMES		1598	1282	2880	5	2445	2450	1430	1590	3020	1887	3	1890
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		1722	1388	3110	5	2715	2720	1558	1732	3290	2095	5	2100
2040	TURN SUMMARY	1350	1140	2490	0	2340	2340	1210	1270	2480	2190	0	2190
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		1541	929	2470	4	2056	2060	1014	1596	2610	1588	2	1590
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		1629	981	2610	2	2208	2210	1085	1705	2790	1708	2	1710
2020	TURN SUMMARY	1250	850	2100	0	1780	1780	860	1250	2110	1770	0	1770
CONTROL LINK VOLUMES		1798	1082	2880	5	2445	2450	1173	1847	3020	1887	3	1890
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		1938	1172	3110	5	2715	2720	1278	2012	3290	2095	5	2100
2040	TURN SUMMARY	1490	1020	2510	0	2590	2590	1030	1490	2520	2580	0	2580

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD-FORCED AND BALANCED
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	EB SW 7 St. at SW 17 Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	8,570	23,750	11,910	22,890
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**0.9%**	**CGR**	**1.0%**	**CGR**	**0.9%**	**CGR**	**1.0%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

				1		**1**		**1**		**1**
		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
		2013		8,570		23,750		11,910		22,890
NO. YEARS	7	2020	1.063	9,000	1.074	25,500	1.063	12,500	1.074	24,600
NO. YEARS	17	2030	1.161	10,000	1.190	28,300	1.161	14,000	1.190	27,200
NO. YEARS	27	2040	1.267	11,000	1.319	31,300	1.267	15,000	1.319	30,200

Percent Turns Calculated From Base Year AADTs:

JKTURNS	FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	8,570			23,750			11,910			22,890		
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
22,890	11,910	23,750	8,570	22,890	11,910	23,750	8,570	22,890	11,910	23,750	8,570
39%	20%	41%	20%	53%	27%	43%	16%	41%	27%	54%	19%
2020 2-WAY ADT	9,000			25,500			12,500			24,600	
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
24,600	12,500	25,500	9,000	24,600	12,500	25,500	9,000	24,600	12,500	25,500	9,000
39%	20%	41%	20%	53%	27%	43%	15%	42%	27%	54%	19%
2030 2-WAY ADT	10,000			28,300			14,000			27,200	
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
27,200	14,000	28,300	10,000	27,200	14,000	28,300	10,000	27,200	14,000	28,300	10,000
39%	20%	41%	20%	53%	27%	43%	15%	42%	27%	54%	19%
2040 2-WAY ADT	11,000			31,300			15,000			30,200	
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
30,200	15,000	31,300	11,000	30,200	15,000	31,300	11,000	30,200	15,000	31,300	11,000
39%	20%	41%	20%	54%	27%	43%	15%	42%	26%	55%	19%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	2,081			1,932			1,944			1,789			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	0	978	217	1	1	1	189	698	0	78	1,523	187	3,873
% TURNS:	0%	82%	18%	33%	33%	33%	21%	79%	0%	4%	85%	10%	
P.M.	2-Way Pk Hr Vol:	1,626			1,824			1,550			1,718			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	0	703	194	1	1	1	140	602	0	104	1,487	126	3,359
% TURNS:	0%	78%	22%	33%	33%	33%	19%	81%	0%	6%	87%	7%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		SB			WB			NB			EB	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
A.M.												
2013	0%	82%	18%	33%	33%	33%	21%	79%	0%	4%	85%	10%
2020	4%	76%	20%	32%	35%	33%	23%	72%	4%	7%	82%	11%
2030	5%	74%	21%	32%	36%	33%	24%	71%	5%	7%	81%	12%
2040	7%	71%	22%	31%	37%	32%	25%	68%	7%	8%	80%	12%
P.M.												
2013	0%	78%	22%	33%	33%	33%	19%	81%	0%	6%	87%	7%
2020	4%	73%	24%	32%	35%	33%	21%	75%	4%	8%	83%	9%
2030	5%	71%	24%	32%	36%	33%	22%	73%	5%	9%	83%	9%
2040	7%	69%	25%	31%	37%	32%	23%	70%	7%	9%	81%	9%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: EB SW 7 St. at SW 17 Ave.
PREPARED BY: NC
FILE: BUILD-FORCED AND BALANCED

DATE: 12/30/2014
NOTES:

0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	8,570	23,750	11,910	22,890
24 HR EST. AADT	2020	9,000	25,500	12,500	24,600
24 HR EST. AADT	2030	10,000	28,300	14,000	27,200
24 HR EST. AADT	2040	11,000	31,300	15,000	30,200

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	57.4%	55.2%	0.1%	0.1%	45.6%	47.9%	99.9%	99.9%
2020	Approach D30 Factor	57.4%	55.2%	0.1%	0.1%	45.6%	47.9%	99.9%	99.9%
2030	Approach D30 Factor	57.4%	55.2%	0.1%	0.1%	45.6%	47.9%	99.9%	99.9%
2040	Approach D30 Factor	57.4%	55.2%	0.1%	0.1%	45.6%	47.9%	99.9%	99.9%

A.M. DESIGN HR. TURNS		NORTH LEG RIGHT	NORTH LEG THRU	NORTH LEG LEFT	EAST LEG RIGHT	EAST LEG THRU	EAST LEG LEFT	SOUTH LEG RIGHT	SOUTH LEG THRU	SOUTH LEG LEFT	WEST LEG RIGHT	WEST LEG THRU	WEST LEG LEFT
2013	EST. TURNS												
2020	EST. TURNS	0	1,050	180	0	0	0	160	740	0	120	1,400	100
2030	EST. TURNS												
2040	EST. TURNS	0	1,260	210	0	0	0	190	880	0	140	2,040	120
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	0	900	170	0	0	0	140	650	0	80	1,700	100
2030	EST. TURNS												
2040	EST. TURNS	0	1,080	200	0	0	0	160	780	0	90	2,600	110

LINK VOLUME CHECK

		NORTH LEG FROM	NORTH LEG TO	NORTH LEG LINK	EAST LEG FROM	EAST LEG TO	EAST LEG LINK	SOUTH LEG FROM	SOUTH LEG TO	SOUTH LEG LINK	WEST LEG FROM	WEST LEG TO	WEST LEG LINK
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		443	327	770	2	2138	2140	489	581	1070	2059	1	2060
2013	TURN SUMMARY	1230	0	1230	0	180	180	0	1050	1050	0	0	0
CONTROL LINK VOLUMES		465	345	810	2	2298	2300	513	617	1130	2213	-3	2210
2020	TURN SUMMARY	#REF!	840	#REF!	0	#REF!	#REF!	900	#REF!	#REF!	1620	0	1620
CONTROL LINK VOLUMES		517	383	900	3	2547	2550	575	685	1260	2447	3	2450
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		569	421	990	3	2817	2820	616	734	1350	2716	4	2720
2040	TURN SUMMARY	1470	1000	2470	0	2440	2440	1070	1400	2470	2300	0	2300
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		425	345	770	2	2138	2140	513	557	1070	2059	1	2060
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		447	363	810	2	2298	2300	539	591	1130	2213	-3	2210
2020	TURN SUMMARY	1070	750	1820	0	2010	2010	790	980	1770	1880	0	1880
CONTROL LINK VOLUMES		496	404	900	3	2547	2550	603	657	1260	2447	3	2450
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		546	444	990	3	2817	2820	646	704	1350	2716	4	2720
2040	TURN SUMMARY	1280	890	2170	0	2960	2960	940	1170	2110	2800	0	2800

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD-FORCED AND BALANCED
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	EB SW 7 St. at SW 12 Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	8,920	18,170	10,880	23,750
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**0.9%**	**CGR**	**1.0%**	**CGR**	**0.9%**	**CGR**	**1.0%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
		2013		8,920		18,170		10,880		23,750
NO. YEARS	7	2020	1.063	9,500	1.074	19,500	1.063	11,500	1.074	25,500
NO. YEARS	17	2030	1.161	10,500	1.190	21,600	1.161	12,500	1.190	28,300
NO. YEARS	27	2040	1.267	11,500	1.319	24,000	1.267	14,000	1.319	31,300

Percent Turns Calculated From Base Year AADTs:

JKTURNS		FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG	
2013 2-WAY ADT		8,920			18,170			10,880			23,750	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	23,750	10,880	18,170	8,920	23,750	10,880	18,170	8,920	23,750	10,880	18,170	8,920
	45%	21%	34%	20%	55%	25%	36%	18%	47%	29%	48%	23%
2020 2-WAY ADT		9,500			19,500			11,500			25,500	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	25,500	11,500	19,500	9,500	25,500	11,500	19,500	9,500	25,500	11,500	19,500	9,500
	45%	20%	35%	20%	55%	25%	36%	17%	47%	28%	48%	23%
2030 2-WAY ADT		10,500			21,600			12,500			28,300	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	28,300	12,500	21,600	10,500	28,300	12,500	21,600	10,500	28,300	12,500	21,600	10,500
	45%	20%	35%	20%	55%	24%	36%	17%	47%	28%	48%	24%
2040 2-WAY ADT		11,500			24,000			14,000			31,300	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	31,300	14,000	24,000	11,500	31,300	14,000	24,000	11,500	31,300	14,000	24,000	11,500
	45%	20%	35%	20%	55%	25%	36%	17%	47%	28%	48%	23%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)		
A.M.	2-Way Pk Hr Vol:	1,103			2,046			971			2,122		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	0	333	124	1	1	1	88	452	0	97	1,831	193	3,121
% TURNS:	0%	73%	27%	33%	33%	33%	16%	84%	0%	5%	86%	9%	
P.M.	2-Way Pk Hr Vol:	1,306			1,656			1,134			1,656		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	0	516	163	1	1	1	87	452	0	78	1,403	174	2,876
% TURNS:	0%	76%	24%	33%	33%	33%	16%	84%	0%	5%	85%	11%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	0%	73%	27%	33%	33%	33%	16%	84%	0%	5%	86%	9%
	2020	5%	68%	28%	32%	35%	32%	18%	77%	5%	7%	83%	11%
	2030	6%	66%	28%	32%	36%	32%	19%	75%	6%	8%	82%	11%
	2040	8%	64%	28%	31%	37%	32%	20%	73%	8%	9%	80%	11%
P.M.													
	2013	0%	76%	24%	33%	33%	33%	16%	84%	0%	5%	85%	11%
	2020	5%	70%	25%	32%	35%	32%	18%	77%	5%	7%	81%	12%
	2030	6%	69%	25%	32%	36%	32%	19%	76%	6%	8%	80%	12%
	2040	8%	67%	26%	31%	37%	32%	19%	73%	8%	9%	79%	13%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: EB SW 7 St. at SW 12 Ave.
PREPARED BY: NC
FILE: BUILD-FORCED AND BALANCED

DATE: 12/30/2014
NOTES:

0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	8,920	18,170	10,880	23,750
24 HR EST. AADT	2020	9,500	19,500	11,500	25,500
24 HR EST. AADT	2030	10,500	21,600	12,500	28,300
24 HR EST. AADT	2040	11,500	24,000	14,000	31,300

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	41.4%	52.0%	0.1%	0.1%	55.6%	47.5%	99.9%	99.9%
2020	Approach D30 Factor	41.4%	52.0%	0.1%	0.1%	55.6%	47.5%	99.9%	99.9%
2030	Approach D30 Factor	41.4%	52.0%	0.1%	0.1%	55.6%	47.5%	99.9%	99.9%
2040	Approach D30 Factor	41.4%	52.0%	0.1%	0.1%	55.6%	47.5%	99.9%	99.9%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	0	360	100	0	0	0	110	490	0	140	1,500	150
2030	EST. TURNS												
2040	EST. TURNS	0	430	120	0	0	0	140	590	0	170	2,180	190
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	0	570	140	0	0	0	120	510	0	70	1,700	140
2030	EST. TURNS												
2040	EST. TURNS	0	680	170	0	0	0	130	600	0	90	2,600	170

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		333	467	800	2	1638	1640	545	435	980	2135	5	2140
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		354	506	860	3	1757	1760	576	464	1040	2293	7	2300
2020	TURN SUMMARY	460	640	1100	0	1710	1710	600	500	1100	1790	0	1790
CONTROL LINK VOLUMES		392	558	950	3	1937	1940	626	504	1130	2544	6	2550
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		429	611	1040	3	2157	2160	701	559	1260	2814	6	2820
2040	TURN SUMMARY	550	780	1330	0	2440	2440	730	600	1330	2540	0	2540
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		417	383	800	2	1638	1640	465	515	980	2136	4	2140
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		445	415	860	2	1758	1760	492	548	1040	2294	6	2300
2020	TURN SUMMARY	710	650	1360	0	1960	1960	630	640	1270	1910	0	1910
CONTROL LINK VOLUMES		491	459	950	2	1938	1940	535	595	1130	2545	5	2550
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		538	502	1040	2	2158	2160	599	661	1260	2815	5	2820
2040	TURN SUMMARY	850	770	1620	0	2900	2900	730	770	1500	2860	0	2860

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD-FORCED AND BALANCED
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	EB SW 7 St. at SR 7/SW 8 Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	6,320	22,770	3,780	18,170
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**0.9%**	**CGR**	**1.0%**	**CGR**	**0.9%**	**CGR**	**1.0%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
		2013		6,320		22,770		3,780		18,170
NO. YEARS	7	2020	1.063	6,500	1.074	24,500	1.063	4,000	1.074	19,500
NO. YEARS	17	2030	1.161	7,500	1.190	27,100	1.161	4,500	1.190	21,600
NO. YEARS	27	2040	1.267	8,000	1.319	30,000	1.267	5,000	1.319	24,000

Percent Turns Calculated From Base Year AADTs:

JKTURNS	FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	6,320			22,770			3,780			18,170		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	18,170	3,780	22,770	6,320	18,170	3,780	22,770	6,320	18,170	3,780	22,770	6,320
	41%	8%	51%	22%	64%	13%	48%	13%	38%	11%	69%	19%
2020 2-WAY ADT	6,500			24,500			4,000			19,500		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	19,500	4,000	24,500	6,500	19,500	4,000	24,500	6,500	19,500	4,000	24,500	6,500
	41%	8%	51%	22%	65%	13%	49%	13%	39%	11%	70%	19%
2030 2-WAY ADT	7,500			27,100			4,500			21,600		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	21,600	4,500	27,100	7,500	21,600	4,500	27,100	7,500	21,600	4,500	27,100	7,500
	41%	8%	51%	22%	64%	13%	48%	13%	38%	12%	69%	19%
2040 2-WAY ADT	8,000			30,000			5,000			24,000		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	24,000	5,000	30,000	8,000	24,000	5,000	30,000	8,000	24,000	5,000	30,000	8,000
	41%	8%	51%	22%	65%	14%	48%	13%	39%	12%	70%	19%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	574			1,772			363			1,757			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	0	115	164	1	1	1	49	146	0	52	1,556	148	2,233
% TURNS:	0%	41%	59%	33%	33%	33%	25%	75%	0%	3%	89%	8%	
P.M.	2-Way Pk Hr Vol:	539			1,701			357			1,783			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	0	142	100	1	1	1	35	128	0	51	1,563	168	2,190
% TURNS:	0%	59%	41%	33%	33%	33%	21%	79%	0%	3%	88%	9%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	0%	41%	59%	33%	33%	33%	25%	75%	0%	3%	89%	8%
	2020	4%	38%	58%	32%	37%	31%	27%	69%	4%	4%	87%	9%
	2030	5%	37%	58%	32%	37%	31%	28%	67%	5%	4%	86%	10%
	2040	7%	36%	57%	31%	39%	30%	29%	65%	6%	4%	85%	10%
P.M.													
	2013	0%	59%	41%	33%	33%	33%	21%	79%	0%	3%	88%	9%
	2020	4%	54%	42%	32%	37%	31%	24%	72%	4%	4%	86%	10%
	2030	5%	52%	43%	32%	37%	31%	25%	70%	5%	4%	85%	11%
	2040	7%	50%	43%	31%	39%	30%	26%	68%	6%	4%	85%	11%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: EB SW 7 St. at SR 7/SW 8 Ave.
PREPARED BY: NC
FILE: BUILD-FORCED AND BALANCED

DATE: 12/30/2014
NOTES:

0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	6,320	22,770	3,780	18,170
24 HR EST. AADT	2020	6,500	24,500	4,000	19,500
24 HR EST. AADT	2030	7,500	27,100	4,500	21,600
24 HR EST. AADT	2040	8,000	30,000	5,000	24,000

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	48.6%	44.9%	0.1%	0.1%	53.7%	45.7%	99.9%	99.9%
2020	Approach D30 Factor	48.6%	44.9%	0.1%	0.1%	53.7%	45.7%	99.9%	99.9%
2030	Approach D30 Factor	48.6%	44.9%	0.1%	0.1%	53.7%	45.7%	99.9%	99.9%
2040	Approach D30 Factor	48.6%	44.9%	0.1%	0.1%	53.7%	45.7%	99.9%	99.9%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	0	270	140	0	0	0	50	300	0	40	1,500	140
2030	EST. TURNS												
2040	EST. TURNS	0	320	170	0	0	0	60	360	0	50	2,200	170
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	0	160	100	0	0	0	40	210	0	40	1,700	160
2030	EST. TURNS												
2040	EST. TURNS	0	190	120	0	0	0	40	250	0	60	2,700	230

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		276	294	570	2	2048	2050	183	157	340	1634	6	1640
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		284	306	590	2	2208	2210	193	167	360	1754	6	1760
2020	TURN SUMMARY	410	440	850	0	1690	1690	350	310	660	1680	0	1680
CONTROL LINK VOLUMES		328	352	680	2	2438	2440	218	192	410	1943	-3	1940
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		350	370	720	3	2697	2700	242	208	450	2159	1	2160
2040	TURN SUMMARY	490	530	1020	0	2430	2430	420	370	790	2420	0	2420
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		255	315	570	2	2048	2050	155	185	340	1634	6	1640
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		263	327	590	2	2208	2210	164	196	360	1754	6	1760
2020	TURN SUMMARY	260	370	630	0	1840	1840	250	200	450	1900	0	1900
CONTROL LINK VOLUMES		303	377	680	2	2438	2440	185	225	410	1943	-3	1940
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		323	397	720	3	2697	2700	205	245	450	2159	1	2160
2040	TURN SUMMARY	310	480	790	0	2860	2860	290	250	540	2990	0	2990

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD-FORCED AND BALANCED
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	EB SW 7 St. at SW 4 Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	12,700	24,230	12,940	22,770
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**0.9%**	**CGR**	**1.9%**	**CGR**	**0.9%**	**CGR**	**1.9%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

				1		**1**		**1**		**1**
		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
		2013		12,700		24,230		12,940		22,770
NO. YEARS	7	2020	1.063	13,500	1.139	27,600	1.063	14,000	1.139	25,900
NO. YEARS	17	2030	1.161	14,500	1.372	33,300	1.161	15,000	1.372	31,300
NO. YEARS	27	2040	1.267	16,000	1.653	40,100	1.267	16,500	1.653	37,600

Percent Turns Calculated From Base Year AADTs:

JKTURNS	FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	12,700			24,230			12,940			22,770		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	22,770	12,940	24,230	12,700	22,770	12,940	24,230	12,700	22,770	12,940	24,230	12,700
	38%	22%	40%	26%	47%	27%	41%	21%	38%	26%	49%	25%
2020 2-WAY ADT	13,500			27,600			14,000			25,900		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	25,900	14,000	27,600	13,500	25,900	14,000	27,600	13,500	25,900	14,000	27,600	13,500
	38%	21%	41%	25%	49%	26%	41%	20%	39%	25%	50%	25%
2030 2-WAY ADT	14,500			33,300			15,000			31,300		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	31,300	15,000	33,300	14,500	31,300	15,000	33,300	14,500	31,300	15,000	33,300	14,500
	39%	19%	42%	24%	51%	25%	42%	18%	40%	24%	53%	23%
2040 2-WAY ADT	16,000			40,100			16,500			37,600		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	37,600	16,500	40,100	16,000	37,600	16,500	40,100	16,000	37,600	16,500	40,100	16,000
	40%	18%	43%	23%	54%	24%	43%	17%	40%	23%	55%	22%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	2,981			4,068			602			1,685			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	0	523	2,456	1	1	1	1	1	1	75	1,608	0	4,668
% TURNS:	0%	18%	82%	33%	33%	33%	33%	33%	33%	4%	96%	0%	
P.M.	2-Way Pk Hr Vol:	2,053			3,002			760			1,705			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	0	627	1,424	1	1	1	1	1	1	129	1,574	0	3,760
% TURNS:	0%	31%	69%	33%	33%	33%	33%	33%	33%	8%	92%	0%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	0%	18%	82%	33%	33%	33%	33%	33%	33%	4%	96%	0%
	2020	4%	18%	78%	33%	35%	33%	34%	32%	34%	7%	91%	2%
	2030	5%	18%	77%	32%	36%	32%	34%	31%	34%	7%	90%	3%
	2040	7%	18%	76%	32%	37%	32%	35%	31%	34%	8%	89%	4%
P.M.													
	2013	0%	31%	69%	33%	33%	33%	33%	33%	33%	8%	92%	0%
	2020	4%	30%	67%	33%	35%	33%	34%	32%	34%	9%	88%	2%
	2030	5%	29%	66%	32%	36%	32%	34%	31%	34%	10%	88%	3%
	2040	7%	28%	65%	32%	37%	32%	35%	31%	34%	10%	86%	4%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: EB SW 7 St. at SW 4 Ave.
PREPARED BY: NC
FILE: BUILD-FORCED AND BALANCED

DATE: 12/30/2014
NOTES:

0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	12,700	24,230	12,940	22,770
24 HR EST. AADT	2020	13,500	27,600	14,000	25,900
24 HR EST. AADT	2030	14,500	33,300	15,000	31,300
24 HR EST. AADT	2040	16,000	40,100	16,500	37,600

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	99.9%	99.9%	0.1%	0.1%	0.5%	0.4%	99.9%	99.9%
2020	Approach D30 Factor	99.9%	99.9%	0.1%	0.1%	0.5%	0.4%	99.9%	99.9%
2030	Approach D30 Factor	99.9%	99.9%	0.2%	0.2%	0.5%	0.4%	99.8%	99.8%
2040	Approach D30 Factor	99.9%	99.9%	0.2%	0.2%	0.5%	0.4%	99.8%	99.8%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	0	280	1,060	0	0	0	0	0	0	190	1,600	0
2030	EST. TURNS												
2040	EST. TURNS	0	350	1,310	0	0	0	0	0	0	270	2,320	0
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	0	580	590	0	0	0	0	0	0	150	1,880	0
2030	EST. TURNS												
2040	EST. TURNS	0	690	710	0	0	0	0	0	0	210	2,900	0

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		1142	-2	1140	2	2178	2180	6	1154	1160	2047	3	2050
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		1214	6	1220	3	2477	2480	6	1254	1260	2328	2	2330
2020	TURN SUMMARY	1340	0	1340	0	2660	2660	0	470	470	1790	0	1790
CONTROL LINK VOLUMES		1304	6	1310	5	2995	3000	7	1343	1350	2812	8	2820
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		1439	1	1440	7	3603	3610	7	1483	1490	3377	3	3380
2040	TURN SUMMARY	1660	0	1660	0	3630	3630	0	620	620	2590	0	2590
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		1142	-2	1140	2	2178	2180	5	1155	1160	2047	3	2050
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		1214	6	1220	3	2477	2480	5	1255	1260	2328	2	2330
2020	TURN SUMMARY	1170	0	1170	0	2470	2470	0	730	730	2030	0	2030
CONTROL LINK VOLUMES		1304	6	1310	5	2995	3000	5	1345	1350	2812	8	2820
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		1439	1	1440	7	3603	3610	6	1484	1490	3377	3	3380
2040	TURN SUMMARY	1400	0	1400	0	3610	3610	0	900	900	3110	0	3110

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD-FORCED AND BALANCED
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	EB SW 7 St. at SW 3 Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	3,400	24,110	2,950	24,230
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**0.9%**	**CGR**	**1.9%**	**CGR**	**0.9%**	**CGR**	**1.9%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
		2013		3,400		24,110		2,950		24,230
NO. YEARS	7	2020	1.063	3,500	1.139	27,500	1.063	3,000	1.139	27,600
NO. YEARS	17	2030	1.161	4,000	1.372	33,100	1.161	3,500	1.372	33,300
NO. YEARS	27	2040	1.267	4,500	1.653	39,900	1.267	3,500	1.653	40,100

Percent Turns Calculated From Base Year AADTs:

JKTURNS	FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	3,400			24,110			2,950			24,230		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	24,230	2,950	24,110	3,400	24,230	2,950	24,110	3,400	24,230	2,950	24,110	3,400
	47%	6%	47%	11%	79%	10%	47%	7%	47%	10%	79%	11%
2020 2-WAY ADT	3,500			27,500			3,000			27,600		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	27,600	3,000	27,500	3,500	27,600	3,000	27,500	3,500	27,600	3,000	27,500	3,500
	48%	5%	47%	10%	81%	9%	47%	6%	47%	9%	81%	10%
2030 2-WAY ADT	4,000			33,100			3,500			33,300		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	33,300	3,500	33,100	4,000	33,300	3,500	33,100	4,000	33,300	3,500	33,100	4,000
	48%	5%	47%	10%	82%	9%	47%	6%	47%	9%	82%	10%
2040 2-WAY ADT	4,500			39,900			3,500			40,100		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	40,100	3,500	39,900	4,500	40,100	3,500	39,900	4,500	40,100	3,500	39,900	4,500
	48%	4%	48%	9%	83%	7%	47%	5%	47%	7%	83%	9%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	569			2,314			935			2,276			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	0	327	15	1	1	1	233	194	0	180	2,063	32	3,047
% TURNS:	0%	96%	4%	33%	33%	33%	55%	45%	0%	8%	91%	1%	
P.M.	2-Way Pk Hr Vol:	750			1,661			887			1,620			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	0	466	15	1	1	1	176	180	0	64	1,467	88	2,459
% TURNS:	0%	97%	3%	33%	33%	33%	49%	51%	0%	4%	91%	5%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	0%	96%	4%	33%	33%	33%	55%	45%	0%	8%	91%	1%
	2020	5%	87%	9%	31%	38%	31%	54%	41%	5%	8%	90%	2%
	2030	6%	84%	10%	30%	39%	30%	54%	40%	6%	8%	90%	2%
	2040	8%	80%	12%	29%	42%	29%	53%	39%	8%	8%	89%	3%
P.M.													
	2013	0%	97%	3%	33%	33%	33%	49%	51%	0%	4%	91%	5%
	2020	5%	88%	8%	31%	38%	31%	49%	46%	5%	4%	90%	6%
	2030	6%	85%	9%	30%	39%	30%	49%	45%	6%	5%	89%	6%
	2040	8%	81%	11%	29%	42%	29%	49%	43%	8%	5%	89%	6%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: EB SW 7 St. at SW 3 Ave.
PREPARED BY: NC
FILE: BUILD-FORCED AND BALANCED

DATE: 12/30/2014
NOTES:

0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	3,400	24,110	2,950	24,230
24 HR EST. AADT	2020	3,500	27,500	3,000	27,600
24 HR EST. AADT	2030	4,000	33,100	3,500	33,300
24 HR EST. AADT	2040	4,500	39,900	3,500	40,100

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	60.1%	64.1%	0.1%	0.1%	45.7%	40.1%	99.9%	99.9%
2020	Approach D30 Factor	60.1%	64.1%	0.1%	0.1%	45.7%	40.1%	99.9%	99.9%
2030	Approach D30 Factor	60.1%	64.1%	0.1%	0.1%	45.7%	40.1%	99.9%	99.9%
2040	Approach D30 Factor	60.1%	64.1%	0.1%	0.1%	45.7%	40.1%	99.9%	99.9%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	0	0	0	0	0	0	290	260	0	120	1,550	110
2030	EST. TURNS												
2040	EST. TURNS	0	0	0	0	0	0	340	310	0	140	2,250	140
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	0	0	0	0	0	0	330	300	0	200	1,500	210
2030	EST. TURNS												
2040	EST. TURNS	0	0	0	0	0	0	400	360	0	240	2,350	310

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		184	126	310	3	2167	2170	121	149	270	2179	1	2180
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		189	131	320	3	2477	2480	123	147	270	2482	-2	2480
2020	TURN SUMMARY	0	370	370	0	1840	1840	550	120	670	1780	0	1780
CONTROL LINK VOLUMES		216	144	360	4	2976	2980	144	176	320	2994	6	3000
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		243	167	410	5	3585	3590	144	176	320	3605	5	3610
2040	TURN SUMMARY	0	450	450	0	2590	2590	650	140	790	2530	0	2530
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		196	114	310	2	2168	2170	107	163	270	2179	1	2180
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		202	118	320	2	2478	2480	108	162	270	2482	-2	2480
2020	TURN SUMMARY	0	510	510	0	1830	1830	630	200	830	1910	0	1910
CONTROL LINK VOLUMES		231	129	360	3	2977	2980	126	194	320	2995	5	3000
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		260	150	410	4	3586	3590	126	194	320	3607	3	3610
2040	TURN SUMMARY	0	670	670	0	2750	2750	760	240	1000	2900	0	2900

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD-FORCED AND BALANCED
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	EB SW 7 St. at SW 2 Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	16,400	17,310	11,880	24,110
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**0.9%**	**CGR**	**1.9%**	**CGR**	**0.9%**	**CGR**	**1.9%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
			1		**1**		**1**		**1**	
		2013		16,400		17,310		11,880		24,110
NO. YEARS	7	2020	1.063	17,500	1.139	19,700	1.063	12,500	1.139	27,500
NO. YEARS	17	2030	1.161	19,000	1.372	23,800	1.161	14,000	1.372	33,100
NO. YEARS	27	2040	1.267	21,000	1.653	28,600	1.267	15,000	1.653	39,900

Percent Turns Calculated From Base Year AADTs:

JKTURNS	FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	16,400			17,310			11,880			24,110		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	24,110	11,880	17,310	16,400	24,110	11,880	17,310	16,400	24,110	11,880	17,310	16,400
	45%	22%	32%	31%	46%	23%	30%	28%	42%	26%	38%	36%
2020 2-WAY ADT	17,500			19,700			12,500			27,500		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	27,500	12,500	19,700	17,500	27,500	12,500	19,700	17,500	27,500	12,500	19,700	17,500
	46%	21%	33%	30%	48%	22%	30%	27%	43%	25%	40%	35%
2030 2-WAY ADT	19,000			23,800			14,000			33,100		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	33,100	14,000	23,800	19,000	33,100	14,000	23,800	19,000	33,100	14,000	23,800	19,000
	47%	20%	34%	29%	50%	21%	31%	25%	44%	25%	42%	33%
2040 2-WAY ADT	21,000			28,600			15,000			39,900		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	39,900	15,000	28,600	21,000	39,900	15,000	28,600	21,000	39,900	15,000	28,600	21,000
	48%	18%	34%	28%	53%	20%	32%	23%	45%	23%	44%	33%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	1,628			1,864			1,442			2,286			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	0	216	129	1	1	1	81	896	0	248	1,651	386	3,610
% TURNS:	0%	63%	37%	33%	33%	33%	8%	92%	0%	11%	72%	17%	
P.M.	2-Way Pk Hr Vol:	1,683			1,361			1,678			1,822			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	0	351	146	1	1	1	82	869	0	375	1,130	316	3,272
% TURNS:	0%	71%	29%	33%	33%	33%	9%	91%	0%	21%	62%	17%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	0%	63%	37%	33%	33%	33%	8%	92%	0%	11%	72%	17%
	2020	5%	58%	37%	33%	35%	32%	11%	85%	4%	12%	69%	19%
	2030	6%	57%	37%	33%	35%	32%	11%	83%	5%	13%	68%	19%
	2040	8%	55%	37%	32%	37%	31%	12%	80%	7%	13%	68%	19%
P.M.													
	2013	0%	71%	29%	33%	33%	33%	9%	91%	0%	21%	62%	17%
	2020	5%	66%	30%	33%	35%	32%	11%	85%	4%	21%	60%	19%
	2030	6%	64%	30%	33%	35%	32%	11%	83%	5%	21%	60%	19%
	2040	8%	62%	30%	32%	37%	31%	13%	80%	7%	21%	59%	20%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: EB SW 7 St. at SW 2 Ave.
PREPARED BY: NC
FILE: BUILD-FORCED AND BALANCED

DATE: 12/30/2014
NOTES:

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ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	16,400	17,310	11,880	24,110
24 HR EST. AADT	2020	17,500	19,700	12,500	27,500
24 HR EST. AADT	2030	19,000	23,800	14,000	33,100
24 HR EST. AADT	2040	21,000	28,600	15,000	39,900

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	21.2%	29.5%	0.1%	0.1%	67.8%	56.7%	99.9%	99.9%
2020	Approach D30 Factor	21.2%	29.5%	0.1%	0.1%	67.8%	56.7%	99.9%	99.9%
2030	Approach D30 Factor	21.2%	29.5%	0.1%	0.1%	67.8%	56.7%	99.9%	99.9%
2040	Approach D30 Factor	21.2%	29.5%	0.1%	0.1%	67.8%	56.7%	99.9%	99.9%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2020	EST. TURNS	0	230	100	0	0	0	60	670	0	210	1,290	460
2040	EST. TURNS	0	280	120	0	0	0	70	810	0	310	1,870	670
P.M. DESIGN HR. TURNS													
2020	EST. TURNS	0	400	130	0	0	0	80	640	0	320	1,220	450
2040	EST. TURNS	0	480	160	0	0	0	90	760	0	470	1,890	650

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		313	1167	1480	2	1558	1560	724	346	1070	2168	2	2170
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		334	1246	1580	2	1768	1770	762	368	1130	2473	7	2480
2020	TURN SUMMARY	330	1130	1460	0	1450	1450	730	440	1170	1960	0	1960
CONTROL LINK VOLUMES		362	1348	1710	2	2138	2140	854	406	1260	2976	4	2980
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		401	1489	1890	3	2567	2570	915	435	1350	3587	3	3590
2040	TURN SUMMARY	400	1480	1880	0	2060	2060	880	590	1470	2850	0	2850
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		436	1044	1480	2	1558	1560	606	464	1070	2169	1	2170
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		465	1115	1580	2	1768	1770	638	492	1130	2474	6	2480
2020	TURN SUMMARY	530	1090	1620	0	1430	1430	720	720	1440	1990	0	1990
CONTROL LINK VOLUMES		505	1205	1710	2	2138	2140	714	546	1260	2977	3	2980
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		558	1332	1890	3	2567	2570	765	585	1350	3589	1	3590
2040	TURN SUMMARY	640	1410	2050	0	2140	2140	850	950	1800	3010	0	3010

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD-FORCED AND BALANCED
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	EB SW 7 St. at SW 1 Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	4,040	12,530	6,990	17,310
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**0.9%**	**CGR**	**1.9%**	**CGR**	**0.9%**	**CGR**	**1.9%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
		2013		4,040		12,530		6,990		17,310
NO. YEARS	7	2020	1.063	4,500	1.139	14,300	1.063	7,500	1.139	19,700
NO. YEARS	17	2030	1.161	4,500	1.372	17,200	1.161	8,000	1.372	23,800
NO. YEARS	27	2040	1.267	5,000	1.653	20,700	1.267	9,000	1.653	28,600

Percent Turns Calculated From Base Year AADTs:

JKTURNS	FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	4,040			12,530			6,990			17,310		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	17,310	6,990	12,530	4,040	17,310	6,990	12,530	4,040	17,310	6,990	12,530	4,040
	47%	19%	34%	14%	61%	25%	37%	12%	51%	30%	53%	17%
2020 2-WAY ADT	4,500			14,300			7,500			19,700		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	19,700	7,500	14,300	4,500	19,700	7,500	14,300	4,500	19,700	7,500	14,300	4,500
	47%	18%	34%	14%	62%	24%	37%	12%	51%	29%	54%	17%
2030 2-WAY ADT	4,500			17,200			8,000			23,800		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	23,800	8,000	17,200	4,500	23,800	8,000	17,200	4,500	23,800	8,000	17,200	4,500
	49%	16%	35%	12%	66%	22%	38%	10%	52%	27%	58%	15%
2040 2-WAY ADT	5,000			20,700			9,000			28,600		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	28,600	9,000	20,700	5,000	28,600	9,000	20,700	5,000	28,600	9,000	20,700	5,000
	49%	15%	36%	12%	67%	21%	38%	9%	53%	26%	60%	14%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	672			1,765			960			2,049			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	0	463	207	1	1	1	1	1	1	493	1,554	0	2,723
% TURNS:	0%	69%	31%	33%	33%	33%	33%	33%	33%	24%	76%	0%	
P.M.	2-Way Pk Hr Vol:	852			1,186			1,056			1,386			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	0	712	138	1	1	1	1	1	1	340	1,044	0	2,240
% TURNS:	0%	84%	16%	33%	33%	33%	33%	33%	33%	25%	75%	0%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	0%	69%	31%	33%	33%	33%	33%	33%	33%	24%	76%	0%
	2020	5%	64%	31%	31%	36%	32%	34%	31%	35%	25%	74%	2%
	2030	6%	63%	31%	31%	37%	32%	34%	30%	36%	24%	74%	2%
	2040	8%	60%	32%	30%	39%	31%	34%	29%	37%	24%	73%	2%
P.M.													
	2013	0%	84%	16%	33%	33%	33%	33%	33%	33%	25%	75%	0%
	2020	5%	77%	18%	31%	36%	32%	34%	31%	35%	25%	73%	2%
	2030	6%	75%	19%	31%	37%	32%	34%	30%	36%	25%	73%	2%
	2040	8%	72%	19%	30%	39%	31%	34%	29%	37%	25%	73%	2%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: EB SW 7 St. at SW 1 Ave.
PREPARED BY: NC
FILE: BUILD-FORCED AND BALANCED

DATE: 12/30/2014
NOTES:

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ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	4,040	12,530	6,990	17,310
24 HR EST. AADT	2020	4,500	14,300	7,500	19,700
24 HR EST. AADT	2030	4,500	17,200	8,000	23,800
24 HR EST. AADT	2040	5,000	20,700	9,000	28,600

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	99.7%	99.8%	0.1%	0.1%	0.3%	0.3%	99.9%	99.9%
2020	Approach D30 Factor	99.7%	99.8%	0.2%	0.2%	0.3%	0.3%	99.8%	99.8%
2030	Approach D30 Factor	99.7%	99.8%	0.2%	0.2%	0.3%	0.3%	99.8%	99.8%
2040	Approach D30 Factor	99.7%	99.8%	0.2%	0.2%	0.3%	0.3%	99.8%	99.8%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	0	600	370	0	0	0	0	0	0	440	1,160	0
2030	EST. TURNS												
2040	EST. TURNS	0	720	440	0	0	0	0	0	0	630	1,690	0
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	0	990	340	0	0	0	0	0	0	310	1,250	0
2030	EST. TURNS												
2040	EST. TURNS	0	1,180	410	0	0	0	0	0	0	460	1,900	0

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		363	-3	360	1	1129	1130	2	628	630	1556	4	1560
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		404	6	410	3	1287	1290	2	678	680	1769	1	1770
2020	TURN SUMMARY	970	0	970	0	1530	1530	0	1040	1040	1600	0	1600
CONTROL LINK VOLUMES		404	6	410	3	1547	1550	2	718	720	2138	2	2140
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		449	1	450	4	1856	1860	3	807	810	2569	1	2570
2040	TURN SUMMARY	1160	0	1160	0	2130	2130	0	1350	1350	2320	0	2320
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		363	-3	360	1	1129	1130	2	628	630	1556	4	1560
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		404	6	410	3	1287	1290	2	678	680	1769	1	1770
2020	TURN SUMMARY	1330	0	1330	0	1590	1590	0	1300	1300	1560	0	1560
CONTROL LINK VOLUMES		404	6	410	3	1547	1550	2	718	720	2138	2	2140
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		449	1	450	4	1856	1860	2	808	810	2569	1	2570
2040	TURN SUMMARY	1590	0	1590	0	2310	2310	0	1640	1640	2360	0	2360

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD-FORCED AND BALANCED
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	EB SW 7 St. at S Miami Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	5,730	14,490	9,010	12,530
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**0.9%**	**CGR**	**1.9%**	**CGR**	**0.9%**	**CGR**	**1.9%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
			1		**1**		**1**		**1**	
		2013		5,730		14,490		9,010		12,530
NO. YEARS	7	2020	1.063	6,000	1.139	16,500	1.063	9,500	1.139	14,300
NO. YEARS	17	2030	1.161	6,500	1.372	19,900	1.161	10,500	1.372	17,200
NO. YEARS	27	2040	1.267	7,500	1.653	24,000	1.267	11,500	1.653	20,700

Percent Turns Calculated From Base Year AADTs:

JKTURNS	FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	5,730			14,490			9,010			12,530		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	12,530	9,010	14,490	5,730	12,530	9,010	14,490	5,730	12,530	9,010	14,490	5,730
	35%	25%	40%	21%	46%	33%	44%	17%	38%	31%	50%	20%
2020 2-WAY ADT	6,000			16,500			9,500			14,300		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	14,300	9,500	16,500	6,000	14,300	9,500	16,500	6,000	14,300	9,500	16,500	6,000
	35%	24%	41%	20%	48%	32%	45%	16%	39%	30%	52%	19%
2030 2-WAY ADT	6,500			19,900			10,500			17,200		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	17,200	10,500	19,900	6,500	17,200	10,500	19,900	6,500	17,200	10,500	19,900	6,500
	36%	22%	42%	19%	50%	31%	46%	15%	39%	28%	54%	18%
2040 2-WAY ADT	7,500			24,000			11,500			20,700		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	20,700	11,500	24,000	7,500	20,700	11,500	24,000	7,500	20,700	11,500	24,000	7,500
	37%	20%	43%	19%	52%	29%	46%	14%	40%	27%	56%	17%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	832			1,711			668			1,871			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	1	1	1	1	1	1	69	597	0	0	1,638	231	2,541
% TURNS:	33%	33%	33%	33%	33%	33%	10%	90%	0%	0%	88%	12%	
P.M.	2-Way Pk Hr Vol:	976			1,006			739			1,239			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	1	1	1	1	1	1	51	686	0	0	951	286	1,980
% TURNS:	33%	33%	33%	33%	33%	33%	7%	93%	0%	0%	77%	23%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	33%	33%	33%	33%	33%	33%	10%	90%	0%	0%	88%	12%
	2020	34%	32%	34%	32%	35%	33%	14%	82%	4%	3%	84%	13%
	2030	34%	32%	34%	32%	35%	33%	15%	80%	5%	4%	83%	13%
	2040	34%	31%	35%	31%	36%	33%	16%	77%	7%	4%	82%	13%
P.M.													
	2013	33%	33%	33%	33%	33%	33%	7%	93%	0%	0%	77%	23%
	2020	34%	32%	34%	32%	35%	33%	11%	85%	4%	3%	74%	23%
	2030	34%	32%	34%	32%	35%	33%	12%	83%	5%	4%	74%	22%
	2040	34%	31%	35%	31%	36%	33%	13%	80%	7%	4%	73%	22%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: EB SW 7 St. at S Miami Ave.
PREPARED BY: NC
FILE: BUILD-FORCED AND BALANCED

DATE: 12/30/2014
NOTES:

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ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	5,730	14,490	9,010	12,530
24 HR EST. AADT	2020	6,000	16,500	9,500	14,300
24 HR EST. AADT	2030	6,500	19,900	10,500	17,200
24 HR EST. AADT	2040	7,500	24,000	11,500	20,700

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	0.4%	0.3%	0.1%	0.1%	99.7%	99.7%	99.9%	99.9%
2020	Approach D30 Factor	0.4%	0.3%	0.1%	0.1%	99.7%	99.7%	99.9%	99.9%
2030	Approach D30 Factor	0.4%	0.3%	0.1%	0.1%	99.7%	99.7%	99.9%	99.9%
2040	Approach D30 Factor	0.4%	0.3%	0.1%	0.1%	99.7%	99.7%	99.9%	99.9%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	0	0	0	0	0	0	80	720	0	0	1,190	270
2030	EST. TURNS												
2040	EST. TURNS	0	0	0	0	0	0	100	860	0	0	1,730	390
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	0	0	0	0	0	0	140	1050	0	0	1,060	700
2030	EST. TURNS												
2040	EST. TURNS	0	0	0	0	0	0	170	1250	0	0	1,540	1,010

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		2	518	520	1	1299	1300	808	2	810	1126	4	1130
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		2	538	540	1	1489	1490	852	8	860	1286	4	1290
2020	TURN SUMMARY	0	990	990	0	1270	1270	800	0	800	1460	0	1460
CONTROL LINK VOLUMES		2	588	590	2	1788	1790	942	8	950	1546	4	1550
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		2	678	680	2	2158	2160	1032	8	1040	1861	-1	1860
2040	TURN SUMMARY	0	1250	1250	0	1830	1830	960	0	960	2120	0	2120
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		2	518	520	1	1299	1300	809	1	810	1127	3	1130
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		2	538	540	1	1489	1490	853	7	860	1286	4	1290
2020	TURN SUMMARY	0	1750	1750	0	1200	1200	1190	0	1190	1760	0	1760
CONTROL LINK VOLUMES		2	588	590	2	1788	1790	942	8	950	1546	4	1550
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		2	678	680	2	2158	2160	1032	8	1040	1861	-1	1860
2040	TURN SUMMARY	0	2260	2260	0	1710	1710	1420	0	1420	2550	0	2550

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD-FORCED AND BALANCED
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	EB SW 7 St. at Brickell Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	45,980	11,840	42,390	14,490
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**0.9%**	**CGR**	**1.9%**	**CGR**	**0.9%**	**CGR**	**1.9%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
		2013		45,980		11,840		42,390		14,490
NO. YEARS	7	2020	1.063	49,000	1.139	13,500	1.063	45,000	1.139	16,500
NO. YEARS	17	2030	1.161	53,500	1.372	16,300	1.161	49,000	1.372	19,900
NO. YEARS	27	2040	1.267	58,500	1.653	19,600	1.267	53,500	1.653	24,000

Percent Turns Calculated From Base Year AADTs:

JKTURNS		FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG	
2013 2-WAY ADT		45,980			11,840			42,390			14,490	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	14,490	42,390	11,840	45,980	14,490	42,390	11,840	45,980	14,490	42,390	11,840	45,980
	21%	62%	17%	45%	14%	41%	16%	64%	20%	42%	12%	46%
2020 2-WAY ADT		49,000			13,500			45,000			16,500	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	16,500	45,000	13,500	49,000	16,500	45,000	13,500	49,000	16,500	45,000	13,500	49,000
	22%	60%	18%	44%	15%	41%	17%	62%	21%	42%	13%	46%
2030 2-WAY ADT		53,500			16,300			49,000			19,900	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	19,900	49,000	16,300	53,500	19,900	49,000	16,300	53,500	19,900	49,000	16,300	53,500
	23%	58%	19%	44%	16%	40%	18%	60%	22%	41%	14%	45%
2040 2-WAY ADT		58,500			19,600			53,500			24,000	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	24,000	53,500	19,600	58,500	24,000	53,500	19,600	58,500	24,000	53,500	19,600	58,500
	25%	55%	20%	43%	18%	39%	19%	57%	24%	41%	15%	44%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	3,133			2,107			2,351			1,461			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	0	816	346	589	1	233	233	848	0	221	705	534	4,526
% TURNS:	0%	70%	30%	72%	0%	28%	22%	78%	0%	15%	48%	37%	
P.M.	2-Way Pk Hr Vol:	3,108			1,749			2,682			907			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	0	1,095	313	518	1	278	191	921	0	197	448	261	4,223
% TURNS:	0%	78%	22%	65%	0%	35%	17%	83%	0%	22%	49%	29%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	0%	70%	30%	72%	0%	28%	22%	78%	0%	15%	48%	37%
	2020	2%	69%	29%	69%	2%	30%	21%	77%	2%	18%	45%	37%
	2030	3%	69%	28%	68%	2%	30%	21%	76%	3%	18%	44%	38%
	2040	4%	68%	28%	67%	3%	30%	21%	75%	4%	19%	43%	38%
P.M.													
	2013	0%	78%	22%	65%	0%	35%	17%	83%	0%	22%	49%	29%
	2020	2%	76%	22%	63%	2%	35%	17%	81%	2%	24%	46%	30%
	2030	3%	75%	22%	62%	2%	36%	17%	80%	3%	24%	45%	31%
	2040	4%	74%	22%	61%	3%	36%	18%	79%	4%	25%	44%	31%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: EB SW 7 St. at Brickell Ave.
PREPARED BY: NC
FILE: BUILD-FORCED AND BALANCED

DATE: 12/30/2014
NOTES:

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ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	45,980	11,840	42,390	14,490
24 HR EST. AADT	2020	49,000	13,500	45,000	16,500
24 HR EST. AADT	2030	53,500	16,300	49,000	19,900
24 HR EST. AADT	2040	58,500	19,600	53,500	24,000

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	37.1%	45.3%	0.1%	0.1%	46.0%	41.5%	99.9%	99.9%
2020	Approach D30 Factor	37.1%	45.3%	0.1%	0.1%	46.0%	41.5%	99.9%	99.9%
2030	Approach D30 Factor	37.1%	45.3%	0.1%	0.1%	46.0%	41.5%	99.9%	99.9%
2040	Approach D30 Factor	37.1%	45.3%	0.1%	0.1%	46.0%	41.5%	99.9%	99.9%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	0	1,510	220	50	0	50	270	950	0	250	560	430
2030	EST. TURNS												
2040	EST. TURNS	0	1,800	260	70	0	70	330	1130	0	360	820	620
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	0	1,810	30	110	0	80	10	1500	0	760	30	310
2030	EST. TURNS												
2040	EST. TURNS	0	2,160	30	140	0	90	20	1860	0	1,100	30	450

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		1535	2605	4140	1	1069	1070	1754	2066	3820	1303	-3	1300
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		1636	2774	4410	1	1219	1220	1862	2188	4050	1484	6	1490
2020	TURN SUMMARY	1730	1430	3160	100	1050	1150	1220	1810	3030	1240	0	1240
CONTROL LINK VOLUMES		1786	3034	4820	1	1469	1470	2028	2382	4410	1789	1	1790
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		1953	3317	5270	2	1758	1760	2214	2606	4820	2158	2	2160
2040	TURN SUMMARY	2060	1820	3880	140	1410	1550	1460	2230	3690	1800	0	1800
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		1875	2265	4140	1	1069	1070	1582	2238	3820	1303	-3	1300
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		1998	2412	4410	1	1219	1220	1679	2371	4050	1484	6	1490
2020	TURN SUMMARY	1840	1920	3760	190	70	260	1510	2650	4160	1100	0	1100
CONTROL LINK VOLUMES		2181	2639	4820	1	1469	1470	1828	2582	4410	1789	1	1790
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		2385	2885	5270	2	1758	1760	1996	2824	4820	2158	2	2160
2040	TURN SUMMARY	2190	2450	4640	230	80	310	1880	3350	5230	1580	0	1580

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD-BASED ON FIELD K&D
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	EB SR 90 at SR 9		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	41,180	34,490	39,450	37,770
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**0.9%**	**CGR**	**1.0%**	**CGR**	**0.9%**	**CGR**	**1.0%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
		2013		41,180		34,490		39,450		37,770
NO. YEARS	7	2020	1.063	44,000	1.074	37,100	1.063	42,000	1.074	40,600
NO. YEARS	17	2030	1.161	48,000	1.190	41,100	1.161	46,000	1.190	45,000
NO. YEARS	27	2040	1.267	52,000	1.319	45,500	1.267	50,000	1.319	49,800

Percent Turns Calculated From Base Year AADTs:

JKTURNS	FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	41,180			34,490			39,450			37,770		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	37,770	39,450	34,490	41,180	37,770	39,450	34,490	41,180	37,770	39,450	34,490	41,180
	34%	35%	31%	35%	32%	33%	30%	36%	33%	34%	30%	36%
2020 2-WAY ADT	44,000			37,100			42,000			40,600		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	40,600	42,000	37,100	44,000	40,600	42,000	37,100	44,000	40,600	42,000	37,100	44,000
	34%	35%	31%	35%	32%	33%	30%	36%	33%	34%	30%	36%
2030 2-WAY ADT	48,000			41,100			46,000			45,000		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	45,000	46,000	41,100	48,000	45,000	46,000	41,100	48,000	45,000	46,000	41,100	48,000
	34%	35%	31%	35%	32%	33%	31%	36%	34%	34%	30%	36%
2040 2-WAY ADT	52,000			45,500			50,000			49,800		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	49,800	50,000	45,500	52,000	49,800	50,000	45,500	52,000	49,800	50,000	45,500	52,000
	34%	34%	31%	34%	33%	33%	31%	35%	34%	34%	31%	35%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	3,230			2,749			3,484			2,557			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	94	1,366	190	21	1,102	0	317	1,559	182	60	1,119	0	6,010
% TURNS:	6%	83%	12%	2%	98%	0%	15%	76%	9%	5%	95%	0%	
P.M.	2-Way Pk Hr Vol:	3,085			2,673			3,095			2,509			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	136	1,320	262	38	1,265	0	223	1,329	180	43	885	0	5,681
% TURNS:	8%	77%	15%	3%	97%	0%	13%	77%	10%	5%	95%	0%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	6%	83%	12%	2%	98%	0%	15%	76%	9%	5%	95%	0%
	2020	9%	78%	13%	5%	92%	3%	17%	72%	11%	8%	88%	4%
	2030	9%	77%	14%	6%	90%	4%	17%	71%	12%	9%	87%	4%
	2040	10%	75%	15%	7%	87%	5%	18%	69%	13%	10%	84%	6%
P.M.													
	2013	8%	77%	15%	3%	97%	0%	13%	77%	10%	5%	95%	0%
	2020	11%	73%	17%	6%	91%	3%	15%	73%	13%	8%	89%	4%
	2030	11%	72%	17%	7%	89%	4%	15%	72%	13%	8%	87%	4%
	2040	12%	70%	18%	8%	86%	5%	16%	70%	14%	10%	85%	6%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: EB SR 90 at SR 9
PREPARED BY: NC
FILE: BUILD-BASED ON FIELD K&D

DATE: 12/30/2014
NOTES:

0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	41,180	34,490	39,450	37,770
24 HR EST. AADT	2020	44,000	37,100	42,000	40,600
24 HR EST. AADT	2030	48,000	41,100	46,000	45,000
24 HR EST. AADT	2040	52,000	45,500	50,000	49,800

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	51.1%	55.7%	41.1%	58.9%	59.1%	56.0%	58.9%	41.1%
2020	Approach D30 Factor	51.1%	55.7%	41.1%	58.9%	59.1%	56.0%	58.9%	41.1%
2030	Approach D30 Factor	51.1%	55.7%	41.1%	58.9%	59.1%	56.0%	58.9%	41.1%
2040	Approach D30 Factor	51.1%	55.7%	41.1%	58.9%	59.1%	56.0%	58.9%	41.1%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	100	1,500	70	50	230	0	120	1,710	200	60	470	70
2030	EST. TURNS												
2040	EST. TURNS	130	1,900	90	70	290	0	150	2160	250	80	570	90
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	150	1,380	70	110	220	50	60	1450	200	50	580	70
2030	EST. TURNS												
2040	EST. TURNS	190	1,750	90	140	260	100	80	1840	250	60	690	80

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		1893	1817	3710	1276	1824	3100	2097	1453	3550	2002	1398	3400
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		2023	1937	3960	1372	1968	3340	2233	1547	3780	2152	1498	3650
2020	TURN SUMMARY	1670	1830	3500	280	660	940	2030	1560	3590	600	530	1130
CONTROL LINK VOLUMES		2207	2113	4320	1520	2180	3700	2445	1695	4140	2385	1665	4050
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		2391	2289	4680	1683	2417	4100	2658	1842	4500	2640	1840	4480
2040	TURN SUMMARY	2120	2320	4440	360	810	1170	2560	1980	4540	740	670	1410
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		2064	1646	3710	1828	1272	3100	1987	1563	3550	1397	2003	3400
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		2205	1755	3960	1967	1373	3340	2115	1665	3780	1502	2148	3650
2020	TURN SUMMARY	1600	1630	3230	380	710	1090	1710	1480	3190	700	570	1270
CONTROL LINK VOLUMES		2406	1914	4320	2179	1521	3700	2317	1823	4140	1665	2385	4050
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		2606	2074	4680	2412	1688	4100	2518	1982	4500	1842	2638	4480
2040	TURN SUMMARY	2030	2060	4090	500	860	1360	2170	1910	4080	830	700	1530

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD-BASED ON FIELD K&D
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	EB SR 90 at SW 24 Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	2,870	12,250	2,870	34,490
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**0.9%**	**CGR**	**1.0%**	**CGR**	**0.9%**	**CGR**	**1.0%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
			1		**1**		**1**		**1**	
		2013		2,870		12,250		2,870		34,490
NO. YEARS	7	2020	1.063	3,000	1.074	13,200	1.063	3,000	1.074	37,100
NO. YEARS	17	2030	1.161	3,500	1.190	14,600	1.161	3,500	1.190	41,100
NO. YEARS	27	2040	1.267	3,500	1.319	16,200	1.267	3,500	1.319	45,500

Percent Turns Calculated From Base Year AADTs:

JKTURNS	FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	2,870			12,250			2,870			34,490		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	34,490	2,870	12,250	2,870	34,490	2,870	12,250	2,870	34,490	2,870	12,250	2,870
	70%	6%	25%	7%	86%	7%	25%	6%	70%	16%	68%	16%
2020 2-WAY ADT	3,000			13,200			3,000			37,100		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	37,100	3,000	13,200	3,000	37,100	3,000	13,200	3,000	37,100	3,000	13,200	3,000
	70%	6%	25%	7%	86%	7%	25%	6%	70%	16%	69%	16%
2030 2-WAY ADT	3,500			14,600			3,500			41,100		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	41,100	3,500	14,600	3,500	41,100	3,500	14,600	3,500	41,100	3,500	14,600	3,500
	69%	6%	25%	7%	85%	7%	25%	6%	69%	16%	68%	16%
2040 2-WAY ADT	3,500			16,200			3,500			45,500		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	45,500	3,500	16,200	3,500	45,500	3,500	16,200	3,500	45,500	3,500	16,200	3,500
	70%	5%	25%	7%	87%	7%	25%	5%	70%	15%	70%	15%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	192			2,480			210			2,462			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	0	57	37	0	998	0	67	49	0	37	1,378	49	2,672
% TURNS:	0%	61%	39%	0%	100%	0%	58%	42%	0%	3%	94%	3%	
P.M.	2-Way Pk Hr Vol:	243			2,716			217			2,688			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	0	88	59	0	1,265	0	50	47	0	32	1,342	49	2,932
% TURNS:	0%	60%	40%	0%	100%	0%	52%	48%	0%	2%	94%	3%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	0%	61%	39%	0%	100%	0%	58%	42%	0%	3%	94%	3%
	2020	7%	55%	38%	1%	99%	1%	54%	39%	7%	4%	92%	5%
	2030	9%	54%	38%	1%	98%	1%	54%	38%	9%	4%	91%	5%
	2040	12%	51%	37%	1%	98%	1%	52%	36%	12%	5%	90%	5%
P.M.													
	2013	0%	60%	40%	0%	100%	0%	52%	48%	0%	2%	94%	3%
	2020	7%	54%	39%	1%	99%	1%	49%	44%	7%	4%	92%	5%
	2030	9%	53%	38%	1%	98%	1%	48%	43%	9%	4%	91%	5%
	2040	12%	51%	38%	1%	98%	1%	47%	41%	12%	4%	90%	5%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: EB SR 90 at SW 24 Ave.
PREPARED BY: NC
FILE: BUILD-BASED ON FIELD K&D

DATE: 12/30/2014
NOTES:

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ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	2,870	12,250	2,870	34,490
24 HR EST. AADT	2020	3,000	13,200	3,000	37,100
24 HR EST. AADT	2030	3,500	14,600	3,500	41,100
24 HR EST. AADT	2040	3,500	16,200	3,500	45,500

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	49.0%	60.5%	41.1%	58.9%	55.2%	44.7%	58.9%	41.1%
2020	Approach D30 Factor	49.0%	60.5%	41.1%	58.9%	55.2%	44.7%	58.9%	41.1%
2030	Approach D30 Factor	49.0%	60.5%	41.1%	58.9%	55.2%	44.7%	58.9%	41.1%
2040	Approach D30 Factor	49.0%	60.5%	41.1%	58.9%	55.2%	44.7%	58.9%	41.1%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	100	60	10	0	130	110	30	50	50	10	560	20
2030	EST. TURNS												
2040	EST. TURNS	130	70	20	0	190	140	30	60	60	20	690	20
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	100	10	10	0	250	280	10	10	50	10	680	10
2030	EST. TURNS												
2040	EST. TURNS	130	10	20	0	290	330	20	0	0	10	810	10

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		126	134	260	453	647	1100	143	117	260	1828	1272	3100
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		132	138	270	488	702	1190	149	121	270	1967	1373	3340
2020	TURN SUMMARY	170	70	240	240	600	840	130	180	310	590	280	870
CONTROL LINK VOLUMES		154	166	320	540	770	1310	174	146	320	2179	1521	3700
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		154	166	320	599	861	1460	174	146	320	2412	1688	4100
2040	TURN SUMMARY	220	80	300	330	740	1070	150	230	380	730	380	1110
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		156	104	260	649	451	1100	115	145	260	1276	1824	3100
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		163	107	270	700	490	1190	121	149	270	1372	1968	3340
2020	TURN SUMMARY	120	20	140	530	700	1230	70	300	370	700	400	1100
CONTROL LINK VOLUMES		191	129	320	774	536	1310	141	179	320	1520	2180	3700
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		191	129	320	859	601	1460	141	179	320	1683	2417	4100
2040	TURN SUMMARY	160	10	170	620	850	1470	20	350	370	830	420	1250

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD-BASED ON FIELD K&D
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	EB SR 90 at SW 22 Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	25,780	14,190	34,970	12,250
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**0.9%**	**CGR**	**1.0%**	**CGR**	**0.9%**	**CGR**	**1.0%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
			1		**1**		**1**		**1**	
		2013		25,780		14,190		34,970		12,250
NO. YEARS	7	2020	1.063	27,500	1.074	15,200	1.063	37,000	1.074	13,200
NO. YEARS	17	2030	1.161	30,000	1.190	16,900	1.161	40,500	1.190	14,600
NO. YEARS	27	2040	1.267	32,500	1.319	18,700	1.267	44,500	1.319	16,200

Percent Turns Calculated From Base Year AADTs:

JKTURNS	FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	25,780			14,190			34,970			12,250		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	12,250	34,970	14,190	25,780	12,250	34,970	14,190	25,780	12,250	34,970	14,190	25,780
	20%	57%	23%	35%	17%	48%	27%	49%	23%	47%	19%	34%
2020 2-WAY ADT	27,500			15,200			37,000			13,200		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	13,200	37,000	15,200	27,500	13,200	37,000	15,200	27,500	13,200	37,000	15,200	27,500
	20%	57%	23%	35%	17%	48%	27%	49%	24%	46%	19%	35%
2030 2-WAY ADT	30,000			16,900			40,500			14,600		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	14,600	40,500	16,900	30,000	14,600	40,500	16,900	30,000	14,600	40,500	16,900	30,000
	20%	56%	23%	35%	17%	48%	27%	49%	24%	46%	19%	34%
2040 2-WAY ADT	32,500			18,700			44,500			16,200		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	16,200	44,500	18,700	32,500	16,200	44,500	18,700	32,500	16,200	44,500	18,700	32,500
	20%	56%	24%	35%	17%	48%	28%	48%	24%	46%	20%	34%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	2,197			2,796			2,274			2,617			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	65	1,010	130	78	850	128	162	817	83	74	1,448	97	4,942
% TURNS:	5%	84%	11%	7%	80%	12%	15%	77%	8%	5%	89%	6%	
P.M.	2-Way Pk Hr Vol:	2,233			3,137			2,211			2,861			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	75	1,099	154	152	1,095	215	126	614	95	62	1,395	139	5,221
% TURNS:	6%	83%	12%	10%	75%	15%	15%	74%	11%	4%	87%	9%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	5%	84%	11%	7%	80%	12%	15%	77%	8%	5%	89%	6%
	2020	7%	81%	12%	10%	74%	16%	16%	74%	9%	9%	82%	9%
	2030	7%	80%	12%	11%	73%	17%	17%	73%	10%	10%	81%	10%
	2040	8%	79%	13%	12%	70%	18%	17%	72%	11%	12%	78%	11%
P.M.													
	2013	6%	83%	12%	10%	75%	15%	15%	74%	11%	4%	87%	9%
	2020	7%	80%	13%	13%	69%	18%	16%	71%	13%	8%	81%	11%
	2030	7%	79%	13%	14%	68%	19%	17%	70%	13%	9%	79%	12%
	2040	8%	78%	14%	14%	65%	20%	17%	69%	13%	11%	76%	13%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: EB SR 90 at SW 22 Ave.
PREPARED BY: NC
FILE: BUILD-BASED ON FIELD K&D

DATE: 12/30/2014
NOTES:

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ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	25,780	14,190	34,970	12,250
24 HR EST. AADT	2020	27,500	15,200	37,000	13,200
24 HR EST. AADT	2030	30,000	16,900	40,500	14,600
24 HR EST. AADT	2040	32,500	18,700	44,500	16,200

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	54.8%	59.5%	41.1%	58.9%	46.7%	37.8%	58.9%	41.1%
2020	Approach D30 Factor	54.8%	59.5%	41.1%	58.9%	46.7%	37.8%	58.9%	41.1%
2030	Approach D30 Factor	54.8%	59.5%	41.1%	58.9%	46.7%	37.8%	58.9%	41.1%
2040	Approach D30 Factor	54.8%	59.5%	41.1%	58.9%	46.7%	37.8%	58.9%	41.1%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	20	1,100	50	20	210	30	60	890	20	30	600	30
2030	EST. TURNS												
2040	EST. TURNS	20	1,400	60	30	260	40	80	1130	30	30	740	40
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	30	1,200	20	60	520	10	40	720	30	20	650	30
2030	EST. TURNS												
2040	EST. TURNS	30	1,520	20	80	620	10	40	910	40	20	780	40

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		1273	1047	2320	525	755	1280	1470	1680	3150	649	451	1100
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		1357	1123	2480	562	808	1370	1555	1775	3330	700	490	1190
2020	TURN SUMMARY	1170	940	2110	260	710	970	970	1160	2130	660	250	910
CONTROL LINK VOLUMES		1481	1219	2700	625	895	1520	1702	1948	3650	774	536	1310
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		1604	1326	2930	692	988	1680	1870	2140	4010	859	601	1460
2040	TURN SUMMARY	1480	1200	2680	330	880	1210	1240	1470	2710	810	310	1120
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		1380	940	2320	752	528	1280	1189	1961	3150	453	647	1100
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		1472	1008	2480	806	564	1370	1258	2072	3330	488	702	1190
2020	TURN SUMMARY	1250	810	2060	590	710	1300	790	1230	2020	700	580	1280
CONTROL LINK VOLUMES		1606	1094	2700	896	624	1520	1377	2273	3650	540	770	1310
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		1740	1190	2930	991	689	1680	1513	2497	4010	599	861	1460
2040	TURN SUMMARY	1570	1030	2600	710	840	1550	990	1550	2540	840	690	1530

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD-BASED ON FIELD K&D
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	EB SR 90 at SW 17 Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	8,090	17,800	15,210	14,190
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**0.9%**	**CGR**	**1.0%**	**CGR**	**0.9%**	**CGR**	**1.0%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

				1		**1**		**1**		**1**
		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
		2013		8,090		17,800		15,210		14,190
NO. YEARS	7	2020	1.063	8,500	1.074	19,100	1.063	16,000	1.074	15,200
NO. YEARS	17	2030	1.161	9,500	1.190	21,200	1.161	17,500	1.190	16,900
NO. YEARS	27	2040	1.267	10,000	1.319	23,500	1.267	19,500	1.319	18,700

Percent Turns Calculated From Base Year AADTs:

JKTURNS		FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG	
2013	2-WAY ADT	8,090			17,800			15,210			14,190	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	14,190	15,210	17,800	8,090	14,190	15,210	17,800	8,090	14,190	15,210	17,800	8,090
	30%	32%	38%	22%	38%	41%	44%	20%	35%	37%	43%	20%
2020	2-WAY ADT	8,500			19,100			16,000			15,200	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	15,200	16,000	19,100	8,500	15,200	16,000	19,100	8,500	15,200	16,000	19,100	8,500
	30%	32%	38%	21%	38%	40%	45%	20%	36%	37%	44%	19%
2030	2-WAY ADT	9,500			21,200			17,500			16,900	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	16,900	17,500	21,200	9,500	16,900	17,500	21,200	9,500	16,900	17,500	21,200	9,500
	30%	31%	38%	22%	38%	40%	45%	20%	36%	36%	44%	20%
2040	2-WAY ADT	10,000			23,500			19,500			18,700	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	18,700	19,500	23,500	10,000	18,700	19,500	23,500	10,000	18,700	19,500	23,500	10,000
	30%	32%	38%	21%	39%	40%	45%	19%	36%	37%	44%	19%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)		
A.M.	2-Way Pk Hr Vol:	2,327			2,988			2,161			2,810		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	118	978	217	129	808	122	189	698	96	78	1,523	187	5,143
% TURNS:	9%	74%	17%	12%	76%	12%	19%	71%	10%	4%	85%	10%	
P.M.	2-Way Pk Hr Vol:	1,879			3,316			1,819			3,220		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	157	703	194	97	1,237	161	140	602	109	104	1,487	126	5,117
% TURNS:	15%	67%	18%	6%	83%	11%	16%	71%	13%	6%	87%	7%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		SB			WB			NB			EB	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
A.M.												
2013	9%	74%	17%	12%	76%	12%	19%	71%	10%	4%	85%	10%
2020	11%	70%	19%	13%	72%	14%	22%	66%	12%	8%	81%	11%
2030	12%	69%	19%	13%	72%	15%	22%	65%	13%	8%	80%	12%
2040	13%	67%	20%	14%	70%	16%	24%	62%	14%	10%	78%	12%
P.M.												
2013	15%	67%	18%	6%	83%	11%	16%	71%	13%	6%	87%	7%
2020	16%	63%	20%	8%	78%	14%	19%	66%	15%	9%	82%	9%
2030	17%	62%	21%	8%	77%	14%	20%	64%	16%	10%	81%	9%
2040	17%	61%	22%	9%	75%	16%	21%	62%	17%	11%	80%	9%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: EB SR 90 at SW 17 Ave.
PREPARED BY: NC
FILE: BUILD-BASED ON FIELD K&D

DATE: 12/30/2014
NOTES:

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ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	8,090	17,800	15,210	14,190
24 HR EST. AADT	2020	8,500	19,100	16,000	15,200
24 HR EST. AADT	2030	9,500	21,200	17,500	16,900
24 HR EST. AADT	2040	10,000	23,500	19,500	18,700

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	56.4%	56.1%	41.1%	58.9%	45.5%	46.8%	58.9%	41.1%
2020	Approach D30 Factor	56.4%	56.1%	41.1%	58.9%	45.5%	46.8%	58.9%	41.1%
2030	Approach D30 Factor	56.4%	56.1%	41.1%	58.9%	45.5%	46.8%	58.9%	41.1%
2040	Approach D30 Factor	56.4%	56.1%	41.1%	58.9%	45.5%	46.8%	58.9%	41.1%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	30	1,060	80	40	190	30	70	760	20	30	650	60
2030	EST. TURNS												
2040	EST. TURNS	40	1,350	110	50	240	40	90	960	30	30	810	80
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	60	820	60	40	550	70	40	650	40	30	650	30
2030	EST. TURNS												
2040	EST. TURNS	80	1,050	70	50	660	80	50	830	50	30	780	40

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		411	319	730	658	942	1600	623	747	1370	752	528	1280
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		432	338	770	707	1013	1720	655	785	1440	806	564	1370
2020	TURN SUMMARY	1170	860	2030	260	800	1060	850	1120	1970	740	240	980
CONTROL LINK VOLUMES		482	378	860	784	1126	1910	716	864	1580	896	624	1520
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		508	392	900	869	1251	2120	798	962	1760	991	689	1680
2040	TURN SUMMARY	1500	1090	2590	330	1010	1340	1080	1420	2500	920	310	1230
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		408	322	730	944	656	1600	640	730	1370	525	755	1280
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		429	341	770	1012	708	1720	674	766	1440	562	808	1370
2020	TURN SUMMARY	940	720	1660	660	750	1410	730	920	1650	710	650	1360
CONTROL LINK VOLUMES		480	380	860	1124	786	1910	737	843	1580	625	895	1520
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		505	395	900	1246	874	2120	821	939	1760	692	988	1680
2040	TURN SUMMARY	1200	920	2120	790	900	1690	930	1160	2090	850	790	1640

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD-BASED ON FIELD K&D
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	EB SR 90 at SW 12 Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	7,100	14,090	14,310	17,800
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**0.9%**	**CGR**	**1.0%**	**CGR**	**0.9%**	**CGR**	**1.0%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
			1		**1**		**1**		**1**	
		2013		7,100		14,090		14,310		17,800
NO. YEARS	7	2020	1.063	7,500	1.074	15,100	1.063	15,000	1.074	19,100
NO. YEARS	17	2030	1.161	8,000	1.190	16,800	1.161	16,500	1.190	21,200
NO. YEARS	27	2040	1.267	9,000	1.319	18,600	1.267	18,000	1.319	23,500

Percent Turns Calculated From Base Year AADTs:

JKTURNS	FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT		7,100			14,090			14,310			17,800	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	17,800	14,310	14,090	7,100	17,800	14,310	14,090	7,100	17,800	14,310	14,090	7,100
	39%	31%	30%	18%	45%	36%	36%	18%	46%	40%	40%	20%
2020 2-WAY ADT		7,500			15,100			15,000			19,100	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	19,100	15,000	15,100	7,500	19,100	15,000	15,100	7,500	19,100	15,000	15,100	7,500
	39%	30%	31%	18%	46%	36%	36%	18%	46%	40%	40%	20%
2030 2-WAY ADT		8,000			16,800			16,500			21,200	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	21,200	16,500	16,800	8,000	21,200	16,500	16,800	8,000	21,200	16,500	16,800	8,000
	39%	30%	31%	18%	46%	36%	37%	17%	46%	40%	41%	19%
2040 2-WAY ADT		9,000			18,600			18,000			23,500	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	23,500	18,000	18,600	9,000	23,500	18,000	18,600	9,000	23,500	18,000	18,600	9,000
	39%	30%	31%	18%	47%	36%	36%	18%	46%	39%	41%	20%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	1,317			2,941			1,192			3,164			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	144	333	124	71	752	75	88	452	147	97	1,831	193	4,307
% TURNS:	24%	55%	21%	8%	84%	8%	13%	66%	21%	5%	86%	9%	
P.M.	2-Way Pk Hr Vol:	1,508			3,257			1,426			3,325			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	108	516	163	95	1,389	120	87	452	173	78	1,403	174	4,758
% TURNS:	14%	66%	21%	6%	87%	7%	12%	63%	24%	5%	85%	11%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	24%	55%	21%	8%	84%	8%	13%	66%	21%	5%	86%	9%
	2020	25%	53%	22%	9%	80%	11%	15%	61%	24%	8%	82%	10%
	2030	26%	52%	22%	9%	79%	12%	16%	60%	24%	9%	81%	10%
	2040	26%	51%	22%	10%	78%	13%	17%	58%	25%	10%	79%	11%
P.M.													
	2013	14%	66%	21%	6%	87%	7%	12%	63%	24%	5%	85%	11%
	2020	16%	62%	22%	7%	83%	10%	15%	59%	26%	8%	80%	11%
	2030	17%	61%	22%	7%	82%	11%	15%	58%	27%	9%	79%	12%
	2040	18%	60%	22%	8%	80%	12%	16%	56%	28%	11%	77%	12%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: EB SR 90 at SW 12 Ave.
PREPARED BY: NC
FILE: BUILD-BASED ON FIELD K&D

DATE: 12/30/2014
NOTES:

0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	7,100	14,090	14,310	17,800
24 HR EST. AADT	2020	7,500	15,100	15,000	19,100
24 HR EST. AADT	2030	8,000	16,800	16,500	21,200
24 HR EST. AADT	2040	9,000	18,600	18,000	23,500

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	45.6%	52.2%	41.1%	58.9%	57.6%	49.9%	58.9%	41.1%
2020	Approach D30 Factor	45.6%	52.2%	41.1%	58.9%	57.6%	49.9%	58.9%	41.1%
2030	Approach D30 Factor	45.6%	52.2%	41.1%	58.9%	57.6%	49.9%	58.9%	41.1%
2040	Approach D30 Factor	45.6%	52.2%	41.1%	58.9%	57.6%	49.9%	58.9%	41.1%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	30	370	50	20	170	20	40	580	40	40	680	70
2030	EST. TURNS												
2040	EST. TURNS	40	470	60	30	240	30	40	740	50	50	840	80
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	40	570	50	40	570	60	30	540	70	20	650	50
2030	EST. TURNS												
2040	EST. TURNS	50	730	60	50	680	70	30	690	90	30	780	60

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		292	348	640	521	749	1270	742	548	1290	944	656	1600
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		308	372	680	559	801	1360	778	572	1350	1012	708	1720
2020	TURN SUMMARY	450	670	1120	210	770	980	660	430	1090	790	240	1030
CONTROL LINK VOLUMES		329	391	720	621	889	1510	856	634	1490	1124	786	1910
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		370	440	810	688	982	1670	934	686	1620	1246	874	2120
2040	TURN SUMMARY	570	850	1420	300	940	1240	830	550	1380	970	330	1300
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		333	307	640	747	523	1270	643	647	1290	658	942	1600
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		352	328	680	800	560	1360	674	676	1350	707	1013	1720
2020	TURN SUMMARY	660	630	1290	670	730	1400	640	650	1290	720	680	1400
CONTROL LINK VOLUMES		376	344	720	891	619	1510	741	749	1490	784	1126	1910
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		423	387	810	986	684	1670	809	811	1620	869	1251	2120
2040	TURN SUMMARY	840	800	1640	800	870	1670	810	830	1640	870	820	1690

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD-BASED ON FIELD K&D
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	EB SR 90 at SR 7/SW 8 Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	760	14,090	760	16,310
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**0.9%**	**CGR**	**1.0%**	**CGR**	**0.9%**	**CGR**	**1.0%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
			1		**1**		**1**		**1**	
		2013		760		14,090		760		16,310
NO. YEARS	7	2020	1.063	1,000	1.074	15,100	1.063	1,000	1.074	17,500
NO. YEARS	17	2030	1.161	1,000	1.190	16,800	1.161	1,000	1.190	19,400
NO. YEARS	27	2040	1.267	1,000	1.319	18,600	1.267	1,000	1.319	21,500

Percent Turns Calculated From Base Year AADTs:

JKTURNS	FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT		760			14,090			760			16,310	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	16,310	760	14,090	760	16,310	760	14,090	760	16,310	760	14,090	760
	52%	2%	45%	4%	91%	4%	45%	2%	52%	5%	90%	5%
2020 2-WAY ADT		1,000			15,100			1,000			17,500	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	17,500	1,000	15,100	1,000	17,500	1,000	15,100	1,000	17,500	1,000	15,100	1,000
	52%	3%	45%	5%	90%	5%	45%	3%	52%	6%	88%	6%
2030 2-WAY ADT		1,000			16,800			1,000			19,400	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	19,400	1,000	16,800	1,000	19,400	1,000	16,800	1,000	19,400	1,000	16,800	1,000
	52%	3%	45%	5%	91%	5%	45%	3%	52%	5%	89%	5%
2040 2-WAY ADT		1,000			18,600			1,000			21,500	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	21,500	1,000	18,600	1,000	21,500	1,000	18,600	1,000	21,500	1,000	18,600	1,000
	52%	2%	45%	4%	91%	4%	45%	2%	52%	5%	90%	5%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	723			2,441			474			2,472			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	88	115	164	62	563	47	49	146	65	52	1,556	148	3,055
% TURNS:	24%	31%	45%	9%	84%	7%	19%	56%	25%	3%	89%	8%	
P.M.	2-Way Pk Hr Vol:	667			3,086			512			3,201			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	66	142	100	63	1,261	64	35	128	92	51	1,563	168	3,733
% TURNS:	21%	46%	32%	5%	91%	5%	14%	50%	36%	3%	88%	9%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	24%	31%	45%	9%	84%	7%	19%	56%	25%	3%	89%	8%
	2020	27%	28%	45%	9%	84%	7%	21%	51%	28%	3%	89%	8%
	2030	27%	28%	45%	9%	85%	7%	22%	49%	28%	3%	89%	8%
	2040	29%	27%	45%	8%	85%	7%	23%	47%	30%	3%	89%	8%
P.M.													
	2013	21%	46%	32%	5%	91%	5%	14%	50%	36%	3%	88%	9%
	2020	24%	42%	34%	5%	91%	5%	17%	45%	38%	3%	88%	9%
	2030	25%	41%	34%	5%	91%	5%	18%	44%	38%	3%	88%	9%
	2040	27%	39%	35%	4%	91%	5%	19%	42%	39%	3%	88%	9%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: EB SR 90 at SR 7/SW 8 Ave.
PREPARED BY: NC
FILE: BUILD-BASED ON FIELD K&D

DATE: 12/30/2014
NOTES:

0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	760	14,090	760	16,310
24 HR EST. AADT	2020	1,000	15,100	1,000	17,500
24 HR EST. AADT	2030	1,000	16,800	1,000	19,400
24 HR EST. AADT	2040	1,000	18,600	1,000	21,500

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	50.8%	46.2%	41.1%	58.9%	54.9%	49.8%	58.9%	41.1%
2020	Approach D30 Factor	50.8%	46.2%	41.1%	58.9%	54.9%	49.8%	58.9%	41.1%
2030	Approach D30 Factor	50.8%	46.2%	41.1%	58.9%	54.9%	49.8%	58.9%	41.1%
2040	Approach D30 Factor	50.8%	46.2%	41.1%	58.9%	54.9%	49.8%	58.9%	41.1%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	20	200	60	20	160	10	20	300	20	20	620	50
2030	EST. TURNS												
2040	EST. TURNS	30	250	80	20	220	20	20	380	20	20	770	60
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	20	150	30	30	590	30	10	200	30	10	630	40
2030	EST. TURNS												
2040	EST. TURNS	30	200	40	30	700	40	10	260	40	20	750	50

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		35	35	70	521	749	1270	38	32	70	865	605	1470
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		46	44	90	559	801	1360	49	41	90	928	652	1580
2020	TURN SUMMARY	280	370	650	190	700	890	340	230	570	690	200	890
CONTROL LINK VOLUMES		46	44	90	621	889	1510	49	41	90	1028	722	1750
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		46	44	90	688	982	1670	49	41	90	1140	800	1940
2040	TURN SUMMARY	360	460	820	260	870	1130	420	290	710	850	270	1120
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		32	38	70	747	523	1270	34	36	70	603	867	1470
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		42	48	90	800	560	1360	45	45	90	647	933	1580
2020	TURN SUMMARY	200	270	470	650	670	1320	240	190	430	680	640	1320
CONTROL LINK VOLUMES		42	48	90	891	619	1510	45	45	90	718	1032	1750
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		42	48	90	986	684	1670	45	45	90	795	1145	1940
2040	TURN SUMMARY	270	340	610	770	800	1570	310	260	570	820	770	1590

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD-BASED ON FIELD K&D
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	EB SR 90 at SW 5 Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	9,050	16,310	9,050	16,310
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**0.9%**	**CGR**	**1.0%**	**CGR**	**0.9%**	**CGR**	**1.0%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

			NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
			1		**1**		**1**		**1**	
		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
		2013		9,050		16,310		9,050		16,310
NO. YEARS	7	2020	1.063	9,500	1.074	17,500	1.063	9,500	1.074	17,500
NO. YEARS	17	2030	1.161	10,500	1.190	19,400	1.161	10,500	1.190	19,400
NO. YEARS	27	2040	1.267	11,500	1.319	21,500	1.267	11,500	1.319	21,500

Percent Turns Calculated From Base Year AADTs:

JKTURNS		FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT		9,050			16,310			9,050			16,310		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	
	16,310	9,050	16,310	9,050	16,310	9,050	16,310	9,050	16,310	9,050	16,310	9,050	
	39%	22%	39%	26%	47%	26%	39%	22%	39%	26%	47%	26%	
2020 2-WAY ADT		9,500			17,500			9,500			17,500		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	
	17,500	9,500	17,500	9,500	17,500	9,500	17,500	9,500	17,500	9,500	17,500	9,500	
	39%	21%	39%	26%	48%	26%	39%	21%	39%	26%	48%	26%	
2030 2-WAY ADT		10,500			19,400			10,500			19,400		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	
	19,400	10,500	19,400	10,500	19,400	10,500	19,400	10,500	19,400	10,500	19,400	10,500	
	39%	21%	39%	26%	48%	26%	39%	21%	39%	26%	48%	26%	
2040 2-WAY ADT		11,500			21,500			11,500			21,500		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	
	21,500	11,500	21,500	11,500	21,500	11,500	21,500	11,500	21,500	11,500	21,500	11,500	
	39%	21%	39%	26%	48%	26%	39%	21%	39%	26%	48%	26%	

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	209			2,545			306			2,478			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	1	1	1	0	747	0	204	85	0	16	1,593	121	2,769
% TURNS:	33%	33%	33%	0%	100%	0%	71%	29%	0%	1%	92%	7%	
P.M.	2-Way Pk Hr Vol:	302			3,057			504			2,985			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	1	1	1	0	1,258	0	304	133	0	66	1,494	166	3,424
% TURNS:	33%	33%	33%	0%	100%	0%	70%	30%	0%	4%	87%	10%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	33%	33%	33%	0%	100%	0%	71%	29%	0%	1%	92%	7%
	2020	34%	32%	34%	3%	95%	3%	67%	29%	4%	3%	88%	9%
	2030	34%	32%	34%	3%	94%	3%	67%	28%	5%	4%	87%	9%
	2040	34%	31%	34%	4%	91%	4%	65%	28%	7%	5%	85%	10%
P.M.													
	2013	33%	33%	33%	0%	100%	0%	70%	30%	0%	4%	87%	10%
	2020	34%	32%	34%	3%	95%	3%	67%	30%	4%	6%	83%	11%
	2030	34%	32%	34%	3%	94%	3%	66%	29%	5%	7%	82%	12%
	2040	34%	31%	34%	4%	91%	4%	65%	29%	7%	7%	80%	12%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: EB SR 90 at SW 5 Ave.
PREPARED BY: NC
FILE: BUILD-BASED ON FIELD K&D

DATE: 12/30/2014
NOTES:

0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	9,050	16,310	9,050	16,310
24 HR EST. AADT	2020	9,500	17,500	9,500	17,500
24 HR EST. AADT	2030	10,500	19,400	10,500	19,400
24 HR EST. AADT	2040	11,500	21,500	11,500	21,500

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	1.4%	1.0%	41.1%	58.9%	94.4%	86.7%	58.9%	41.1%
2020	Approach D30 Factor	1.4%	1.0%	41.1%	58.9%	94.4%	86.7%	58.9%	41.1%
2030	Approach D30 Factor	1.4%	1.0%	41.1%	58.9%	94.4%	86.7%	58.9%	41.1%
2040	Approach D30 Factor	1.4%	1.0%	41.1%	58.9%	94.4%	86.7%	58.9%	41.1%

A.M. DESIGN HR. TURNS		NORTH LEG RIGHT	NORTH LEG THRU	NORTH LEG LEFT	EAST LEG RIGHT	EAST LEG THRU	EAST LEG LEFT	SOUTH LEG RIGHT	SOUTH LEG THRU	SOUTH LEG LEFT	WEST LEG RIGHT	WEST LEG THRU	WEST LEG LEFT
2013	EST. TURNS												
2020	EST. TURNS	0	0	0	30	210	0	30	520	30	0	630	70
2030	EST. TURNS												
2040	EST. TURNS	0	0	0	30	250	0	40	590	40	0	780	90
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	0	0	0	30	680	0	30	530	30	0	620	40
2030	EST. TURNS												
2040	EST. TURNS	0	0	0	30	830	0	40	600	40	0	740	50

LINK VOLUME CHECK

DESIGN HOUR A.M.:		NORTH LEG FROM	NORTH LEG TO	NORTH LEG LINK	EAST LEG FROM	EAST LEG TO	EAST LEG LINK	SOUTH LEG FROM	SOUTH LEG TO	SOUTH LEG LINK	WEST LEG FROM	WEST LEG TO	WEST LEG LINK
CONTROL LINK VOLUMES		12	798	810	603	867	1470	769	41	810	865	605	1470
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		12	848	860	647	933	1580	808	52	860	928	652	1580
2020	TURN SUMMARY	0	620	620	240	660	900	580	0	580	700	240	940
CONTROL LINK VOLUMES		14	936	950	718	1032	1750	893	57	950	1028	722	1750
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		15	1025	1040	795	1145	1940	978	62	1040	1140	800	1940
2040	TURN SUMMARY	0	710	710	280	820	1100	670	0	670	870	290	1160

DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		8	802	810	865	605	1470	706	104	810	603	867	1470
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		8	852	860	928	652	1580	741	119	860	647	933	1580
2020	TURN SUMMARY	0	600	600	710	650	1360	590	0	590	660	710	1370
CONTROL LINK VOLUMES		9	941	950	1028	722	1750	819	131	950	718	1032	1750
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		10	1030	1040	1140	800	1940	897	143	1040	795	1145	1940
2040	TURN SUMMARY	0	680	680	860	780	1640	680	0	680	790	870	1660

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD-BASED ON FIELD K&D
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	EB SR 90 at SW 4 Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	12,170	15,760	1,840	16,310
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**0.9%**	**CGR**	**1.9%**	**CGR**	**0.9%**	**CGR**	**1.9%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
			1		**1**		**1**		**1**	
		2013		12,170		15,760		1,840		16,310
NO. YEARS	7	2020	1.063	13,000	1.139	18,000	1.063	2,000	1.139	18,600
NO. YEARS	17	2030	1.161	14,000	1.372	21,600	1.161	2,000	1.372	22,400
NO. YEARS	27	2040	1.267	15,500	1.653	26,100	1.267	2,500	1.653	27,000

Percent Turns Calculated From Base Year AADTs:

JKTURNS	FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	12,170			15,760			1,840			16,310		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	16,310	1,840	15,760	12,170	16,310	1,840	15,760	12,170	16,310	1,840	15,760	12,170
	48%	5%	46%	40%	54%	6%	36%	28%	37%	6%	53%	41%
2020 2-WAY ADT	13,000			18,000			2,000			18,600		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	18,600	2,000	18,000	13,000	18,600	2,000	18,000	13,000	18,600	2,000	18,000	13,000
	48%	5%	47%	39%	55%	6%	36%	26%	38%	6%	55%	39%
2030 2-WAY ADT	14,000			21,600			2,000			22,400		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	22,400	2,000	21,600	14,000	22,400	2,000	21,600	14,000	22,400	2,000	21,600	14,000
	49%	4%	47%	36%	58%	5%	37%	24%	39%	5%	57%	37%
2040 2-WAY ADT	15,500			26,100			2,500			27,000		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	27,000	2,500	26,100	15,500	27,000	2,500	26,100	15,500	27,000	2,500	26,100	15,500
	49%	4%	47%	34%	60%	6%	38%	23%	39%	6%	59%	35%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	3,372			4,934			1,214			2,530			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	293	523	2,456	0	454	316	100	100	100	75	1,608	0	6,025
% TURNS:	9%	16%	75%	0%	59%	41%	33%	33%	33%	4%	96%	0%	
P.M.	2-Way Pk Hr Vol:	2,665			4,101			1,315			3,061			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	514	627	1,424	0	744	259	100	100	100	129	1,574	0	5,571
% TURNS:	20%	24%	56%	0%	74%	26%	33%	33%	33%	8%	92%	0%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	9%	16%	75%	0%	59%	41%	33%	33%	33%	4%	96%	0%
	2020	13%	15%	72%	4%	59%	38%	34%	33%	34%	5%	91%	4%
	2030	14%	15%	72%	5%	59%	37%	34%	32%	34%	5%	91%	5%
	2040	16%	14%	70%	6%	59%	35%	34%	32%	34%	5%	89%	6%
P.M.													
	2013	20%	24%	56%	0%	74%	26%	33%	33%	33%	8%	92%	0%
	2020	23%	23%	55%	4%	72%	24%	34%	33%	34%	7%	89%	4%
	2030	24%	22%	54%	5%	72%	23%	34%	32%	34%	7%	88%	5%
	2040	25%	21%	54%	6%	72%	22%	34%	32%	34%	7%	87%	6%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: EB SR 90 at SW 4 Ave.
PREPARED BY: NC
FILE: BUILD-BASED ON FIELD K&D

DATE: 12/30/2014
NOTES:

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ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	12,170	15,760	1,840	16,310
24 HR EST. AADT	2020	13,000	18,000	2,000	18,600
24 HR EST. AADT	2030	14,000	21,600	2,000	22,400
24 HR EST. AADT	2040	15,500	26,100	2,500	27,000

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	97.0%	96.2%	41.1%	58.9%	24.7%	22.8%	58.9%	41.1%
2020	Approach D30 Factor	97.0%	96.2%	41.1%	58.9%	24.7%	22.8%	58.9%	41.1%
2030	Approach D30 Factor	97.0%	96.2%	41.1%	58.9%	24.7%	22.8%	58.9%	41.1%
2040	Approach D30 Factor	97.0%	96.2%	41.1%	58.9%	24.7%	22.8%	58.9%	41.1%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	80	620	490	0	130	100	0	0	0	30	550	0
2030	EST. TURNS												
2040	EST. TURNS	100	790	620	0	190	140	0	0	0	50	800	0
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	200	400	460	0	480	400	0	0	0	50	530	0
2030	EST. TURNS												
2040	EST. TURNS	260	510	580	0	690	580	0	0	0	70	770	0

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		1063	37	1100	583	837	1420	41	129	170	865	605	1470
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		1135	35	1170	666	954	1620	44	136	180	986	684	1670
2020	TURN SUMMARY	1190	0	1190	230	1040	1270	0	750	750	580	210	790
CONTROL LINK VOLUMES		1223	37	1260	799	1141	1940	44	136	180	1187	833	2020
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		1354	46	1400	965	1385	2350	56	174	230	1431	999	2430
2040	TURN SUMMARY	1510	0	1510	330	1420	1750	0	980	980	850	290	1140
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		1054	46	1100	835	585	1420	38	132	170	603	867	1470
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		1126	44	1170	954	666	1620	41	139	180	688	982	1670
2020	TURN SUMMARY	1060	0	1060	880	990	1870	0	850	850	580	680	1260
CONTROL LINK VOLUMES		1213	47	1260	1145	795	1940	41	139	180	829	1191	2020
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		1343	57	1400	1384	966	2350	51	179	230	999	1431	2430
2040	TURN SUMMARY	1350	0	1350	1270	1350	2620	0	1160	1160	840	950	1790

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD-BASED ON FIELD K&D
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	EB SR 90 at SW 3 Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	6,840	23,650	4,030	19,120
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**0.9%**	**CGR**	**1.9%**	**CGR**	**0.9%**	**CGR**	**1.9%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
		2013		6,840		23,650		4,030		19,120
NO. YEARS	7	2020	1.063	7,500	1.139	26,900	1.063	4,500	1.139	21,800
NO. YEARS	17	2030	1.161	8,000	1.372	32,500	1.161	4,500	1.372	26,200
NO. YEARS	27	2040	1.267	8,500	1.653	39,100	1.267	5,000	1.653	31,600

Percent Turns Calculated From Base Year AADTs:

JKTURNS	FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	6,840			23,650			4,030			19,120		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	19,120	4,030	23,650	6,840	19,120	4,030	23,650	6,840	19,120	4,030	23,650	6,840
	41%	9%	51%	23%	64%	13%	48%	14%	39%	12%	69%	20%
2020 2-WAY ADT	7,500			26,900			4,500			21,800		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	21,800	4,500	26,900	7,500	21,800	4,500	26,900	7,500	21,800	4,500	26,900	7,500
	41%	8%	51%	22%	64%	13%	48%	13%	39%	12%	69%	19%
2030 2-WAY ADT	8,000			32,500			4,500			26,200		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	26,200	4,500	32,500	8,000	26,200	4,500	32,500	8,000	26,200	4,500	32,500	8,000
	41%	7%	51%	21%	68%	12%	49%	12%	39%	10%	72%	18%
2040 2-WAY ADT	8,500			39,100			5,000			31,600		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	31,600	5,000	39,100	8,500	31,600	5,000	39,100	8,500	31,600	5,000	39,100	8,500
	42%	7%	52%	19%	70%	11%	49%	11%	40%	10%	74%	16%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	659			3,388			1,158			3,037			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	0	327	15	91	762	224	233	194	0	180	2,063	32	4,121
% TURNS:	0%	96%	4%	8%	71%	21%	55%	45%	0%	8%	91%	1%	
P.M.	2-Way Pk Hr Vol:	913			3,080			1,152			2,611			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	0	466	15	164	992	266	176	180	0	64	1,467	88	3,878
% TURNS:	0%	97%	3%	12%	70%	19%	49%	51%	0%	4%	91%	5%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	0%	96%	4%	8%	71%	21%	55%	45%	0%	8%	91%	1%
	2020	4%	87%	9%	10%	70%	20%	54%	42%	4%	8%	89%	3%
	2030	5%	85%	10%	10%	70%	20%	54%	41%	5%	8%	88%	3%
	2040	7%	81%	12%	10%	71%	19%	54%	40%	7%	8%	88%	4%
P.M.													
	2013	0%	97%	3%	12%	70%	19%	49%	51%	0%	4%	91%	5%
	2020	4%	88%	8%	13%	69%	18%	49%	47%	4%	5%	88%	7%
	2030	5%	86%	9%	13%	70%	18%	49%	46%	5%	5%	88%	7%
	2040	7%	82%	11%	13%	70%	17%	49%	44%	7%	5%	88%	7%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: EB SR 90 at SW 3 Ave.
PREPARED BY: NC
FILE: BUILD-BASED ON FIELD K&D

DATE: 12/30/2014
NOTES:

0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	6,840	23,650	4,030	19,120
24 HR EST. AADT	2020	7,500	26,900	4,500	21,800
24 HR EST. AADT	2030	8,000	32,500	4,500	26,200
24 HR EST. AADT	2040	8,500	39,100	5,000	31,600

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	51.9%	52.7%	41.1%	58.9%	36.9%	30.9%	58.9%	41.1%
2020	Approach D30 Factor	51.9%	52.7%	41.1%	58.9%	36.9%	30.9%	58.9%	41.1%
2030	Approach D30 Factor	51.9%	52.7%	41.1%	58.9%	36.9%	30.9%	58.9%	41.1%
2040	Approach D30 Factor	51.9%	52.7%	41.1%	58.9%	36.9%	30.9%	58.9%	41.1%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	290	0	80	50	810	0	90	260	20	0	890	50
2030	EST. TURNS												
2040	EST. TURNS	420	0	110	70	1170	0	120	330	30	0	1,300	70
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	320	0	140	120	1100	0	50	350	50	0	920	70
2030	EST. TURNS												
2040	EST. TURNS	420	0	180	170	1590	0	60	450	60	0	1,330	100

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		319	301	620	875	1255	2130	134	226	360	1014	706	1720
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		350	330	680	995	1425	2420	149	261	410	1156	804	1960
2020	TURN SUMMARY	370	360	730	860	1060	1920	370	0	370	940	1120	2060
CONTROL LINK VOLUMES		374	346	720	1202	1728	2930	149	261	410	1389	971	2360
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		397	373	770	1446	2074	3520	166	284	450	1675	1165	2840
2040	TURN SUMMARY	530	470	1000	1240	1530	2770	480	0	480	1370	1620	2990
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		324	296	620	1254	876	2130	112	248	360	707	1013	1720
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		356	324	680	1426	994	2420	125	285	410	806	1154	1960
2020	TURN SUMMARY	460	540	1000	1220	1110	2330	450	0	450	990	1470	2460
CONTROL LINK VOLUMES		379	341	720	1723	1207	2930	125	285	410	969	1391	2360
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		403	367	770	2073	1447	3520	139	311	450	1169	1671	2840
2040	TURN SUMMARY	600	720	1320	1760	1570	3330	570	0	570	1430	2070	3500

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD-BASED ON FIELD K&D
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	EB SR 90 at SW 2 Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	8,040	15,460	12,520	23,650
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**0.9%**	**CGR**	**1.9%**	**CGR**	**0.9%**	**CGR**	**1.9%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

				1		**1**		**1**		**1**
		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
		2013		8,040		15,460		12,520		23,650
NO. YEARS	7	2020	1.063	8,500	1.139	17,600	1.063	13,500	1.139	26,900
NO. YEARS	17	2030	1.161	9,500	1.372	21,200	1.161	14,500	1.372	32,500
NO. YEARS	27	2040	1.267	10,000	1.653	25,600	1.267	16,000	1.653	39,100

Percent Turns Calculated From Base Year AADTs:

JKTURNS		FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG	
2013 2-WAY ADT		8,040			15,460			12,520			23,650	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	23,650	12,520	15,460	8,040	23,650	12,520	15,460	8,040	23,650	12,520	15,460	8,040
	46%	24%	30%	18%	53%	28%	33%	17%	50%	35%	43%	22%
2020 2-WAY ADT		8,500			17,600			13,500			26,900	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	26,900	13,500	17,600	8,500	26,900	13,500	17,600	8,500	26,900	13,500	17,600	8,500
	46%	23%	30%	17%	55%	28%	33%	16%	51%	34%	44%	21%
2030 2-WAY ADT		9,500			21,200			14,500			32,500	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	32,500	14,500	21,200	9,500	32,500	14,500	21,200	9,500	32,500	14,500	21,200	9,500
	48%	21%	31%	17%	58%	26%	34%	15%	51%	32%	47%	21%
2040 2-WAY ADT		10,000			25,600			16,000			39,100	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	39,100	16,000	25,600	10,000	39,100	16,000	25,600	10,000	39,100	16,000	25,600	10,000
	48%	20%	32%	15%	60%	25%	34%	13%	52%	31%	50%	19%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)		
A.M.	2-Way Pk Hr Vol:	1,818			2,718			1,789			3,277		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	85	216	129	106	655	96	81	896	252	248	1,651	386	4,801
% TURNS:	20%	50%	30%	12%	76%	11%	7%	73%	21%	11%	72%	17%	
P.M.	2-Way Pk Hr Vol:	1,945			2,676			2,016			3,401		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	179	351	146	84	1,148	86	82	869	253	375	1,130	316	5,019
% TURNS:	26%	52%	22%	6%	87%	7%	7%	72%	21%	21%	62%	17%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	20%	50%	30%	12%	76%	11%	7%	73%	21%	11%	72%	17%
	2020	22%	48%	30%	13%	74%	13%	9%	67%	24%	13%	69%	17%
	2030	23%	47%	30%	13%	74%	13%	10%	66%	24%	14%	69%	17%
	2040	25%	45%	30%	13%	74%	13%	11%	63%	26%	14%	68%	17%
P.M.													
	2013	26%	52%	22%	6%	87%	7%	7%	72%	21%	21%	62%	17%
	2020	28%	49%	22%	7%	84%	9%	9%	67%	24%	22%	60%	18%
	2030	29%	48%	23%	8%	83%	9%	10%	65%	25%	22%	60%	18%
	2040	30%	47%	23%	8%	83%	10%	11%	62%	26%	22%	60%	18%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: EB SR 90 at SW 2 Ave.
PREPARED BY: NC
FILE: BUILD-BASED ON FIELD K&D

DATE: 12/30/2014
NOTES:

0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	8,040	15,460	12,520	23,650
24 HR EST. AADT	2020	8,500	17,600	13,500	26,900
24 HR EST. AADT	2030	9,500	21,200	14,500	32,500
24 HR EST. AADT	2040	10,000	25,600	16,000	39,100

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	23.7%	34.8%	41.1%	58.9%	68.7%	59.7%	58.9%	41.1%
2020	Approach D30 Factor	23.7%	34.8%	41.1%	58.9%	68.7%	59.7%	58.9%	41.1%
2030	Approach D30 Factor	23.7%	34.8%	41.1%	58.9%	68.7%	59.7%	58.9%	41.1%
2040	Approach D30 Factor	23.7%	34.8%	41.1%	58.9%	68.7%	59.7%	58.9%	41.1%

A.M. DESIGN HR. TURNS		NORTH LEG RIGHT	NORTH LEG THRU	NORTH LEG LEFT	EAST LEG RIGHT	EAST LEG THRU	EAST LEG LEFT	SOUTH LEG RIGHT	SOUTH LEG THRU	SOUTH LEG LEFT	WEST LEG RIGHT	WEST LEG THRU	WEST LEG LEFT
2013	EST. TURNS												
2020	EST. TURNS	30	240	50	30	700	60	30	990	70	100	830	160
2030	EST. TURNS												
2040	EST. TURNS	40	300	60	50	1000	80	40	1250	80	140	1,200	220
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	90	380	50	40	940	40	20	700	100	100	830	100
2030	EST. TURNS												
2040	EST. TURNS	110	480	60	60	1360	60	30	890	130	150	1,200	140

LINK VOLUME CHECK

		NORTH LEG FROM	NORTH LEG TO	NORTH LEG LINK	EAST LEG FROM	EAST LEG TO	EAST LEG LINK	SOUTH LEG FROM	SOUTH LEG TO	SOUTH LEG LINK	WEST LEG FROM	WEST LEG TO	WEST LEG LINK
DESIGN HOUR A.M.:													
CONTROL LINK VOLUMES		171	549	720	572	818	1390	774	356	1130	1254	876	2130
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		181	589	770	651	929	1580	835	385	1220	1426	994	2420
2020	TURN SUMMARY	320	1180	1500	790	910	1700	1090	400	1490	1090	800	1890
CONTROL LINK VOLUMES		202	658	860	784	1126	1910	897	413	1310	1723	1207	2930
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		213	687	900	947	1353	2300	989	451	1440	2073	1447	3520
2040	TURN SUMMARY	400	1520	1920	1130	1300	2430	1370	520	1890	1560	1120	2680
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		251	469	720	820	570	1390	673	457	1130	875	1255	2130
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		266	504	770	933	647	1580	726	494	1220	995	1425	2420
2020	TURN SUMMARY	520	840	1360	1020	900	1920	820	520	1340	1030	1130	2160
CONTROL LINK VOLUMES		297	563	860	1124	786	1910	779	531	1310	1202	1728	2930
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		313	587	900	1357	943	2300	860	580	1440	1446	2074	3520
2040	TURN SUMMARY	650	1090	1740	1480	1290	2770	1050	690	1740	1490	1600	3090

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD-BASED ON FIELD K&D
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	EB SR 90 at SW 1 Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	6,380	15,460	8,120	15,460
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**0.9%**	**CGR**	**1.9%**	**CGR**	**0.9%**	**CGR**	**1.9%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

				1		**1**		**1**		**1**
		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
		2013		6,380		15,460		8,120		15,460
NO. YEARS	7	2020	1.063	7,000	1.139	17,600	1.063	8,500	1.139	17,600
NO. YEARS	17	2030	1.161	7,500	1.372	21,200	1.161	9,500	1.372	21,200
NO. YEARS	27	2040	1.267	8,000	1.653	25,600	1.267	10,500	1.653	25,600

Percent Turns Calculated From Base Year AADTs:

JKTURNS	FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	6,380			15,460			8,120			15,460		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	15,460	8,120	15,460	6,380	15,460	8,120	15,460	6,380	15,460	8,120	15,460	6,380
	40%	21%	40%	21%	52%	27%	41%	17%	41%	27%	52%	21%
2020 2-WAY ADT	7,000			17,600			8,500			17,600		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	17,600	8,500	17,600	7,000	17,600	8,500	17,600	7,000	17,600	8,500	17,600	7,000
	40%	19%	40%	21%	53%	26%	42%	17%	42%	26%	53%	21%
2030 2-WAY ADT	7,500			21,200			9,500			21,200		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	21,200	9,500	21,200	7,500	21,200	9,500	21,200	7,500	21,200	9,500	21,200	7,500
	41%	18%	41%	20%	55%	25%	42%	15%	42%	25%	55%	20%
2040 2-WAY ADT	8,000			25,600			10,500			25,600		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	25,600	10,500	25,600	8,000	25,600	10,500	25,600	8,000	25,600	10,500	25,600	8,000
	41%	17%	41%	18%	58%	24%	43%	14%	43%	24%	58%	18%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	975			2,671			1,085			3,135			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	304	463	207	0	783	126	1	1	1	493	1,554	0	3,933
% TURNS:	31%	48%	21%	0%	86%	14%	33%	33%	33%	24%	76%	0%	
P.M.	2-Way Pk Hr Vol:	1,137			2,564			1,258			2,849			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	286	712	138	0	1,178	203	1	1	1	340	1,044	0	3,904
% TURNS:	25%	63%	12%	0%	85%	15%	33%	33%	33%	25%	75%	0%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	31%	48%	21%	0%	86%	14%	33%	33%	33%	24%	76%	0%
	2020	32%	45%	23%	2%	83%	15%	34%	32%	34%	24%	74%	2%
	2030	32%	44%	24%	2%	82%	15%	34%	31%	34%	24%	73%	2%
	2040	33%	42%	25%	3%	81%	16%	35%	30%	35%	24%	73%	3%
P.M.													
	2013	25%	63%	12%	0%	85%	15%	33%	33%	33%	25%	75%	0%
	2020	27%	58%	15%	2%	82%	16%	34%	32%	34%	25%	73%	2%
	2030	27%	57%	16%	2%	82%	16%	34%	31%	34%	25%	73%	2%
	2040	28%	55%	17%	3%	81%	16%	35%	30%	35%	24%	73%	3%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: EB SR 90 at SW 1 Ave.
PREPARED BY: NC
FILE: BUILD-BASED ON FIELD K&D

DATE: 12/30/2014
NOTES:

0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	6,380	15,460	8,120	15,460
24 HR EST. AADT	2020	7,000	17,600	8,500	17,600
24 HR EST. AADT	2030	7,500	21,200	9,500	21,200
24 HR EST. AADT	2040	8,000	25,600	10,500	25,600

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	99.9%	99.9%	41.1%	58.9%	0.3%	0.2%	58.9%	41.1%
2020	Approach D30 Factor	99.9%	99.9%	41.1%	58.9%	0.3%	0.2%	58.9%	41.1%
2030	Approach D30 Factor	99.9%	99.9%	41.1%	58.9%	0.3%	0.2%	58.9%	41.1%
2040	Approach D30 Factor	99.9%	99.9%	41.1%	58.9%	0.3%	0.2%	58.9%	41.1%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	90	800	190	0	700	50	0	0	0	190	800	0
2030	EST. TURNS												
2040	EST. TURNS	110	1,030	240	0	1000	80	0	0	0	270	1,150	0
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	130	1,000	110	0	910	140	0	0	0	100	800	0
2030	EST. TURNS												
2040	EST. TURNS	160	1,260	140	0	1310	200	0	0	0	150	1,150	0

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		574	-4	570	572	818	1390	2	728	730	820	570	1390
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		629	1	630	651	929	1580	2	768	770	933	647	1580
2020	TURN SUMMARY	1080	0	1080	750	990	1740	0	1040	1040	990	790	1780
CONTROL LINK VOLUMES		674	6	680	784	1126	1910	2	858	860	1124	786	1910
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		719	1	720	947	1353	2300	3	947	950	1357	943	2300
2040	TURN SUMMARY	1380	0	1380	1080	1390	2470	0	1380	1380	1420	1110	2530
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		574	-4	570	820	570	1390	2	728	730	572	818	1390
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		629	1	630	933	647	1580	2	768	770	651	929	1580
2020	TURN SUMMARY	1240	0	1240	1050	910	1960	0	1240	1240	900	1040	1940
CONTROL LINK VOLUMES		674	6	680	1124	786	1910	2	858	860	784	1126	1910
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		719	1	720	1357	943	2300	2	948	950	947	1353	2300
2040	TURN SUMMARY	1560	0	1560	1510	1290	2800	0	1610	1610	1300	1470	2770

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD-BASED ON FIELD K&D
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	EB SR 90 at S Miami Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	7,420	17,570	14,490	15,460
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**0.9%**	**CGR**	**1.9%**	**CGR**	**0.9%**	**CGR**	**1.9%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
		2013		7,420		17,570		14,490		15,460
NO. YEARS	7	2020	1.063	8,000	1.139	20,000	1.063	15,500	1.139	17,600
NO. YEARS	17	2030	1.161	8,500	1.372	24,100	1.161	17,000	1.372	21,200
NO. YEARS	27	2040	1.267	9,500	1.653	29,100	1.267	18,500	1.653	25,600

Percent Turns Calculated From Base Year AADTs:

JKTURNS	FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	7,420			17,570			14,490			15,460		
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
15,460	14,490	17,570	7,420	15,460	14,490	17,570	7,420	15,460	14,490	17,570	7,420
33%	30%	37%	20%	41%	39%	43%	18%	38%	37%	45%	19%
2020 2-WAY ADT	8,000			20,000			15,500			17,600	
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
17,600	15,500	20,000	8,000	17,600	15,500	20,000	8,000	17,600	15,500	20,000	8,000
33%	29%	38%	19%	43%	38%	44%	18%	39%	36%	46%	18%
2030 2-WAY ADT	8,500			24,100			17,000			21,200	
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
21,200	17,000	24,100	8,500	21,200	17,000	24,100	8,500	21,200	17,000	24,100	8,500
34%	27%	39%	18%	45%	36%	45%	16%	39%	34%	49%	17%
2040 2-WAY ADT	9,500			29,100			18,500			25,600	
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
25,600	18,500	29,100	9,500	25,600	18,500	29,100	9,500	25,600	18,500	29,100	9,500
35%	25%	40%	18%	48%	35%	45%	15%	40%	32%	51%	17%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	905			2,442			950			2,813			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	1	1	1	74	660	0	69	597	283	0	1,638	231	3,555
% TURNS:	33%	33%	33%	10%	90%	0%	7%	63%	30%	0%	88%	12%	
P.M.	2-Way Pk Hr Vol:	1,088			2,127			1,160			2,671			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	1	1	1	113	1,011	0	51	686	422	0	951	286	3,523
% TURNS:	33%	33%	33%	10%	90%	0%	4%	59%	36%	0%	77%	23%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	33%	33%	33%	10%	90%	0%	7%	63%	30%	0%	88%	12%
	2020	33%	33%	34%	11%	85%	4%	11%	58%	31%	4%	83%	13%
	2030	33%	33%	34%	11%	84%	5%	12%	57%	31%	4%	83%	13%
	2040	34%	32%	34%	11%	83%	6%	14%	55%	31%	5%	82%	13%
P.M.													
	2013	33%	33%	33%	10%	90%	0%	4%	59%	36%	0%	77%	23%
	2020	33%	33%	34%	11%	85%	4%	8%	55%	37%	4%	74%	23%
	2030	33%	33%	34%	11%	84%	5%	9%	54%	37%	4%	73%	22%
	2040	34%	32%	34%	11%	83%	6%	11%	52%	37%	5%	73%	22%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: EB SR 90 at S Miami Ave.
PREPARED BY: NC
FILE: BUILD-BASED ON FIELD K&D

DATE: 12/30/2014
NOTES:

0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	7,420	17,570	14,490	15,460
24 HR EST. AADT	2020	8,000	20,000	15,500	17,600
24 HR EST. AADT	2030	8,500	24,100	17,000	21,200
24 HR EST. AADT	2040	9,500	29,100	18,500	25,600

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	0.3%	0.3%	41.1%	58.9%	99.9%	99.9%	58.9%	41.1%
2020	Approach D30 Factor	0.3%	0.3%	41.1%	58.9%	99.9%	99.9%	58.9%	41.1%
2030	Approach D30 Factor	0.3%	0.3%	41.1%	58.9%	99.9%	99.9%	58.9%	41.1%
2040	Approach D30 Factor	0.3%	0.3%	41.1%	58.9%	99.9%	99.9%	58.9%	41.1%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	0	0	0	50	750	0	40	730	90	0	920	130
2030	EST. TURNS												
2040	EST. TURNS	0	0	0	70	1080	0	50	930	110	0	1,330	180
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	0	0	0	150	830	0	20	1040	240	0	680	220
2030	EST. TURNS												
2040	EST. TURNS	0	0	0	210	1200	0	30	1320	310	0	980	320

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		2	668	670	650	930	1580	1303	-3	1300	820	570	1390
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		2	718	720	740	1060	1800	1394	6	1400	933	647	1580
2020	TURN SUMMARY	0	910	910	800	960	1760	860	0	860	1050	840	1890
CONTROL LINK VOLUMES		3	767	770	891	1279	2170	1528	2	1530	1124	786	1910
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		3	857	860	1076	1544	2620	1663	7	1670	1357	943	2300
2040	TURN SUMMARY	0	1180	1180	1150	1380	2530	1090	0	1090	1510	1190	2700
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		2	668	670	931	649	1580	1303	-3	1300	572	818	1390
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		2	718	720	1060	740	1800	1394	6	1400	651	929	1580
2020	TURN SUMMARY	0	1410	1410	980	700	1680	1300	0	1300	900	1070	1970
CONTROL LINK VOLUMES		2	768	770	1278	892	2170	1529	1	1530	784	1126	1910
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		2	858	860	1543	1077	2620	1664	6	1670	947	1353	2300
2040	TURN SUMMARY	0	1850	1850	1410	1010	2420	1660	0	1660	1300	1510	2810

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD-BASED ON FIELD K&D
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	EB SR 90 at Brickell Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	44,380	14,430	45,220	17,570
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**0.9%**	**CGR**	**1.9%**	**CGR**	**0.9%**	**CGR**	**1.9%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
		2013		44,380		14,430		45,220		17,570
NO. YEARS	7	2020	1.063	47,000	1.139	16,400	1.063	48,000	1.139	20,000
NO. YEARS	17	2030	1.161	51,500	1.372	19,800	1.161	52,500	1.372	24,100
NO. YEARS	27	2040	1.267	56,000	1.653	23,900	1.267	57,500	1.653	29,100

Percent Turns Calculated From Base Year AADTs:

JKTURNS		FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013	2-WAY ADT	44,380			14,430			45,220			17,570		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	
	17,570	45,220	14,430	44,380	17,570	45,220	14,430	44,380	17,570	45,220	14,430	44,380	
	23%	59%	19%	41%	16%	42%	19%	58%	23%	43%	14%	43%	
2020	2-WAY ADT	47,000			16,400			48,000			20,000		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	
	20,000	48,000	16,400	47,000	20,000	48,000	16,400	47,000	20,000	48,000	16,400	47,000	
	24%	57%	19%	41%	17%	42%	20%	56%	24%	43%	15%	42%	
2030	2-WAY ADT	51,500			19,800			52,500			24,100		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	
	24,100	52,500	19,800	51,500	24,100	52,500	19,800	51,500	24,100	52,500	19,800	51,500	
	25%	54%	21%	40%	19%	41%	21%	54%	25%	42%	16%	42%	
2040	2-WAY ADT	56,000			23,900			57,500			29,100		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	
	29,100	57,500	23,900	56,000	29,100	57,500	23,900	56,000	29,100	57,500	23,900	56,000	
	26%	52%	22%	39%	20%	40%	22%	51%	27%	42%	17%	41%	

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	3,299			2,146			2,747			2,062			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	166	816	346	589	40	233	233	848	396	221	705	534	5,127
% TURNS:	13%	61%	26%	68%	5%	27%	16%	57%	27%	15%	48%	37%	
P.M.	2-Way Pk Hr Vol:	3,474			1,979			3,200			2,021			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	366	1,095	313	518	231	278	191	921	518	197	448	261	5,337
% TURNS:	21%	62%	18%	50%	22%	27%	12%	57%	32%	22%	49%	29%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	13%	61%	26%	68%	5%	27%	16%	57%	27%	15%	48%	37%
	2020	14%	61%	25%	66%	6%	29%	16%	57%	27%	18%	45%	37%
	2030	14%	61%	25%	65%	6%	29%	16%	57%	27%	19%	44%	37%
	2040	15%	60%	25%	63%	7%	29%	17%	56%	27%	20%	43%	37%
P.M.													
	2013	21%	62%	18%	50%	22%	27%	12%	57%	32%	22%	49%	29%
	2020	21%	61%	18%	49%	22%	29%	13%	56%	31%	24%	46%	30%
	2030	21%	61%	18%	49%	22%	29%	13%	56%	31%	24%	45%	30%
	2040	22%	60%	18%	49%	22%	29%	13%	56%	31%	25%	44%	31%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: EB SR 90 at Brickell Ave.
PREPARED BY: NC
FILE: BUILD-BASED ON FIELD K&D

DATE: 12/30/2014
NOTES:

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ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	44,380	14,430	45,220	17,570
24 HR EST. AADT	2020	47,000	16,400	48,000	20,000
24 HR EST. AADT	2030	51,500	19,800	52,500	24,100
24 HR EST. AADT	2040	56,000	23,900	57,500	29,100

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	40.3%	51.1%	41.1%	58.9%	53.8%	50.9%	58.9%	41.1%
2020	Approach D30 Factor	40.3%	51.1%	41.1%	58.9%	53.8%	50.9%	58.9%	41.1%
2030	Approach D30 Factor	40.3%	51.1%	41.1%	58.9%	53.8%	50.9%	58.9%	41.1%
2040	Approach D30 Factor	40.3%	51.1%	41.1%	58.9%	53.8%	50.9%	58.9%	41.1%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	140	980	390	210	500	270	250	1,650	200	60	840	150
2030	EST. TURNS												
2040	EST. TURNS	170	1,260	540	310	720	380	320	2090	250	90	1,210	220
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	130	1,340	380	200	460	320	220	1350	400	60	630	60
2030	EST. TURNS												
2040	EST. TURNS	160	1,700	490	280	660	460	280	1710	500	90	910	90

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		1608	2382	3990	534	766	1300	2188	1882	4070	931	649	1580
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		1703	2527	4230	607	873	1480	2323	1997	4320	1060	740	1800
2020	TURN SUMMARY	1510	2010	3520	980	1480	2460	2100	1310	3410	1050	840	1890
CONTROL LINK VOLUMES		1866	2774	4640	732	1048	1780	2541	2189	4730	1278	892	2170
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		2029	3011	5040	884	1266	2150	2782	2398	5180	1543	1077	2620
2040	TURN SUMMARY	1970	2620	4590	1410	2070	3480	2660	1730	4390	1520	1140	2660
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		2040	1950	3990	765	535	1300	2073	1997	4070	650	930	1580
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		2160	2070	4230	869	611	1480	2201	2119	4320	740	1060	1800
2020	TURN SUMMARY	1850	1610	3460	980	1230	2210	1970	1720	3690	750	990	1740
CONTROL LINK VOLUMES		2367	2273	4640	1050	730	1780	2407	2323	4730	891	1279	2170
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		2574	2466	5040	1267	883	2150	2636	2544	5180	1076	1544	2620
2040	TURN SUMMARY	2350	2080	4430	1400	1680	3080	2490	2250	4740	1090	1320	2410

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD-BASED ON FIELD K&D
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	WB SR 90 at SR 9		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	40,120	23,460	37,460	100
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**0.9%**	**CGR**	**1.0%**	**CGR**	**0.9%**	**CGR**	**1.0%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

			NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG		
					1		**1**		**1**		**1**
		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
		2013		40,120		23,460		37,460		100
NO. YEARS	7	2020	1.063	42,500	1.074	25,200	1.063	40,000	1.074	100
NO. YEARS	17	2030	1.161	46,500	1.190	27,900	1.161	43,500	1.190	100
NO. YEARS	27	2040	1.267	51,000	1.319	30,900	1.267	47,500	1.319	100

Percent Turns Calculated From Base Year AADTs:

JKTURNS		FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG	
2013 2-WAY ADT		40,120			23,460			37,460			100	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	100	37,460	23,460	40,120	100	37,460	23,460	40,120	100	37,460	23,460	40,120
	0%	61%	38%	52%	0%	48%	37%	63%	0%	37%	23%	40%
2020 2-WAY ADT		42,500			25,200			40,000			100	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	100	40,000	25,200	42,500	100	40,000	25,200	42,500	100	40,000	25,200	42,500
	0%	61%	39%	51%	0%	48%	37%	63%	0%	37%	23%	39%
2030 2-WAY ADT		46,500			27,900			43,500			100	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	100	43,500	27,900	46,500	100	43,500	27,900	46,500	100	43,500	27,900	46,500
	0%	61%	39%	52%	0%	48%	37%	62%	0%	37%	24%	39%
2040 2-WAY ADT		51,000			30,900			47,500			100	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	100	47,500	30,900	51,000	100	47,500	30,900	51,000	100	47,500	30,900	51,000
	0%	61%	39%	52%	0%	48%	38%	62%	0%	37%	24%	39%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)		
A.M.	2-Way Pk Hr Vol:	3,819			2,131			3,797			1,427		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	31	1,966	190	214	99	192	317	1,281	0	41	1,119	137	5,587
% TURNS:	1%	90%	9%	42%	20%	38%	20%	80%	0%	3%	86%	11%	
P.M.	2-Way Pk Hr Vol:	3,156			2,197			2,947			1,388		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	23	1,218	262	268	346	213	223	1,272	0	21	885	113	4,844
% TURNS:	2%	81%	17%	32%	42%	26%	15%	85%	0%	2%	87%	11%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	1%	90%	9%	42%	20%	38%	20%	80%	0%	3%	86%	11%
	2020	1%	87%	12%	43%	18%	39%	22%	78%	0%	7%	80%	13%
	2030	1%	86%	12%	44%	17%	39%	22%	78%	0%	7%	78%	14%
	2040	1%	85%	14%	44%	16%	40%	23%	77%	0%	9%	76%	15%
P.M.													
	2013	2%	81%	17%	32%	42%	26%	15%	85%	0%	2%	87%	11%
	2020	1%	79%	20%	34%	38%	28%	17%	83%	0%	6%	81%	14%
	2030	1%	79%	20%	35%	37%	29%	18%	82%	0%	6%	79%	15%
	2040	1%	78%	21%	36%	35%	29%	19%	81%	0%	8%	76%	16%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: WB SR 90 at SR 9
PREPARED BY: NC
FILE: BUILD-BASED ON FIELD K&D

DATE: 12/30/2014
NOTES:

0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	40,120	23,460	37,460	100
24 HR EST. AADT	2020	42,500	25,200	40,000	100
24 HR EST. AADT	2030	46,500	27,900	43,500	100
24 HR EST. AADT	2040	51,000	30,900	47,500	100

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	57.3%	47.6%	41.1%	58.9%	42.1%	50.7%	58.9%	41.1%
2020	Approach D30 Factor	57.3%	47.6%	41.1%	58.9%	42.1%	50.7%	58.9%	41.1%
2030	Approach D30 Factor	57.3%	47.6%	41.1%	58.9%	42.1%	50.7%	58.9%	41.1%
2040	Approach D30 Factor	57.3%	47.6%	41.1%	58.9%	42.1%	50.7%	58.9%	41.1%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	30	1,660	150	150	100	150	150	1,600	0	40	0	150
2030	EST. TURNS												
2040	EST. TURNS	40	2,100	190	190	120	190	190	2030	0	50	0	180
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	30	1,350	250	70	220	80	250	1400	0	20	0	120
2030	EST. TURNS												
2040	EST. TURNS	30	1,710	320	90	260	100	320	1780	0	30	0	140

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		2068	1542	3610	868	1242	2110	1419	1951	3370	5	5	10
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		2190	1640	3830	932	1338	2270	1515	2085	3600	5	5	10
2020	TURN SUMMARY	1840	1900	3740	400	300	700	1750	1850	3600	190	130	320
CONTROL LINK VOLUMES		2397	1793	4190	1032	1478	2510	1648	2272	3920	5	5	10
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		2629	1961	4590	1143	1637	2780	1799	2481	4280	5	5	10
2040	TURN SUMMARY	2330	2400	4730	500	380	880	2220	2340	4560	230	160	390
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		1720	1890	3610	1244	866	2110	1710	1660	3370	4	6	10
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		1822	2008	3830	1336	934	2270	1826	1774	3600	4	6	10
2020	TURN SUMMARY	1630	1590	3220	370	500	870	1650	1450	3100	140	250	390
CONTROL LINK VOLUMES		1993	2197	4190	1479	1031	2510	1986	1934	3920	4	6	10
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		2186	2404	4590	1638	1142	2780	2169	2111	4280	4	6	10
2040	TURN SUMMARY	2060	2010	4070	450	640	1090	2100	1840	3940	170	290	460

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD-BASED ON FIELD K&D
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	WB SR 90 at Beacom Blvd.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	30,540	9,420	20,110	21,850
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**0.9%**	**CGR**	**1.0%**	**CGR**	**0.9%**	**CGR**	**1.0%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
			1		**1**		**1**		**1**	
		2013		30,540		9,420		20,110		21,850
NO. YEARS	7	2020	1.063	32,500	1.074	10,100	1.063	21,500	1.074	23,500
NO. YEARS	17	2030	1.161	35,500	1.190	11,200	1.161	23,500	1.190	26,000
NO. YEARS	27	2040	1.267	38,500	1.319	12,400	1.267	25,500	1.319	28,800

Percent Turns Calculated From Base Year AADTs:

JKTURNS	FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	30,540			9,420			20,110			21,850		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	21,850	20,110	9,420	30,540	21,850	20,110	9,420	30,540	21,850	20,110	9,420	30,540
	43%	39%	18%	42%	30%	28%	15%	49%	35%	33%	16%	51%
2020 2-WAY ADT	32,500			10,100			21,500			23,500		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	23,500	21,500	10,100	32,500	23,500	21,500	10,100	32,500	23,500	21,500	10,100	32,500
	43%	39%	18%	42%	30%	28%	15%	49%	36%	34%	16%	51%
2030 2-WAY ADT	35,500			11,200			23,500			26,000		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	26,000	23,500	11,200	35,500	26,000	23,500	11,200	35,500	26,000	23,500	11,200	35,500
	43%	39%	18%	42%	31%	28%	15%	49%	36%	33%	16%	51%
2040 2-WAY ADT	38,500			12,400			25,500			28,800		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	28,800	25,500	12,400	38,500	28,800	25,500	12,400	38,500	28,800	25,500	12,400	38,500
	43%	38%	19%	41%	31%	27%	16%	48%	36%	33%	16%	50%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	912			2,571			1,140			2,673			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	367	297	0	0	515	430	0	248	165	0	1,626	0	3,648
% TURNS:	55%	45%	0%	0%	54%	46%	0%	60%	40%	0%	100%	0%	
P.M.	2-Way Pk Hr Vol:	842			2,561			1,257			2,398			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	302	319	0	0	600	591	0	221	126	0	1,370	0	3,529
% TURNS:	49%	51%	0%	0%	50%	50%	0%	64%	36%	0%	100%	0%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	55%	45%	0%	0%	54%	46%	0%	60%	40%	0%	100%	0%
	2020	54%	44%	2%	4%	52%	44%	2%	59%	40%	3%	92%	5%
	2030	54%	44%	2%	5%	52%	43%	2%	59%	39%	4%	89%	6%
	2040	53%	44%	3%	7%	51%	42%	3%	58%	39%	6%	86%	8%
P.M.													
	2013	49%	51%	0%	0%	50%	50%	0%	64%	36%	0%	100%	0%
	2020	48%	50%	2%	4%	48%	47%	2%	62%	36%	3%	92%	5%
	2030	48%	50%	2%	5%	48%	47%	2%	62%	36%	4%	89%	6%
	2040	48%	49%	3%	7%	47%	46%	3%	61%	36%	6%	86%	8%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: WB SR 90 at Beacom Blvd.
PREPARED BY: NC
FILE: BUILD-BASED ON FIELD K&D

DATE: 12/30/2014
NOTES:

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ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	30,540	9,420	20,110	21,850
24 HR EST. AADT	2020	32,500	10,100	21,500	23,500
24 HR EST. AADT	2030	35,500	11,200	23,500	26,000
24 HR EST. AADT	2040	38,500	12,400	25,500	28,800

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	72.8%	73.8%	41.1%	58.9%	36.2%	27.6%	58.9%	41.1%
2020	Approach D30 Factor	72.8%	73.8%	41.1%	58.9%	36.2%	27.6%	58.9%	41.1%
2030	Approach D30 Factor	72.8%	73.8%	41.1%	58.9%	36.2%	27.6%	58.9%	41.1%
2040	Approach D30 Factor	72.8%	73.8%	41.1%	58.9%	36.2%	27.6%	58.9%	41.1%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	130	960	50	30	190	170	50	460	60	10	300	10
2030	EST. TURNS												
2040	EST. TURNS	160	1,100	60	50	230	210	60	510	80	20	370	20
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	70	1,070	50	50	300	190	50	400	30	10	520	20
2030	EST. TURNS												
2040	EST. TURNS	90	1,230	60	60	360	230	60	440	40	10	660	20

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		2001	749	2750	348	502	850	656	1154	1810	1158	812	1970
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		2130	800	2930	374	536	910	701	1239	1940	1246	874	2120
2020	TURN SUMMARY	1140	500	1640	390	400	790	570	1140	1710	320	380	700
CONTROL LINK VOLUMES		2326	874	3200	414	596	1010	766	1354	2120	1378	962	2340
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		2523	947	3470	459	661	1120	831	1469	2300	1527	1063	2590
2040	TURN SUMMARY	1320	580	1900	490	490	980	650	1330	1980	410	470	880
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		2027	723	2750	499	351	850	500	1310	1810	808	1162	1970
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		2157	773	2930	535	375	910	534	1406	1940	869	1251	2120
2020	TURN SUMMARY	1190	470	1660	540	620	1160	480	1270	1750	550	400	950
CONTROL LINK VOLUMES		2356	844	3200	594	416	1010	584	1536	2120	962	1378	2340
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		2556	914	3470	657	463	1120	634	1666	2300	1065	1525	2590
2040	TURN SUMMARY	1380	520	1900	650	780	1430	540	1470	2010	690	490	1180

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD-BASED ON FIELD K&D
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	WB SR 90 at SW 22 Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	30,670	15,000	25,780	9,420
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**0.9%**	**CGR**	**1.0%**	**CGR**	**0.9%**	**CGR**	**1.0%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
			1		**1**		**1**		**1**	
		2013		30,670		15,000		25,780		9,420
NO. YEARS	7	2020	1.063	32,500	1.074	16,100	1.063	27,500	1.074	10,100
NO. YEARS	17	2030	1.161	35,500	1.190	17,900	1.161	30,000	1.190	11,200
NO. YEARS	27	2040	1.267	39,000	1.319	19,800	1.267	32,500	1.319	12,400

Percent Turns Calculated From Base Year AADTs:

JKTURNS	FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	30,670			15,000			25,780			9,420		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	9,420	25,780	15,000	30,670	9,420	25,780	15,000	30,670	9,420	25,780	15,000	30,670
	19%	51%	30%	47%	14%	39%	27%	56%	17%	36%	21%	43%
2020 2-WAY ADT	32,500			16,100			27,500			10,100		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	10,100	27,500	16,100	32,500	10,100	27,500	16,100	32,500	10,100	27,500	16,100	32,500
	19%	51%	30%	46%	14%	39%	27%	55%	17%	36%	21%	43%
2030 2-WAY ADT	35,500			17,900			30,000			11,200		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	11,200	30,000	17,900	35,500	11,200	30,000	17,900	35,500	11,200	30,000	17,900	35,500
	19%	51%	30%	46%	15%	39%	28%	55%	17%	36%	21%	43%
2040 2-WAY ADT	39,000			19,800			32,500			12,400		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	12,400	32,500	19,800	39,000	12,400	32,500	19,800	39,000	12,400	32,500	19,800	39,000
	19%	50%	31%	46%	15%	39%	28%	55%	17%	36%	22%	43%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	1,794			2,631			1,787			2,462			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	65	703	130	78	850	128	67	769	83	37	1,378	49	4,337
% TURNS:	7%	78%	14%	7%	80%	12%	7%	84%	9%	3%	94%	3%	
P.M.	2-Way Pk Hr Vol:	1,925			3,037			2,003			2,861			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	75	781	54	152	1,095	215	126	724	95	62	1,395	139	4,913
% TURNS:	8%	86%	6%	10%	75%	15%	13%	77%	10%	4%	87%	9%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	7%	78%	14%	7%	80%	12%	7%	84%	9%	3%	94%	3%
	2020	8%	76%	16%	11%	74%	15%	9%	81%	10%	6%	87%	7%
	2030	9%	75%	16%	12%	72%	15%	10%	80%	10%	7%	85%	8%
	2040	9%	74%	17%	14%	70%	17%	11%	79%	10%	8%	82%	10%
P.M.													
	2013	8%	86%	6%	10%	75%	15%	13%	77%	10%	4%	87%	9%
	2020	9%	82%	8%	14%	69%	17%	15%	74%	11%	7%	81%	12%
	2030	10%	81%	9%	15%	67%	18%	15%	74%	11%	8%	79%	13%
	2040	10%	80%	10%	16%	65%	19%	16%	73%	11%	9%	76%	14%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: WB SR 90 at SW 22 Ave.
PREPARED BY: NC
FILE: BUILD-BASED ON FIELD K&D

DATE: 12/30/2014
NOTES:

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ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	30,670	15,000	25,780	9,420
24 HR EST. AADT	2020	32,500	16,100	27,500	10,100
24 HR EST. AADT	2030	35,500	17,900	30,000	11,200
24 HR EST. AADT	2040	39,000	19,800	32,500	12,400

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	50.1%	47.3%	41.1%	58.9%	51.4%	47.2%	58.9%	41.1%
2020	Approach D30 Factor	50.1%	47.3%	41.1%	58.9%	51.4%	47.2%	58.9%	41.1%
2030	Approach D30 Factor	50.1%	47.3%	41.1%	58.9%	51.4%	47.2%	58.9%	41.1%
2040	Approach D30 Factor	50.1%	47.3%	41.1%	58.9%	51.4%	47.2%	58.9%	41.1%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	20	1,000	30	30	310	50	40	840	30	20	390	20
2030	EST. TURNS												
2040	EST. TURNS	30	1,270	40	40	390	60	50	1060	50	30	480	30
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	80	1,100	60	40	390	10	50	790	20	20	540	50
2030	EST. TURNS												
2040	EST. TURNS	120	1,390	80	50	480	10	60	990	30	30	650	60

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		1382	1378	2760	555	795	1350	1193	1127	2320	499	351	850
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		1464	1466	2930	596	854	1450	1273	1207	2480	535	375	910
2020	TURN SUMMARY	1050	890	1940	390	460	850	910	1070	1980	430	360	790
CONTROL LINK VOLUMES		1599	1601	3200	662	948	1610	1389	1311	2700	594	416	1010
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		1757	1753	3510	732	1048	1780	1504	1426	2930	657	463	1120
2040	TURN SUMMARY	1340	1130	2470	490	570	1060	1160	1360	2520	540	470	1010
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		1305	1455	2760	795	555	1350	1095	1225	2320	348	502	850
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		1383	1547	2930	853	597	1450	1168	1312	2480	374	536	910
2020	TURN SUMMARY	1240	880	2120	440	650	1090	860	1130	1990	610	490	1100
CONTROL LINK VOLUMES		1510	1690	3200	949	661	1610	1274	1426	2700	414	596	1010
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		1659	1851	3510	1050	730	1780	1380	1550	2930	459	661	1120
2040	TURN SUMMARY	1590	1100	2690	540	790	1330	1080	1430	2510	740	630	1370

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD-BASED ON FIELD K&D
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	WB SR 90 at SW 17 Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	9,080	16,580	8,090	16,100
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**0.9%**	**CGR**	**1.0%**	**CGR**	**0.9%**	**CGR**	**1.0%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
			1		**1**		**1**		**1**	
		2013		9,080		16,580		8,090		16,100
NO. YEARS	7	2020	1.063	9,500	1.074	17,800	1.063	8,500	1.074	17,300
NO. YEARS	17	2030	1.161	10,500	1.190	19,700	1.161	9,500	1.190	19,200
NO. YEARS	27	2040	1.267	11,500	1.319	21,900	1.267	10,000	1.319	21,200

Percent Turns Calculated From Base Year AADTs:

JKTURNS	FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	9,080			16,580			8,090			16,100		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	16,100	8,090	16,580	9,080	16,100	8,090	16,580	9,080	16,100	8,090	16,580	9,080
	39%	20%	41%	27%	48%	24%	40%	22%	39%	24%	49%	27%
2020 2-WAY ADT	9,500			17,800			8,500			17,300		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	17,300	8,500	17,800	9,500	17,300	8,500	17,800	9,500	17,300	8,500	17,800	9,500
	40%	19%	41%	27%	49%	24%	40%	21%	39%	24%	50%	27%
2030 2-WAY ADT	10,500			19,700			9,500			19,200		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	19,200	9,500	19,700	10,500	19,200	9,500	19,700	10,500	19,200	9,500	19,700	10,500
	40%	20%	41%	27%	49%	24%	40%	21%	39%	24%	50%	26%
2040 2-WAY ADT	11,500			21,900			10,000			21,200		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	21,200	10,000	21,900	11,500	21,200	10,000	21,900	11,500	21,200	10,000	21,900	11,500
	40%	19%	41%	27%	50%	23%	40%	21%	39%	23%	50%	26%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	2,234			2,988			2,068			2,810			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	118	922	217	129	808	122	189	661	96	78	1,523	187	5,050
% TURNS:	9%	73%	17%	12%	76%	12%	20%	70%	10%	4%	85%	10%	
P.M.	2-Way Pk Hr Vol:	2,032			3,316			1,972			3,220			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	157	869	194	97	1,237	161	140	589	109	104	1,487	126	5,270
% TURNS:	13%	71%	16%	6%	83%	11%	17%	70%	13%	6%	87%	7%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	9%	73%	17%	12%	76%	12%	20%	70%	10%	4%	85%	10%
	2020	12%	68%	20%	14%	74%	13%	22%	65%	13%	6%	82%	12%
	2030	13%	67%	20%	14%	73%	13%	22%	64%	14%	7%	81%	12%
	2040	14%	64%	21%	15%	72%	14%	23%	62%	15%	7%	79%	13%
P.M.													
	2013	13%	71%	16%	6%	83%	11%	17%	70%	13%	6%	87%	7%
	2020	16%	66%	18%	9%	79%	12%	19%	65%	16%	8%	83%	9%
	2030	16%	65%	19%	9%	79%	12%	20%	64%	16%	8%	82%	10%
	2040	17%	62%	20%	10%	77%	13%	21%	62%	17%	9%	81%	11%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: WB SR 90 at SW 17 Ave.
PREPARED BY: NC
FILE: BUILD-BASED ON FIELD K&D

DATE: 12/30/2014
NOTES:

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ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	9,080	16,580	8,090	16,100
24 HR EST. AADT	2020	9,500	17,800	8,500	17,300
24 HR EST. AADT	2030	10,500	19,700	9,500	19,200
24 HR EST. AADT	2040	11,500	21,900	10,000	21,200

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	56.3%	60.0%	41.1%	58.9%	45.7%	42.5%	58.9%	41.1%
2020	Approach D30 Factor	56.3%	60.0%	41.1%	58.9%	45.7%	42.5%	58.9%	41.1%
2030	Approach D30 Factor	56.3%	60.0%	41.1%	58.9%	45.7%	42.5%	58.9%	41.1%
2040	Approach D30 Factor	56.3%	60.0%	41.1%	58.9%	45.7%	42.5%	58.9%	41.1%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	40	1,000	60	50	300	50	50	720	30	20	440	50
2030	EST. TURNS												
2040	EST. TURNS	60	1,270	80	60	370	60	70	910	50	30	550	60
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	40	940	90	30	410	50	60	640	30	40	630	40
2030	EST. TURNS												
2040	EST. TURNS	50	1,200	120	40	500	60	70	810	30	50	750	50

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		460	360	820	613	877	1490	333	397	730	853	597	1450
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		481	379	860	658	942	1600	350	420	770	917	643	1560
2020	TURN SUMMARY	1100	820	1920	400	550	950	800	1070	1870	510	370	880
CONTROL LINK VOLUMES		532	418	950	729	1041	1770	391	469	860	1018	712	1730
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		582	458	1040	810	1160	1970	412	488	900	1124	786	1910
2040	TURN SUMMARY	1410	1030	2440	490	700	1190	1030	1360	2390	640	480	1120
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		491	329	820	879	611	1490	309	421	730	596	854	1450
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		513	347	860	944	656	1600	325	445	770	640	920	1560
2020	TURN SUMMARY	1070	710	1780	490	780	1270	730	1030	1760	710	480	1190
CONTROL LINK VOLUMES		567	383	950	1044	726	1770	363	497	860	710	1020	1730
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		621	419	1040	1161	809	1970	382	518	900	784	1126	1910
2040	TURN SUMMARY	1370	900	2270	600	940	1540	910	1310	2220	850	580	1430

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD-BASED ON FIELD K&D
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	WB SR 90 at SW 12 Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	9,730	13,350	7,100	16,580
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**0.9%**	**CGR**	**1.0%**	**CGR**	**0.9%**	**CGR**	**1.0%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
			1		**1**		**1**		**1**	
		2013		9,730		13,350		7,100		16,580
NO. YEARS	7	2020	1.063	10,500	1.074	14,300	1.063	7,500	1.074	17,800
NO. YEARS	17	2030	1.161	11,500	1.190	15,900	1.161	8,000	1.190	19,700
NO. YEARS	27	2040	1.267	12,500	1.319	17,600	1.267	9,000	1.319	21,900

Percent Turns Calculated From Base Year AADTs:

JKTURNS	FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	9,730			13,350			7,100			16,580		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	16,580	7,100	13,350	9,730	16,580	7,100	13,350	9,730	16,580	7,100	13,350	9,730
	45%	19%	36%	29%	50%	21%	34%	25%	42%	24%	44%	32%
2020 2-WAY ADT	10,500			14,300			7,500			17,800		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	17,800	7,500	14,300	10,500	17,800	7,500	14,300	10,500	17,800	7,500	14,300	10,500
	45%	19%	36%	29%	50%	21%	34%	25%	42%	23%	44%	33%
2030 2-WAY ADT	11,500			15,900			8,000			19,700		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	19,700	8,000	15,900	11,500	19,700	8,000	15,900	11,500	19,700	8,000	15,900	11,500
	45%	18%	36%	29%	50%	20%	34%	24%	42%	23%	45%	32%
2040 2-WAY ADT	12,500			17,600			9,000			21,900		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	21,900	9,000	17,600	12,500	21,900	9,000	17,600	12,500	21,900	9,000	17,600	12,500
	45%	19%	36%	29%	50%	21%	34%	24%	42%	23%	45%	32%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	1,402			2,941			1,307			3,134			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	114	380	124	71	752	75	88	520	147	97	1,831	193	4,392
% TURNS:	18%	61%	20%	8%	84%	8%	12%	69%	19%	5%	86%	9%	
P.M.	2-Way Pk Hr Vol:	1,571			3,257			1,489			3,325			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	108	534	163	95	1,389	120	87	497	173	78	1,403	174	4,821
% TURNS:	13%	66%	20%	6%	87%	7%	11%	66%	23%	5%	85%	11%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	18%	61%	20%	8%	84%	8%	12%	69%	19%	5%	86%	9%
	2020	21%	57%	22%	10%	80%	10%	14%	64%	22%	6%	82%	11%
	2030	22%	56%	22%	11%	80%	10%	14%	63%	22%	7%	81%	12%
	2040	23%	54%	23%	11%	78%	10%	15%	61%	23%	8%	79%	13%
P.M.													
	2013	13%	66%	20%	6%	87%	7%	11%	66%	23%	5%	85%	11%
	2020	17%	62%	22%	8%	83%	9%	14%	62%	25%	7%	81%	13%
	2030	17%	60%	22%	9%	82%	9%	14%	60%	25%	7%	80%	13%
	2040	19%	58%	23%	10%	81%	10%	15%	59%	26%	8%	78%	14%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: WB SR 90 at SW 12 Ave.
PREPARED BY: NC
FILE: BUILD-BASED ON FIELD K&D

DATE: 12/30/2014
NOTES:

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ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	9,730	13,350	7,100	16,580
24 HR EST. AADT	2020	10,500	14,300	7,500	17,800
24 HR EST. AADT	2030	11,500	15,900	8,000	19,700
24 HR EST. AADT	2040	12,500	17,600	9,000	21,900

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	44.1%	51.2%	41.1%	58.9%	57.8%	50.8%	58.9%	41.1%
2020	Approach D30 Factor	44.1%	51.2%	41.1%	58.9%	57.8%	50.8%	58.9%	41.1%
2030	Approach D30 Factor	44.1%	51.2%	41.1%	58.9%	57.8%	50.8%	58.9%	41.1%
2040	Approach D30 Factor	44.1%	51.2%	41.1%	58.9%	57.8%	50.8%	58.9%	41.1%

A.M. DESIGN HR. TURNS		NORTH LEG RIGHT	NORTH LEG THRU	NORTH LEG LEFT	EAST LEG RIGHT	EAST LEG THRU	EAST LEG LEFT	SOUTH LEG RIGHT	SOUTH LEG THRU	SOUTH LEG LEFT	WEST LEG RIGHT	WEST LEG THRU	WEST LEG LEFT
2013	EST. TURNS												
2020	EST. TURNS	40	410	30	30	270	30	30	570	50	30	520	50
2030	EST. TURNS												
2040	EST. TURNS	50	520	40	40	340	40	40	720	70	30	670	60
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	30	580	70	30	410	40	40	510	50	40	630	60
2030	EST. TURNS												
2040	EST. TURNS	40	740	80	40	500	50	50	640	60	50	750	80

LINK VOLUME CHECK

		NORTH LEG FROM	NORTH LEG TO	NORTH LEG LINK	EAST LEG FROM	EAST LEG TO	EAST LEG LINK	SOUTH LEG FROM	SOUTH LEG TO	SOUTH LEG LINK	WEST LEG FROM	WEST LEG TO	WEST LEG LINK
DESIGN HOUR A.M.:													
CONTROL LINK VOLUMES		386	494	880	494	706	1200	369	271	640	879	611	1490
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		417	533	950	529	761	1290	390	290	680	944	656	1600
2020	TURN SUMMARY	480	650	1130	330	580	910	650	470	1120	600	360	960
CONTROL LINK VOLUMES		456	584	1040	588	842	1430	416	304	720	1044	726	1770
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		496	634	1130	651	929	1580	468	342	810	1161	809	1970
2040	TURN SUMMARY	610	820	1430	420	750	1170	830	590	1420	760	460	1220
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		449	431	880	708	492	1200	325	315	640	613	877	1490
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		484	466	950	758	532	1290	343	337	680	658	942	1600
2020	TURN SUMMARY	680	600	1280	480	740	1220	600	660	1260	730	490	1220
CONTROL LINK VOLUMES		530	510	1040	843	587	1430	366	354	720	729	1041	1770
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		576	554	1130	933	647	1580	412	398	810	810	1160	1970
2040	TURN SUMMARY	860	760	1620	590	880	1470	750	840	1590	880	600	1480

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD-BASED ON FIELD K&D
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	WB SR 90 at SR 90/SW 8 Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	8,060	14,700	760	13,350
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**0.9%**	**CGR**	**1.0%**	**CGR**	**0.9%**	**CGR**	**1.0%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
			1		**1**		**1**		**1**	
		2013		8,060		14,700		760		13,350
NO. YEARS	7	2020	1.063	8,500	1.074	15,800	1.063	1,000	1.074	14,300
NO. YEARS	17	2030	1.161	9,500	1.190	17,500	1.161	1,000	1.190	15,900
NO. YEARS	27	2040	1.267	10,000	1.319	19,400	1.267	1,000	1.319	17,600

Percent Turns Calculated From Base Year AADTs:

JKTURNS	FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	8,060			14,700			760			13,350		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	13,350	760	14,700	8,060	13,350	760	14,700	8,060	13,350	760	14,700	8,060
	46%	3%	51%	36%	60%	3%	41%	22%	37%	3%	63%	34%
2020 2-WAY ADT	8,500			15,800			1,000			14,300		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	14,300	1,000	15,800	8,500	14,300	1,000	15,800	8,500	14,300	1,000	15,800	8,500
	46%	3%	51%	36%	60%	4%	41%	22%	37%	4%	62%	34%
2030 2-WAY ADT	9,500			17,500			1,000			15,900		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	15,900	1,000	17,500	9,500	15,900	1,000	17,500	9,500	15,900	1,000	17,500	9,500
	46%	3%	51%	36%	60%	4%	41%	22%	37%	4%	63%	34%
2040 2-WAY ADT	10,000			19,400			1,000			17,600		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	17,600	1,000	19,400	10,000	17,600	1,000	19,400	10,000	17,600	1,000	19,400	10,000
	46%	3%	51%	35%	62%	3%	41%	21%	37%	3%	64%	33%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	1,004			2,441			755			2,472			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	88	256	164	62	563	47	49	286	65	52	1,556	148	3,336
% TURNS:	17%	50%	32%	9%	84%	7%	12%	72%	16%	3%	89%	8%	
P.M.	2-Way Pk Hr Vol:	763			3,086			608			3,201			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	66	173	100	63	1,261	64	35	193	92	51	1,563	168	3,829
% TURNS:	19%	51%	29%	5%	91%	5%	11%	60%	29%	3%	88%	9%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	17%	50%	32%	9%	84%	7%	12%	72%	16%	3%	89%	8%
	2020	20%	46%	34%	12%	81%	7%	15%	67%	18%	3%	86%	11%
	2030	21%	44%	35%	13%	81%	7%	16%	65%	19%	3%	85%	12%
	2040	22%	42%	35%	14%	80%	6%	17%	63%	20%	3%	84%	13%
P.M.													
	2013	19%	51%	29%	5%	91%	5%	11%	60%	29%	3%	88%	9%
	2020	22%	46%	32%	8%	88%	5%	14%	56%	30%	3%	85%	12%
	2030	23%	45%	32%	8%	87%	5%	15%	56%	30%	3%	85%	12%
	2040	24%	43%	33%	10%	86%	4%	16%	54%	30%	3%	84%	13%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: WB SR 90 at SR 90/SW 8 Ave.
PREPARED BY: NC
FILE: BUILD-BASED ON FIELD K&D

DATE: 12/30/2014
NOTES:

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ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	8,060	14,700	760	13,350
24 HR EST. AADT	2020	8,500	15,800	1,000	14,300
24 HR EST. AADT	2030	9,500	17,500	1,000	15,900
24 HR EST. AADT	2040	10,000	19,400	1,000	17,600

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	50.6%	44.4%	41.1%	58.9%	53.0%	52.6%	58.9%	41.1%
2020	Approach D30 Factor	50.6%	44.4%	41.1%	58.9%	53.0%	52.6%	58.9%	41.1%
2030	Approach D30 Factor	50.6%	44.4%	41.1%	58.9%	53.0%	52.6%	58.9%	41.1%
2040	Approach D30 Factor	50.6%	44.4%	41.1%	58.9%	53.0%	52.6%	58.9%	41.1%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	30	280	50	30	250	20	10	310	20	10	580	40
2030	EST. TURNS												
2040	EST. TURNS	40	360	60	30	330	30	20	400	30	20	760	40
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	20	170	40	20	400	20	10	210	20	20	650	60
2030	EST. TURNS												
2040	EST. TURNS	20	220	50	20	550	30	20	270	30	20	820	70

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		367	363	730	544	776	1320	36	34	70	708	492	1200
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		387	383	770	584	836	1420	48	42	90	758	532	1290
2020	TURN SUMMARY	360	380	740	300	640	940	340	310	650	630	300	930
CONTROL LINK VOLUMES		433	427	860	647	933	1580	48	42	90	843	587	1430
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		455	445	900	718	1032	1750	48	42	90	933	647	1580
2040	TURN SUMMARY	460	470	930	390	840	1230	450	410	860	820	400	1220
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		322	408	730	779	541	1320	36	34	70	494	706	1200
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		340	430	770	838	582	1420	47	43	90	529	761	1290
2020	TURN SUMMARY	230	290	520	440	700	1140	240	210	450	730	440	1170
CONTROL LINK VOLUMES		380	480	860	928	652	1580	47	43	90	588	842	1430
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		400	500	900	1028	722	1750	47	43	90	651	929	1580
2040	TURN SUMMARY	290	360	650	600	890	1490	320	270	590	910	600	1510

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD-BASED ON FIELD K&D
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	WB SR 90 at SW 4 Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	13,530	15,330	12,170	18,370
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**0.9%**	**CGR**	**1.9%**	**CGR**	**0.9%**	**CGR**	**1.9%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
		2013		13,530		15,330		12,170		18,370
NO. YEARS	7	2020	1.063	14,500	1.139	17,500	1.063	13,000	1.139	20,900
NO. YEARS	17	2030	1.161	15,500	1.372	21,000	1.161	14,000	1.372	25,200
NO. YEARS	27	2040	1.267	17,000	1.653	25,300	1.267	15,500	1.653	30,400

Percent Turns Calculated From Base Year AADTs:

JKTURNS	FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	13,530			15,330			12,170			18,370		
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
18,370	12,170	15,330	13,530	18,370	12,170	15,330	13,530	18,370	12,170	15,330	13,530
40%	27%	33%	31%	42%	28%	32%	29%	39%	30%	37%	33%
2020 2-WAY ADT	14,500			17,500			13,000			20,900	
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
20,900	13,000	17,500	14,500	20,900	13,000	17,500	14,500	20,900	13,000	17,500	14,500
41%	25%	34%	30%	43%	27%	33%	27%	40%	29%	39%	32%
2030 2-WAY ADT	15,500			21,000			14,000			25,200	
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
25,200	14,000	21,000	15,500	25,200	14,000	21,000	15,500	25,200	14,000	21,000	15,500
42%	23%	35%	28%	46%	26%	34%	25%	41%	28%	42%	31%
2040 2-WAY ADT	17,000			25,300			15,500			30,400	
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
30,400	15,500	25,300	17,000	30,400	15,500	25,300	17,000	30,400	15,500	25,300	17,000
43%	22%	36%	27%	48%	25%	35%	23%	42%	27%	44%	29%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	3,789			4,934			1,643			2,518			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	281	952	2,456	0	454	316	100	100	100	75	1,608	0	6,442
% TURNS:	8%	26%	67%	0%	59%	41%	33%	33%	33%	4%	96%	0%	
P.M.	2-Way Pk Hr Vol:	2,711			4,101			1,397			3,025			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	478	709	1,424	0	744	259	100	100	100	129	1,574	0	5,617
% TURNS:	18%	27%	55%	0%	74%	26%	33%	33%	33%	8%	92%	0%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		SB			WB			NB			EB	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
A.M.												
2013	8%	26%	67%	0%	59%	41%	33%	33%	33%	4%	96%	0%
2020	11%	26%	63%	3%	57%	40%	33%	33%	34%	7%	90%	3%
2030	12%	25%	63%	4%	57%	39%	33%	32%	34%	7%	89%	4%
2040	13%	25%	61%	5%	57%	38%	34%	32%	35%	8%	87%	5%
P.M.												
2013	18%	27%	55%	0%	74%	26%	33%	33%	33%	8%	92%	0%
2020	21%	27%	52%	3%	71%	26%	33%	33%	34%	10%	87%	3%
2030	21%	27%	52%	4%	71%	26%	33%	32%	34%	10%	86%	4%
2040	22%	26%	51%	5%	70%	26%	34%	32%	35%	11%	84%	5%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: WB SR 90 at SW 4 Ave.
PREPARED BY: NC
FILE: BUILD-BASED ON FIELD K&D

DATE: 12/30/2014
NOTES:

0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	13,530	15,330	12,170	18,370
24 HR EST. AADT	2020	14,500	17,500	13,000	20,900
24 HR EST. AADT	2030	15,500	21,000	14,000	25,200
24 HR EST. AADT	2040	17,000	25,300	15,500	30,400

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	97.4%	96.3%	41.1%	58.9%	18.3%	21.5%	58.9%	41.1%
2020	Approach D30 Factor	97.4%	96.3%	41.1%	58.9%	18.3%	21.5%	58.9%	41.1%
2030	Approach D30 Factor	97.4%	96.3%	41.1%	58.9%	18.3%	21.5%	58.9%	41.1%
2040	Approach D30 Factor	97.4%	96.3%	41.1%	58.9%	18.3%	21.5%	58.9%	41.1%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	120	920	340	0	200	140	0	0	0	30	600	0
2030	EST. TURNS												
2040	EST. TURNS	150	1,170	440	0	290	190	0	0	0	40	880	0
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	140	1,000	660	0	350	100	0	0	0	70	700	0
2030	EST. TURNS												
2040	EST. TURNS	180	1,260	830	0	490	150	0	0	0	90	890	0

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		1186	34	1220	567	813	1380	200	900	1100	974	676	1650
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		1271	39	1310	647	933	1580	214	956	1170	1108	772	1880
2020	TURN SUMMARY	1380	0	1380	340	940	1280	0	1090	1090	630	320	950
CONTROL LINK VOLUMES		1358	42	1400	777	1113	1890	230	1030	1260	1336	934	2270
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		1490	40	1530	936	1344	2280	255	1145	1400	1612	1128	2740
2040	TURN SUMMARY	1760	0	1760	480	1320	1800	0	1400	1400	920	440	1360
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		1173	47	1220	813	567	1380	235	865	1100	680	970	1650
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		1257	53	1310	928	652	1580	251	919	1170	773	1107	1880
2020	TURN SUMMARY	1800	0	1800	450	1360	1810	0	1170	1170	770	490	1260
CONTROL LINK VOLUMES		1344	56	1400	1113	777	1890	271	989	1260	932	1338	2270
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		1474	56	1530	1341	939	2280	300	1100	1400	1124	1616	2740
2040	TURN SUMMARY	2270	0	2270	640	1720	2360	0	1500	1500	980	670	1650

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD-BASED ON FIELD K&D
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	WB SR 90 at SW 3 Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	190	12,810	15,330	15,610
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**0.9%**	**CGR**	**1.9%**	**CGR**	**0.9%**	**CGR**	**1.9%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

			NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG		
					1		**1**		**1**		**1**
		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
		2013		190		12,810		15,330		15,610
NO. YEARS	7	2020	1.063	200	1.139	14,600	1.063	16,500	1.139	17,800
NO. YEARS	17	2030	1.161	200	1.372	17,600	1.161	18,000	1.372	21,400
NO. YEARS	27	2040	1.267	250	1.653	21,200	1.267	19,500	1.653	25,800

Percent Turns Calculated From Base Year AADTs:

JKTURNS		FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG	
2013 2-WAY ADT		190			12,810			15,330			15,610	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	15,610	15,330	12,810	190	15,610	15,330	12,810	190	15,610	15,330	12,810	190
	36%	35%	29%	1%	50%	49%	45%	1%	55%	54%	45%	1%
2020 2-WAY ADT		200			14,600			16,500			17,800	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	17,800	16,500	14,600	200	17,800	16,500	14,600	200	17,800	16,500	14,600	200
	36%	34%	30%	1%	52%	48%	45%	1%	55%	53%	47%	1%
2030 2-WAY ADT		200			17,600			18,000			21,400	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	21,400	18,000	17,600	200	21,400	18,000	17,600	200	21,400	18,000	17,600	200
	38%	32%	31%	1%	54%	45%	45%	1%	55%	50%	49%	1%
2040 2-WAY ADT		250			21,200			19,500			25,800	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	25,800	19,500	21,200	250	25,800	19,500	21,200	250	25,800	19,500	21,200	250
	39%	29%	32%	1%	57%	43%	45%	1%	55%	48%	52%	1%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)		
A.M.	2-Way Pk Hr Vol:	527			3,378			1,130			3,131		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	0	327	15	81	762	224	233	72	94	180	2,063	32	4,083
% TURNS:	0%	96%	4%	8%	71%	21%	58%	18%	24%	8%	91%	1%	
P.M.	2-Way Pk Hr Vol:	889			3,080			1,250			2,733		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	0	466	15	164	992	266	176	156	122	64	1,467	88	3,976
% TURNS:	0%	97%	3%	12%	70%	19%	39%	34%	27%	4%	91%	5%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	0%	96%	4%	8%	71%	21%	58%	18%	24%	8%	91%	1%
	2020	4%	89%	7%	7%	69%	24%	57%	16%	27%	12%	86%	1%
	2030	5%	88%	8%	7%	69%	24%	57%	16%	27%	13%	85%	1%
	2040	6%	85%	9%	6%	69%	25%	56%	15%	29%	15%	84%	1%
P.M.													
	2013	0%	97%	3%	12%	70%	19%	39%	34%	27%	4%	91%	5%
	2020	4%	91%	6%	10%	68%	22%	39%	31%	30%	9%	86%	5%
	2030	5%	89%	7%	10%	68%	22%	40%	30%	30%	10%	85%	5%
	2040	6%	86%	8%	10%	68%	23%	40%	29%	31%	11%	84%	5%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: WB SR 90 at SW 3 Ave.
PREPARED BY: NC
FILE: BUILD-BASED ON FIELD K&D

DATE: 12/30/2014
NOTES:

0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	190	12,810	15,330	15,610
24 HR EST. AADT	2020	200	14,600	16,500	17,800
24 HR EST. AADT	2030	200	17,600	18,000	21,400
24 HR EST. AADT	2040	250	21,200	19,500	25,800

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	64.9%	54.1%	41.1%	58.9%	35.3%	36.3%	58.9%	41.1%
2020	Approach D30 Factor	64.9%	54.1%	41.1%	58.9%	35.3%	36.3%	58.9%	41.1%
2030	Approach D30 Factor	64.9%	54.1%	41.1%	58.9%	35.3%	36.3%	58.9%	41.1%
2040	Approach D30 Factor	64.9%	54.1%	41.1%	58.9%	35.3%	36.3%	58.9%	41.1%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	0	0	0	60	260	230	60	220	50	120	630	40
2030	EST. TURNS												
2040	EST. TURNS	0	0	0	90	380	330	80	280	60	170	880	40
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	0	0	0	80	390	300	70	410	30	120	480	70
2030	EST. TURNS												
2040	EST. TURNS	0	0	0	120	560	430	90	520	40	170	680	100

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		11	9	20	474	676	1150	487	893	1380	827	573	1400
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		12	8	20	540	770	1310	524	966	1490	944	656	1600
2020	TURN SUMMARY	0	320	320	550	690	1240	330	350	680	790	310	1100
CONTROL LINK VOLUMES		12	8	20	651	929	1580	572	1048	1620	1134	796	1930
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		15	5	20	784	1126	1910	620	1140	1760	1368	952	2320
2040	TURN SUMMARY	0	410	410	800	960	1760	420	500	920	1090	440	1530
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		9	11	20	679	471	1150	501	879	1380	577	823	1400
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		10	10	20	774	536	1310	539	951	1490	658	942	1600
2020	TURN SUMMARY	0	560	560	770	550	1320	510	420	930	670	420	1090
CONTROL LINK VOLUMES		10	10	20	933	647	1580	588	1032	1620	792	1138	1930
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		12	8	20	1124	786	1910	637	1123	1760	954	1366	2320
2040	TURN SUMMARY	0	740	740	1110	770	1880	650	600	1250	950	600	1550

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD-BASED ON FIELD K&D
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	WB SR 90 at SW 2 Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	17,310	15,710	8,040	12,810
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**0.9%**	**CGR**	**1.9%**	**CGR**	**0.9%**	**CGR**	**1.9%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
				1		**1**		**1**		**1**
		2013		17,310		15,710		8,040		12,810
NO. YEARS	7	2020	1.063	18,500	1.139	17,900	1.063	8,500	1.139	14,600
NO. YEARS	17	2030	1.161	20,000	1.372	21,600	1.161	9,500	1.372	17,600
NO. YEARS	27	2040	1.267	22,000	1.653	26,000	1.267	10,000	1.653	21,200

Percent Turns Calculated From Base Year AADTs:

JKTURNS	FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT		17,310			15,710			8,040			12,810	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	12,810	8,040	15,710	17,310	12,810	8,040	15,710	17,310	12,810	8,040	15,710	17,310
	35%	22%	43%	45%	34%	21%	34%	38%	28%	20%	38%	42%
2020 2-WAY ADT		18,500			17,900			8,500			14,600	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	14,600	8,500	17,900	18,500	14,600	8,500	17,900	18,500	14,600	8,500	17,900	18,500
	36%	21%	44%	44%	35%	20%	35%	36%	29%	19%	40%	41%
2030 2-WAY ADT		20,000			21,600			9,500			17,600	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	17,600	9,500	21,600	20,000	17,600	9,500	21,600	20,000	17,600	9,500	21,600	20,000
	36%	20%	44%	42%	37%	20%	36%	34%	30%	19%	42%	39%
2040 2-WAY ADT		22,000			26,000			10,000			21,200	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	21,200	10,000	26,000	22,000	21,200	10,000	26,000	22,000	21,200	10,000	26,000	22,000
	37%	17%	45%	41%	40%	19%	38%	32%	31%	17%	45%	38%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	1,552			2,718			1,523			3,277			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	85	214	129	106	655	96	81	632	252	248	1,651	386	4,535
% TURNS:	20%	50%	30%	12%	76%	11%	8%	65%	26%	11%	72%	17%	
P.M.	2-Way Pk Hr Vol:	1,447			2,676			1,518			3,401			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	179	264	146	84	1,148	86	82	458	253	375	1,130	316	4,521
% TURNS:	30%	45%	25%	6%	87%	7%	10%	58%	32%	21%	62%	17%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	20%	50%	30%	12%	76%	11%	8%	65%	26%	11%	72%	17%
	2020	21%	47%	31%	16%	72%	12%	11%	63%	26%	12%	69%	19%
	2030	22%	46%	32%	16%	72%	12%	12%	62%	27%	12%	69%	20%
	2040	23%	45%	33%	17%	70%	12%	13%	60%	27%	12%	68%	20%
P.M.													
	2013	30%	45%	25%	6%	87%	7%	10%	58%	32%	21%	62%	17%
	2020	31%	42%	27%	10%	82%	8%	13%	56%	32%	20%	60%	20%
	2030	31%	42%	27%	11%	81%	8%	14%	55%	32%	20%	60%	20%
	2040	32%	40%	28%	12%	79%	9%	15%	53%	32%	20%	59%	21%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: WB SR 90 at SW 2 Ave.
PREPARED BY: NC
FILE: BUILD-BASED ON FIELD K&D

DATE: 12/30/2014
NOTES:

0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	17,310	15,710	8,040	12,810
24 HR EST. AADT	2020	18,500	17,900	8,500	14,600
24 HR EST. AADT	2030	20,000	21,600	9,500	17,600
24 HR EST. AADT	2040	22,000	26,000	10,000	21,200

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	27.6%	40.7%	41.1%	58.9%	63.4%	52.2%	58.9%	41.1%
2020	Approach D30 Factor	27.6%	40.7%	41.1%	58.9%	63.4%	52.2%	58.9%	41.1%
2030	Approach D30 Factor	27.6%	40.7%	41.1%	58.9%	63.4%	52.2%	58.9%	41.1%
2040	Approach D30 Factor	27.6%	40.7%	41.1%	58.9%	63.4%	52.2%	58.9%	41.1%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	40	230	30	50	390	40	20	800	100	70	540	110
2030	EST. TURNS												
2040	EST. TURNS	50	290	40	70	560	60	30	1020	120	100	780	160
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	60	290	60	30	580	30	60	580	70	180	280	140
2030	EST. TURNS												
2040	EST. TURNS	80	370	80	40	840	40	90	730	90	260	380	210

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		430	1130	1560	581	829	1410	458	262	720	679	471	1150
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		459	1211	1670	662	948	1610	485	285	770	774	536	1310
2020	TURN SUMMARY	300	960	1260	480	590	1070	920	340	1260	720	530	1250
CONTROL LINK VOLUMES		496	1304	1800	799	1141	1940	542	318	860	933	647	1580
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		546	1434	1980	962	1378	2340	570	330	900	1124	786	1910
2040	TURN SUMMARY	380	1250	1630	690	850	1540	1170	450	1620	1040	730	1770
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		634	926	1560	833	577	1410	378	342	720	474	676	1150
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		678	992	1670	949	661	1610	400	370	770	540	770	1310
2020	TURN SUMMARY	410	750	1160	640	400	1040	710	500	1210	600	710	1310
CONTROL LINK VOLUMES		733	1067	1800	1145	795	1940	447	413	860	651	929	1580
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		806	1174	1980	1378	962	2340	470	430	900	784	1126	1910
2040	TURN SUMMARY	530	980	1510	920	550	1470	910	670	1580	850	1010	1860

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD-BASED ON FIELD K&D
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	WB SR 90 at SW 1 Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	3,290	15,710	6,380	15,710
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**0.9%**	**CGR**	**1.9%**	**CGR**	**0.9%**	**CGR**	**1.9%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
		2013		3,290		15,710		6,380		15,710
NO. YEARS	7	2020	1.063	3,500	1.139	17,900	1.063	7,000	1.139	17,900
NO. YEARS	17	2030	1.161	4,000	1.372	21,600	1.161	7,500	1.372	21,600
NO. YEARS	27	2040	1.267	4,000	1.653	26,000	1.267	8,000	1.653	26,000

Percent Turns Calculated From Base Year AADTs:

JKTURNS	FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	3,290			15,710			6,380			15,710		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	15,710	6,380	15,710	3,290	15,710	6,380	15,710	3,290	15,710	6,380	15,710	3,290
	42%	17%	42%	13%	62%	25%	45%	9%	45%	25%	62%	13%
2020 2-WAY ADT	3,500			17,900			7,000			17,900		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	17,900	7,000	17,900	3,500	17,900	7,000	17,900	3,500	17,900	7,000	17,900	3,500
	42%	16%	42%	12%	63%	25%	46%	9%	46%	25%	63%	12%
2030 2-WAY ADT	4,000			21,600			7,500			21,600		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	21,600	7,500	21,600	4,000	21,600	7,500	21,600	4,000	21,600	7,500	21,600	4,000
	43%	15%	43%	12%	65%	23%	46%	8%	46%	23%	65%	12%
2040 2-WAY ADT	4,000			26,000			8,000			26,000		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	26,000	8,000	26,000	4,000	26,000	8,000	26,000	4,000	26,000	8,000	26,000	4,000
	43%	13%	43%	11%	68%	21%	46%	7%	46%	21%	68%	11%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	1,222			2,770			1,530			3,234			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	304	611	207	0	783	126	100	100	100	493	1,554	0	4,378
% TURNS:	27%	54%	18%	0%	86%	14%	33%	33%	33%	24%	76%	0%	
P.M.	2-Way Pk Hr Vol:	1,170			2,663			1,489			2,948			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	286	646	138	0	1,178	203	100	100	100	340	1,044	0	4,135
% TURNS:	27%	60%	13%	0%	85%	15%	33%	33%	33%	25%	75%	0%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	27%	54%	18%	0%	86%	14%	33%	33%	33%	24%	76%	0%
	2020	29%	51%	21%	1%	84%	15%	35%	31%	35%	24%	75%	1%
	2030	29%	49%	21%	2%	84%	15%	35%	30%	35%	24%	75%	2%
	2040	30%	48%	23%	2%	83%	15%	36%	29%	36%	24%	75%	2%
P.M.													
	2013	27%	60%	13%	0%	85%	15%	33%	33%	33%	25%	75%	0%
	2020	28%	56%	16%	1%	83%	16%	35%	31%	35%	25%	74%	1%
	2030	29%	55%	17%	2%	83%	16%	35%	30%	35%	24%	74%	2%
	2040	29%	53%	18%	2%	82%	16%	36%	29%	36%	24%	74%	2%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: WB SR 90 at SW 1 Ave.
PREPARED BY: NC
FILE: BUILD-BASED ON FIELD K&D

DATE: 12/30/2014
NOTES:

0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	3,290	15,710	6,380	15,710
24 HR EST. AADT	2020	3,500	17,900	7,000	17,900
24 HR EST. AADT	2030	4,000	21,600	7,500	21,600
24 HR EST. AADT	2040	4,000	26,000	8,000	26,000

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	91.8%	91.5%	41.1%	58.9%	19.6%	20.1%	58.9%	41.1%
2020	Approach D30 Factor	91.8%	91.5%	41.1%	58.9%	19.6%	20.1%	58.9%	41.1%
2030	Approach D30 Factor	91.8%	91.5%	41.1%	58.9%	19.6%	20.1%	58.9%	41.1%
2040	Approach D30 Factor	91.8%	91.5%	41.1%	58.9%	19.6%	20.1%	58.9%	41.1%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	130	980	120	0	400	80	0	0	0	130	510	0
2030	EST. TURNS												
2040	EST. TURNS	190	1,240	150	0	580	110	0	0	0	190	740	0
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	90	1,060	220	0	540	100	0	0	0	160	280	0
2030	EST. TURNS												
2040	EST. TURNS	110	1,350	300	0	780	140	0	0	0	200	410	0

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		272	28	300	581	829	1410	113	457	570	833	577	1410
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		289	31	320	662	948	1610	124	506	630	949	661	1610
2020	TURN SUMMARY	1230	0	1230	480	630	1110	0	1190	1190	640	530	1170
CONTROL LINK VOLUMES		331	29	360	799	1141	1940	132	548	680	1145	795	1940
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		331	29	360	962	1378	2340	141	579	720	1378	962	2340
2040	TURN SUMMARY	1580	0	1580	690	890	1580	0	1540	1540	930	770	1700
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		271	29	300	833	577	1410	116	454	570	581	829	1410
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		288	32	320	949	661	1610	127	503	630	662	948	1610
2020	TURN SUMMARY	1370	0	1370	640	500	1140	0	1320	1320	440	630	1070
CONTROL LINK VOLUMES		329	31	360	1145	795	1940	136	544	680	799	1141	1940
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		329	31	360	1378	962	2340	145	575	720	962	1378	2340
2040	TURN SUMMARY	1760	0	1760	920	710	1630	0	1690	1690	610	890	1500

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD-BASED ON FIELD K&D
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	WB SR 90 at S. Miami Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	5,600	13,050	7,420	15,710
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**0.9%**	**CGR**	**1.9%**	**CGR**	**0.9%**	**CGR**	**1.9%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
		2013		5,600		13,050		7,420		15,710
NO. YEARS	7	2020	1.063	6,000	1.139	14,900	1.063	8,000	1.139	17,900
NO. YEARS	17	2030	1.161	6,500	1.372	17,900	1.161	8,500	1.372	21,600
NO. YEARS	27	2040	1.267	7,000	1.653	21,600	1.267	9,500	1.653	26,000

Percent Turns Calculated From Base Year AADTs:

JKTURNS		FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG	
2013 2-WAY ADT		5,600			13,050			7,420			15,710	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	15,710	7,420	13,050	5,600	15,710	7,420	13,050	5,600	15,710	7,420	13,050	5,600
	43%	21%	36%	19%	55%	26%	38%	16%	46%	28%	50%	21%
2020 2-WAY ADT		6,000			14,900			8,000			17,900	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	17,900	8,000	14,900	6,000	17,900	8,000	14,900	6,000	17,900	8,000	14,900	6,000
	44%	20%	37%	19%	56%	25%	38%	15%	46%	28%	52%	21%
2030 2-WAY ADT		6,500			17,900			8,500			21,600	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	21,600	8,500	17,900	6,500	21,600	8,500	17,900	6,500	21,600	8,500	17,900	6,500
	45%	18%	37%	18%	59%	23%	39%	14%	47%	26%	54%	20%
2040 2-WAY ADT		7,000			21,600			9,500			26,000	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	26,000	9,500	21,600	7,000	26,000	9,500	21,600	7,000	26,000	9,500	21,600	7,000
	46%	17%	38%	16%	61%	22%	40%	13%	48%	25%	57%	18%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	839			2,442			884			2,813			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	1	1	1	74	660	0	69	531	283	0	1,638	231	3,489
% TURNS:	33%	33%	33%	10%	90%	0%	8%	60%	32%	0%	88%	12%	
P.M.	2-Way Pk Hr Vol:	911			2,127			983			2,671			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	1	1	1	113	1,011	0	51	509	422	0	951	286	3,346
% TURNS:	33%	33%	33%	10%	90%	0%	5%	52%	43%	0%	77%	23%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	33%	33%	33%	10%	90%	0%	8%	60%	32%	0%	88%	12%
	2020	34%	32%	34%	11%	87%	3%	11%	56%	33%	3%	84%	13%
	2030	35%	31%	34%	11%	86%	3%	12%	54%	34%	3%	83%	13%
	2040	35%	31%	34%	11%	85%	4%	13%	52%	35%	4%	82%	13%
P.M.													
	2013	33%	33%	33%	10%	90%	0%	5%	52%	43%	0%	77%	23%
	2020	34%	32%	34%	11%	87%	3%	9%	48%	43%	3%	74%	23%
	2030	35%	31%	34%	11%	86%	3%	9%	47%	43%	3%	74%	23%
	2040	35%	31%	34%	11%	85%	4%	11%	45%	44%	4%	74%	22%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: WB SR 90 at S. Miami Ave.
PREPARED BY: NC
FILE: BUILD-BASED ON FIELD K&D

DATE: 12/30/2014
NOTES:

0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	5,600	13,050	7,420	15,710
24 HR EST. AADT	2020	6,000	14,900	8,000	17,900
24 HR EST. AADT	2030	6,500	17,900	8,500	21,600
24 HR EST. AADT	2040	7,000	21,600	9,500	26,000

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	0.4%	0.3%	41.1%	58.9%	99.9%	99.9%	58.9%	41.1%
2020	Approach D30 Factor	0.4%	0.3%	41.1%	58.9%	99.9%	99.9%	58.9%	41.1%
2030	Approach D30 Factor	0.4%	0.3%	41.1%	58.9%	99.9%	99.9%	58.9%	41.1%
2040	Approach D30 Factor	0.4%	0.3%	41.1%	58.9%	99.9%	99.9%	58.9%	41.1%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	0	0	0	70	400	0	30	700	120	0	510	90
2030	EST. TURNS												
2040	EST. TURNS	0	0	0	100	580	0	30	890	160	0	740	130
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	0	0	0	100	560	0	30	1100	170	0	290	250
2030	EST. TURNS												
2040	EST. TURNS	0	0	0	150	810	0	40	1390	220	0	410	360

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		2	498	500	483	687	1170	667	3	670	833	577	1410
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		2	538	540	551	789	1340	719	1	720	949	661	1610
2020	TURN SUMMARY	0	860	860	470	540	1010	850	0	850	600	520	1120
CONTROL LINK VOLUMES		2	588	590	662	948	1610	764	6	770	1145	795	1940
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		2	628	630	799	1141	1940	854	6	860	1378	962	2340
2040	TURN SUMMARY	0	1120	1120	680	770	1450	1080	0	1080	870	740	1610
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		2	498	500	692	478	1170	667	3	670	581	829	1410
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		2	538	540	790	550	1340	719	1	720	662	948	1610
2020	TURN SUMMARY	0	1450	1450	660	320	980	1300	0	1300	540	730	1270
CONTROL LINK VOLUMES		2	588	590	949	661	1610	764	6	770	799	1141	1940
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		2	628	630	1145	795	1940	854	6	860	962	1378	2340
2040	TURN SUMMARY	0	1900	1900	960	450	1410	1650	0	1650	770	1030	1800

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD-BASED ON FIELD K&D
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	WB SR 90 at Brickell Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	47,270	11,120	44,380	13,050
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**0.9%**	**CGR**	**1.9%**	**CGR**	**0.9%**	**CGR**	**1.9%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
			1		**1**		**1**		**1**	
		2013		47,270		11,120		44,380		13,050
NO. YEARS	7	2020	1.063	50,500	1.139	12,700	1.063	47,000	1.139	14,900
NO. YEARS	17	2030	1.161	55,000	1.372	15,300	1.161	51,500	1.372	17,900
NO. YEARS	27	2040	1.267	60,000	1.653	18,400	1.267	56,000	1.653	21,600

Percent Turns Calculated From Base Year AADTs:

JKTURNS	FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	47,270			11,120			44,380			13,050		
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
13,050	44,380	11,120	47,270	13,050	44,380	11,120	47,270	13,050	44,380	11,120	47,270
19%	65%	16%	45%	12%	42%	16%	66%	18%	43%	11%	46%
2020 2-WAY ADT	50,500			12,700			47,000			14,900	
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
14,900	47,000	12,700	50,500	14,900	47,000	12,700	50,500	14,900	47,000	12,700	50,500
20%	63%	17%	45%	13%	42%	16%	65%	19%	43%	12%	46%
2030 2-WAY ADT	55,000			15,300			51,500			17,900	
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
17,900	51,500	15,300	55,000	17,900	51,500	15,300	55,000	17,900	51,500	15,300	55,000
21%	61%	18%	44%	14%	41%	17%	62%	20%	42%	13%	45%
2040 2-WAY ADT	60,000			18,400			56,000			21,600	
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
21,600	56,000	18,400	60,000	21,600	56,000	18,400	60,000	21,600	56,000	18,400	60,000
23%	58%	19%	44%	16%	41%	18%	60%	22%	42%	14%	45%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	3,406			1,254			3,307			2,035			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	166	1,149	205	44	40	4	256	1,308	369	221	705	534	5,001
% TURNS:	11%	76%	13%	50%	45%	5%	13%	68%	19%	15%	48%	37%	
P.M.	2-Way Pk Hr Vol:	3,222			880			3,265			2,021			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	366	1,277	23	100	231	67	11	1,195	518	197	448	261	4,694
% TURNS:	22%	77%	1%	25%	58%	17%	1%	69%	30%	22%	49%	29%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	11%	76%	13%	50%	45%	5%	13%	68%	19%	15%	48%	37%
	2020	12%	74%	14%	49%	42%	8%	14%	67%	19%	18%	45%	38%
	2030	12%	74%	14%	49%	42%	9%	14%	67%	19%	19%	44%	38%
	2040	13%	73%	14%	49%	40%	11%	14%	66%	20%	20%	43%	38%
P.M.													
	2013	22%	77%	1%	25%	58%	17%	1%	69%	30%	22%	49%	29%
	2020	22%	75%	3%	27%	54%	19%	2%	69%	29%	24%	46%	31%
	2030	22%	75%	3%	28%	53%	20%	3%	68%	29%	24%	45%	31%
	2040	22%	74%	4%	28%	51%	21%	4%	68%	29%	25%	43%	31%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: WB SR 90 at Brickell Ave.
PREPARED BY: NC
FILE: BUILD-BASED ON FIELD K&D

DATE: 12/30/2014
NOTES:

0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	47,270	11,120	44,380	13,050
24 HR EST. AADT	2020	50,500	12,700	47,000	14,900
24 HR EST. AADT	2030	55,000	15,300	51,500	17,900
24 HR EST. AADT	2040	60,000	18,400	56,000	21,600

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	44.6%	51.7%	41.1%	58.9%	58.5%	52.8%	58.9%	41.1%
2020	Approach D30 Factor	44.6%	51.7%	41.1%	58.9%	58.5%	52.8%	58.9%	41.1%
2030	Approach D30 Factor	44.6%	51.7%	41.1%	58.9%	58.5%	52.8%	58.9%	41.1%
2040	Approach D30 Factor	44.6%	51.7%	41.1%	58.9%	58.5%	52.8%	58.9%	41.1%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	180	1,270	220	50	50	10	280	1,460	290	130	50	300
2030	EST. TURNS												
2040	EST. TURNS	230	1,610	280	70	70	10	350	1850	400	190	70	430
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	90	1,610	30	110	280	80	10	1400	290	90	40	160
2030	EST. TURNS												
2040	EST. TURNS	110	2,050	30	170	400	110	20	1770	370	130	60	230

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		1899	2351	4250	411	589	1000	2335	1655	3990	692	478	1170
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		2028	2522	4550	470	670	1140	2473	1757	4230	790	550	1340
2020	TURN SUMMARY	1670	1810	3480	110	550	660	2030	1410	3440	480	520	1000
CONTROL LINK VOLUMES		2209	2741	4950	566	814	1380	2709	1931	4640	949	661	1610
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		2410	2990	5400	681	979	1660	2946	2094	5040	1145	795	1940
2040	TURN SUMMARY	2120	2350	4470	150	700	850	2600	1810	4410	690	700	1390
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		2200	2050	4250	589	411	1000	2109	1881	3990	483	687	1170
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		2350	2200	4550	673	467	1140	2234	1996	4230	551	789	1340
2020	TURN SUMMARY	1730	1670	3400	470	80	550	1700	1780	3480	290	660	950
CONTROL LINK VOLUMES		2559	2391	4950	811	569	1380	2447	2193	4640	662	948	1610
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		2792	2608	5400	975	685	1660	2661	2379	5040	799	1141	1940
2040	TURN SUMMARY	2190	2170	4360	680	110	790	2160	2290	4450	420	880	1300

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD- FORCED AND BALANCED
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	WB SW 8 St. at SR 9		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	51,470	39,610	43,130	36,060
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**1.1%**	**CGR**	**0.9%**	**CGR**	**1.1%**	**CGR**	**0.9%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
		2013		51,470		39,610		43,130		36,060
NO. YEARS	7	2020	1.077	55,500	1.068	42,300	1.077	46,500	1.068	38,500
NO. YEARS	17	2030	1.198	61,500	1.172	46,400	1.198	51,500	1.172	42,300
NO. YEARS	27	2040	1.333	68,500	1.287	51,000	1.333	57,500	1.287	46,400

Percent Turns Calculated From Base Year AADTs:

JKTURNS		FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013	2-WAY ADT	51,470			39,610			43,130			36,060		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	36,060	43,130	39,610	51,470	36,060	43,130	39,610	51,470	36,060	43,130	39,610	51,470
	30%	36%	33%	39%	28%	33%	31%	40%	28%	32%	30%	38%
2020	2-WAY ADT	55,500			42,300			46,500			38,500		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	38,500	46,500	42,300	55,500	38,500	46,500	42,300	55,500	38,500	46,500	42,300	55,500
	30%	37%	33%	40%	27%	33%	31%	41%	28%	32%	29%	38%
2030	2-WAY ADT	61,500			46,400			51,500			42,300		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	42,300	51,500	46,400	61,500	42,300	51,500	46,400	61,500	42,300	51,500	46,400	61,500
	30%	37%	33%	40%	27%	33%	31%	41%	28%	32%	29%	39%
2040	2-WAY ADT	68,500			51,000			57,500			46,400		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	46,400	57,500	51,000	68,500	46,400	57,500	51,000	68,500	46,400	57,500	51,000	68,500
	30%	37%	33%	40%	27%	33%	31%	41%	28%	32%	29%	39%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	3,629			506			3,482			309			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	31	1,966	0	214	99	192	1	1,281	1	41	0	137	3,963
% TURNS:	2%	98%	0%	42%	20%	38%	0%	100%	0%	23%	0%	77%	
P.M.	2-Way Pk Hr Vol:	2,894			828			2,726			504			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	23	1,218	0	268	346	213	1	1,272	1	21	0	113	3,476
% TURNS:	2%	98%	0%	32%	42%	26%	0%	100%	0%	16%	0%	84%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	2%	98%	0%	42%	20%	38%	0%	100%	0%	23%	0%	77%
	2020	4%	92%	3%	42%	20%	38%	3%	94%	3%	24%	3%	73%
	2030	5%	91%	4%	42%	21%	37%	4%	92%	4%	24%	4%	72%
	2040	6%	88%	5%	42%	21%	37%	5%	90%	5%	25%	5%	71%
P.M.													
	2013	2%	98%	0%	32%	42%	26%	0%	100%	0%	16%	0%	84%
	2020	5%	92%	3%	33%	40%	26%	3%	94%	3%	17%	3%	80%
	2030	5%	90%	4%	33%	40%	27%	4%	92%	4%	18%	4%	79%
	2040	7%	88%	5%	34%	39%	27%	5%	90%	5%	18%	5%	77%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: WB SW 8 St. at SR 9
PREPARED BY: NC
FILE: BUILD- FORCED AND BALANCED

DATE: 12/30/2014
NOTES:

0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	51,470	39,610	43,130	36,060
24 HR EST. AADT	2020	55,500	42,300	46,500	38,500
24 HR EST. AADT	2030	61,500	46,400	51,500	42,300
24 HR EST. AADT	2040	68,500	51,000	57,500	46,400

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	55.0%	42.9%	99.9%	99.9%	36.8%	46.7%	0.1%	0.1%
2020	Approach D30 Factor	55.0%	42.9%	99.9%	99.9%	36.8%	46.7%	0.1%	0.1%
2030	Approach D30 Factor	55.0%	42.9%	99.9%	99.9%	36.8%	46.7%	0.1%	0.1%
2040	Approach D30 Factor	55.0%	42.9%	99.9%	99.9%	36.8%	46.7%	0.1%	0.1%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	100	2,160	0	260	620	210	0	1,680	200	60	0	1,270
2030	EST. TURNS												
2040	EST. TURNS	130	2,520	0	310	740	260	0	2080	240	80	0	1,570
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	150	1,420	0	370	270	260	0	1430	190	50	0	1,060
2030	EST. TURNS												
2040	EST. TURNS	180	1,760	0	450	310	320	0	1770	240	60	0	1,310

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		2549	2081	4630	3561	-1	3560	1430	2450	3880	3	3247	3250
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		2749	2251	5000	3803	7	3810	1542	2648	4190	3	3467	3470
2020	TURN SUMMARY	2260	3210	5470	1090	0	1090	1880	2430	4310	1330	920	2250
CONTROL LINK VOLUMES		3046	2494	5540	4172	8	4180	1708	2932	4640	4	3806	3810
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		3393	2777	6170	4585	5	4590	1907	3273	5180	4	4176	4180
2040	TURN SUMMARY	2650	3960	6610	1310	0	1310	2320	2860	5180	1650	1110	2760
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		1986	2644	4630	3561	-1	3560	1814	2066	3880	3	3247	3250
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		2142	2858	5000	3803	7	3810	1956	2234	4190	3	3467	3470
2020	TURN SUMMARY	1570	2860	4430	900	0	900	1620	1730	3350	1110	610	1720
CONTROL LINK VOLUMES		2374	3166	5540	4172	8	4180	2166	2474	4640	4	3806	3810
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		2644	3526	6170	4585	5	4590	2419	2761	5180	4	4176	4180
2040	TURN SUMMARY	1940	3530	5470	1080	0	1080	2010	2140	4150	1370	730	2100

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD- FORCED AND BALANCED
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	WB SW 8 St. at SW 24 Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	1,430	16,140	1,430	16,140
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**1.1%**	**CGR**	**0.9%**	**CGR**	**1.1%**	**CGR**	**0.9%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

			NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
			1		**1**		**1**		**1**	
		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
		2013		1,430		16,140		1,430		16,140
NO. YEARS	7	2020	1.077	1,500	1.068	17,200	1.077	1,500	1.068	17,200
NO. YEARS	17	2030	1.198	1,500	1.172	18,900	1.198	1,500	1.172	18,900
NO. YEARS	27	2040	1.333	2,000	1.287	20,800	1.333	2,000	1.287	20,800

Percent Turns Calculated From Base Year AADTs:

JKTURNS	FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	1,430			16,140			1,430			16,140		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	16,140	1,430	16,140	1,430	16,140	1,430	16,140	1,430	16,140	1,430	16,140	1,430
	48%	4%	48%	8%	85%	8%	48%	4%	48%	8%	85%	8%
2020 2-WAY ADT	1,500			17,200			1,500			17,200		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	17,200	1,500	17,200	1,500	17,200	1,500	17,200	1,500	17,200	1,500	17,200	1,500
	48%	4%	48%	7%	85%	7%	48%	4%	48%	7%	85%	7%
2030 2-WAY ADT	1,500			18,900			1,500			18,900		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	18,900	1,500	18,900	1,500	18,900	1,500	18,900	1,500	18,900	1,500	18,900	1,500
	48%	4%	48%	7%	86%	7%	48%	4%	48%	7%	86%	7%
2040 2-WAY ADT	2,000			20,800			2,000			20,800		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	20,800	2,000	20,800	2,000	20,800	2,000	20,800	2,000	20,800	2,000	20,800	2,000
	48%	5%	48%	8%	84%	8%	48%	5%	48%	8%	84%	8%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	1,616			1,057			1,684			1,001			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	65	703	0	78	850	128	0	769	83	1	1	1	2,679
% TURNS:	8%	92%	0%	7%	80%	12%	0%	90%	10%	33%	33%	33%	
P.M.	2-Way Pk Hr Vol:	1,733			1,463			1,816			1,268			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	75	781	0	152	1,095	215	0	724	95	1	1	1	3,140
% TURNS:	9%	91%	0%	10%	75%	15%	0%	88%	12%	33%	33%	33%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	8%	92%	0%	7%	80%	12%	0%	90%	10%	33%	33%	33%
	2020	12%	83%	5%	7%	81%	12%	5%	82%	14%	31%	39%	31%
	2030	13%	81%	6%	7%	81%	11%	6%	79%	15%	30%	40%	30%
	2040	15%	77%	8%	7%	81%	11%	8%	76%	16%	29%	42%	29%
P.M.													
	2013	9%	91%	0%	10%	75%	15%	0%	88%	12%	33%	33%	33%
	2020	13%	83%	5%	10%	76%	14%	5%	80%	15%	31%	39%	31%
	2030	14%	80%	6%	10%	76%	14%	6%	78%	16%	30%	40%	30%
	2040	15%	77%	8%	10%	76%	14%	8%	74%	18%	29%	42%	29%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: WB SW 8 St. at SW 24 Ave.
PREPARED BY: NC
FILE: BUILD- FORCED AND BALANCED

DATE: 12/30/2014
NOTES:

0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	1,430	16,140	1,430	16,140
24 HR EST. AADT	2020	1,500	17,200	1,500	17,200
24 HR EST. AADT	2030	1,500	18,900	1,500	18,900
24 HR EST. AADT	2040	2,000	20,800	2,000	20,800

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	47.5%	49.4%	99.9%	99.9%	50.6%	45.1%	0.1%	0.1%
2020	Approach D30 Factor	47.5%	49.4%	99.9%	99.9%	50.6%	45.1%	0.1%	0.1%
2030	Approach D30 Factor	47.5%	49.4%	99.8%	99.8%	50.6%	45.1%	0.2%	0.1%
2040	Approach D30 Factor	47.5%	49.4%	99.8%	99.8%	50.6%	45.1%	0.2%	0.1%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	40	60	0	50	900	40	0	80	50	0	0	0
2030	EST. TURNS												
2040	EST. TURNS	50	80	0	60	1090	50	0	100	70	0	0	0
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	60	100	0	50	700	30	0	50	50	0	0	0
2030	EST. TURNS												
2040	EST. TURNS	80	120	0	60	850	40	0	70	0	0	0	0

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		61	69	130	1451	-1	1450	65	65	130	1	1449	1450
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		64	76	140	1546	4	1550	68	72	140	2	1548	1550
2020	TURN SUMMARY	100	130	230	990	0	990	130	100	230	0	990	990
CONTROL LINK VOLUMES		64	76	140	1698	2	1700	68	72	140	3	1697	1700
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		86	94	180	1868	2	1870	91	89	180	4	1866	1870
2040	TURN SUMMARY	130	160	290	1200	0	1200	170	130	300	0	1210	1210
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		64	66	130	1452	-2	1450	58	72	130	1	1449	1450
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		67	73	140	1546	4	1550	61	79	140	2	1548	1550
2020	TURN SUMMARY	160	100	260	780	0	780	100	130	230	0	810	810
CONTROL LINK VOLUMES		67	73	140	1698	2	1700	61	79	140	2	1698	1700
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		89	91	180	1868	2	1870	81	99	180	2	1868	1870
2040	TURN SUMMARY	200	130	330	950	0	950	70	160	230	0	930	930

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD- FORCED AND BALANCED
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	WB SW 8 St. at SW 22 Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	28,770	20,830	38,200	16,140
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**1.1%**	**CGR**	**0.9%**	**CGR**	**1.1%**	**CGR**	**0.9%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

			NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG		
			1		**1**		**1**		**1**		
		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
		2013		28,770		20,830		38,200		16,140
NO. YEARS	7	2020	1.077	31,000	1.068	22,200	1.077	41,000	1.068	17,200
NO. YEARS	17	2030	1.198	34,500	1.172	24,400	1.198	46,000	1.172	18,900
NO. YEARS	27	2040	1.333	38,500	1.287	26,800	1.333	51,000	1.287	20,800

Percent Turns Calculated From Base Year AADTs:

JKTURNS		FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013	2-WAY ADT	28,770			20,830			38,200			16,140		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	16,140	38,200	20,830	28,770	16,140	38,200	20,830	28,770	16,140	38,200	20,830	28,770
	21%	51%	28%	35%	19%	46%	32%	44%	25%	44%	24%	33%
2020	2-WAY ADT	31,000			22,200			41,000			17,200		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	17,200	41,000	22,200	31,000	17,200	41,000	22,200	31,000	17,200	41,000	22,200	31,000
	21%	51%	28%	35%	19%	46%	32%	44%	24%	44%	24%	33%
2030	2-WAY ADT	34,500			24,400			46,000			18,900		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	18,900	46,000	24,400	34,500	18,900	46,000	24,400	34,500	18,900	46,000	24,400	34,500
	21%	52%	27%	35%	19%	46%	31%	44%	24%	44%	23%	33%
2040	2-WAY ADT	38,500			26,800			51,000			20,800		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	20,800	51,000	26,800	38,500	20,800	51,000	26,800	38,500	20,800	51,000	26,800	38,500
	21%	52%	27%	35%	19%	46%	31%	45%	24%	44%	23%	33%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	1,616			1,057			1,684			1,001			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	65	703	0	78	850	128	0	769	83	1	1	1	2,679
% TURNS:	8%	92%	0%	7%	80%	12%	0%	90%	10%	33%	33%	33%	
P.M.	2-Way Pk Hr Vol:	1,733			1,463			1,816			1,268			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	75	781	0	152	1,095	215	0	724	95	1	1	1	3,140
% TURNS:	9%	91%	0%	10%	75%	15%	0%	88%	12%	33%	33%	33%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	8%	92%	0%	7%	80%	12%	0%	90%	10%	33%	33%	33%
	2020	10%	87%	3%	10%	74%	16%	3%	86%	11%	34%	32%	33%
	2030	10%	87%	3%	11%	73%	16%	4%	85%	12%	35%	32%	33%
	2040	11%	85%	5%	12%	70%	18%	5%	83%	12%	35%	32%	33%
P.M.													
	2013	9%	91%	0%	10%	75%	15%	0%	88%	12%	33%	33%	33%
	2020	10%	87%	3%	13%	69%	18%	3%	84%	13%	34%	32%	33%
	2030	10%	86%	3%	13%	68%	19%	4%	83%	13%	35%	32%	33%
	2040	11%	85%	5%	14%	66%	20%	5%	81%	14%	35%	32%	33%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: WB SW 8 St. at SW 22 Ave.
PREPARED BY: NC
FILE: BUILD- FORCED AND BALANCED

DATE: 12/30/2014
NOTES:

0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	28,770	20,830	38,200	16,140
24 HR EST. AADT	2020	31,000	22,200	41,000	17,200
24 HR EST. AADT	2030	34,500	24,400	46,000	18,900
24 HR EST. AADT	2040	38,500	26,800	51,000	20,800

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	47.5%	49.4%	99.9%	99.9%	50.6%	45.1%	0.1%	0.1%
2020	Approach D30 Factor	47.5%	49.4%	99.9%	99.9%	50.6%	45.1%	0.1%	0.1%
2030	Approach D30 Factor	47.5%	49.4%	99.8%	99.8%	50.6%	45.1%	0.2%	0.2%
2040	Approach D30 Factor	47.5%	49.4%	99.8%	99.8%	50.6%	45.1%	0.2%	0.2%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	80	1,190	0	100	880	150	0	1,360	90	0	0	0
2030	EST. TURNS												
2040	EST. TURNS	100	1,480	0	120	1060	180	0	1700	110	0	0	0
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	100	1,290	0	190	670	280	0	780	100	0	0	0
2030	EST. TURNS												
2040	EST. TURNS	130	1,540	0	230	800	330	0	970	130	0	0	0

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		1231	1359	2590	1873	-3	1870	1739	1701	3440	1	1449	1450
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		1326	1464	2790	1996	4	2000	1867	1823	3690	2	1548	1550
2020	TURN SUMMARY	1270	1460	2730	1130	0	1130	1450	1340	2790	0	1050	1050
CONTROL LINK VOLUMES		1476	1634	3110	2192	8	2200	2095	2045	4140	3	1697	1700
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		1647	1823	3470	2407	3	2410	2322	2268	4590	4	1866	1870
2040	TURN SUMMARY	1580	1820	3400	1360	0	1360	1810	1660	3470	0	1270	1270
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		1279	1311	2590	1873	-3	1870	1551	1889	3440	1	1449	1450
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		1378	1412	2790	1996	4	2000	1664	2026	3690	2	1548	1550
2020	TURN SUMMARY	1390	970	2360	1140	0	1140	880	1570	2450	0	870	870
CONTROL LINK VOLUMES		1534	1576	3110	2193	7	2200	1867	2273	4140	3	1697	1700
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		1712	1758	3470	2407	3	2410	2070	2520	4590	4	1866	1870
2040	TURN SUMMARY	1670	1200	2870	1360	0	1360	1100	1870	2970	0	1060	1060

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD- FORCED AND BALANCED
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	WB SR 90 at SW 17 Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	11,230	22,290	11,050	20,830
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**1.1%**	**CGR**	**0.9%**	**CGR**	**1.1%**	**CGR**	**0.9%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

			NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
			1		**1**		**1**		**1**	
		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
		2013		11,230		22,290		11,050		20,830
NO. YEARS	7	2020	1.077	12,000	1.068	23,800	1.077	12,000	1.068	22,200
NO. YEARS	17	2030	1.198	13,500	1.172	26,100	1.198	13,000	1.172	24,400
NO. YEARS	27	2040	1.333	15,000	1.287	28,700	1.333	14,500	1.287	26,800

Percent Turns Calculated From Base Year AADTs:

JKTURNS	FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT		11,230			22,290			11,050			20,830	
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
20,830	11,050	22,290	11,230	20,830	11,050	22,290	11,230	20,830	11,050	22,290	11,230
38%	20%	41%	26%	48%	26%	41%	21%	38%	25%	50%	25%
2020 2-WAY ADT		12,000			23,800			12,000			22,200
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
22,200	12,000	23,800	12,000	22,200	12,000	23,800	12,000	22,200	12,000	23,800	12,000
38%	21%	41%	26%	48%	26%	41%	21%	38%	25%	50%	25%
2030 2-WAY ADT		13,500			26,100			13,000			24,400
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
24,400	13,000	26,100	13,500	24,400	13,000	26,100	13,500	24,400	13,000	26,100	13,500
38%	20%	41%	27%	48%	26%	41%	21%	38%	25%	50%	26%
2040 2-WAY ADT		15,000			28,700			14,500			26,800
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
26,800	14,500	28,700	15,000	26,800	14,500	28,700	15,000	26,800	14,500	28,700	15,000
38%	21%	41%	27%	48%	26%	41%	21%	38%	25%	49%	26%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	1,831			1,060			1,802			1,025			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	118	922	0	129	808	122	0	661	96	1	1	1	2,859
% TURNS:	11%	89%	0%	12%	76%	12%	0%	87%	13%	33%	33%	33%	
P.M.	2-Way Pk Hr Vol:	1,713			1,496			1,729			1,506			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	157	869	0	97	1,237	161	0	589	109	1	1	1	3,222
% TURNS:	15%	85%	0%	6%	83%	11%	0%	84%	16%	33%	33%	33%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	11%	89%	0%	12%	76%	12%	0%	87%	13%	33%	33%	33%
	2020	14%	82%	4%	14%	73%	13%	4%	81%	15%	33%	35%	33%
	2030	15%	80%	5%	14%	73%	13%	5%	79%	16%	32%	35%	32%
	2040	16%	77%	7%	15%	72%	14%	7%	76%	17%	32%	36%	32%
P.M.													
	2013	15%	85%	0%	6%	83%	11%	0%	84%	16%	33%	33%	33%
	2020	18%	78%	4%	8%	79%	12%	4%	78%	18%	33%	35%	33%
	2030	18%	77%	5%	9%	78%	13%	5%	76%	18%	32%	35%	32%
	2040	19%	74%	7%	10%	77%	13%	7%	74%	19%	32%	36%	32%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: WB SR 90 at SW 17 Ave.
PREPARED BY: NC
FILE: BUILD- FORCED AND BALANCED

DATE: 12/30/2014
NOTES:

0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	11,230	22,290	11,050	20,830
24 HR EST. AADT	2020	12,000	23,800	12,000	22,200
24 HR EST. AADT	2030	13,500	26,100	13,000	24,400
24 HR EST. AADT	2040	15,000	28,700	14,500	26,800

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	56.8%	59.9%	99.9%	99.9%	42.0%	40.4%	0.1%	0.1%
2020	Approach D30 Factor	56.8%	59.9%	99.8%	99.8%	42.0%	40.4%	0.2%	0.2%
2030	Approach D30 Factor	56.8%	59.9%	99.9%	99.9%	42.0%	40.4%	0.1%	0.1%
2040	Approach D30 Factor	56.8%	59.9%	99.9%	99.9%	42.0%	40.4%	0.1%	0.1%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	130	990	0	150	880	170	0	750	130	0	0	0
2030	EST. TURNS												
2040	EST. TURNS	160	1,230	0	180	1060	210	0	930	160	0	0	0
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	170	940	0	130	750	220	0	640	120	0	0	0
2030	EST. TURNS												
2040	EST. TURNS	210	1,160	0	160	910	270	0	790	150	0	0	0

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		574	436	1010	2004	6	2010	418	572	990	2	1868	1870
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		613	467	1080	2138	2	2140	454	626	1080	4	1996	2000
2020	TURN SUMMARY	1120	900	2020	1200	0	1200	880	1160	2040	0	1140	1140
CONTROL LINK VOLUMES		690	530	1220	2347	3	2350	492	678	1170	2	2198	2200
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		767	583	1350	2581	-1	2580	548	762	1310	2	2408	2410
2040	TURN SUMMARY	1390	1110	2500	1450	0	1450	1090	1440	2530	0	1380	1380
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		605	405	1010	2005	5	2010	401	589	990	2	1868	1870
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		647	433	1080	2138	2	2140	436	644	1080	4	1996	2000
2020	TURN SUMMARY	1110	770	1880	1100	0	1100	760	1160	1920	0	1040	1040
CONTROL LINK VOLUMES		728	492	1220	2347	3	2350	472	698	1170	2	2198	2200
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		809	541	1350	2581	-1	2580	527	783	1310	2	2408	2410
2040	TURN SUMMARY	1370	950	2320	1340	0	1340	940	1430	2370	0	1270	1270

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD- FORCED AND BALANCED
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	WB SW 8 St. at SW 12 Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	10,080	19,720	13,110	22,290
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**1.1%**	**CGR**	**0.9%**	**CGR**	**1.1%**	**CGR**	**0.9%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

			NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
			1		**1**		**1**		**1**	
		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
		2013		10,080		19,720		13,110		22,290
NO. YEARS	7	2020	1.077	11,000	1.068	21,100	1.077	14,000	1.068	23,800
NO. YEARS	17	2030	1.198	12,000	1.172	23,100	1.198	15,500	1.172	26,100
NO. YEARS	27	2040	1.333	13,500	1.287	25,400	1.333	17,500	1.287	28,700

Percent Turns Calculated From Base Year AADTs:

JKTURNS	FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	10,080			19,720			13,110			22,290		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	22,290	13,110	19,720	10,080	22,290	13,110	19,720	10,080	22,290	13,110	19,720	10,080
	40%	24%	36%	22%	49%	29%	38%	19%	43%	31%	46%	23%
2020 2-WAY ADT	11,000			21,100			14,000			23,800		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	23,800	14,000	21,100	11,000	23,800	14,000	21,100	11,000	23,800	14,000	21,100	11,000
	40%	24%	36%	23%	49%	29%	38%	20%	43%	30%	46%	24%
2030 2-WAY ADT	12,000			23,100			15,500			26,100		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	26,100	15,500	23,100	12,000	26,100	15,500	23,100	12,000	26,100	15,500	23,100	12,000
	40%	24%	36%	22%	49%	29%	38%	20%	43%	31%	46%	24%
2040 2-WAY ADT	13,500			25,400			17,500			28,700		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	28,700	17,500	25,400	13,500	28,700	17,500	25,400	13,500	28,700	17,500	25,400	13,500
	40%	24%	35%	23%	48%	29%	38%	20%	42%	31%	45%	24%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	1,086			899			1,123			1,016			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	114	380	0	71	752	75	0	520	147	1	1	1	2,062
% TURNS:	23%	77%	0%	8%	84%	8%	0%	78%	22%	33%	33%	33%	
P.M.	2-Way Pk Hr Vol:	1,235			1,605			1,325			1,673			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	108	534	0	95	1,389	120	0	497	173	1	1	1	2,919
% TURNS:	17%	83%	0%	6%	87%	7%	0%	74%	26%	33%	33%	33%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		SB			WB			NB			EB	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
A.M.												
2013	23%	77%	0%	8%	84%	8%	0%	78%	22%	33%	33%	33%
2020	25%	72%	4%	9%	80%	10%	4%	72%	24%	33%	35%	32%
2030	25%	70%	4%	10%	79%	11%	5%	71%	25%	33%	35%	32%
2040	26%	68%	6%	10%	78%	12%	6%	68%	25%	33%	35%	32%
P.M.												
2013	17%	83%	0%	6%	87%	7%	0%	74%	26%	33%	33%	33%
2020	19%	77%	4%	8%	83%	10%	4%	69%	27%	33%	35%	32%
2030	20%	76%	4%	8%	82%	10%	5%	67%	28%	33%	35%	32%
2040	21%	73%	6%	9%	80%	11%	6%	65%	29%	33%	35%	32%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: WB SW 8 St. at SW 12 Ave.
PREPARED BY: NC
FILE: BUILD- FORCED AND BALANCED

DATE: 12/30/2014
NOTES:

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ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	10,080	19,720	13,110	22,290
24 HR EST. AADT	2020	11,000	21,100	14,000	23,800
24 HR EST. AADT	2030	12,000	23,100	15,500	26,100
24 HR EST. AADT	2040	13,500	25,400	17,500	28,700

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	45.5%	52.0%	99.9%	99.9%	59.4%	50.6%	0.1%	0.1%
2020	Approach D30 Factor	45.5%	52.0%	99.9%	99.9%	59.4%	50.6%	0.1%	0.1%
2030	Approach D30 Factor	45.5%	52.0%	99.9%	99.9%	59.4%	50.6%	0.1%	0.1%
2040	Approach D30 Factor	45.5%	52.0%	99.9%	99.9%	59.4%	50.6%	0.1%	0.1%

A.M. DESIGN HR. TURNS		NORTH LEG RIGHT	NORTH LEG THRU	NORTH LEG LEFT	EAST LEG RIGHT	EAST LEG THRU	EAST LEG LEFT	SOUTH LEG RIGHT	SOUTH LEG THRU	SOUTH LEG LEFT	WEST LEG RIGHT	WEST LEG THRU	WEST LEG LEFT
2013	EST. TURNS												
2020	EST. TURNS	130	410	0	90	900	90	0	560	170	0	0	0
2030	EST. TURNS												
2040	EST. TURNS	170	510	0	110	1090	110	0	690	200	0	0	0
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	130	580	0	130	740	210	0	540	200	0	0	0
2030	EST. TURNS												
2040	EST. TURNS	160	710	0	160	900	260	0	660	250	0	0	0

LINK VOLUME CHECK

		NORTH LEG FROM	NORTH LEG TO	NORTH LEG LINK	EAST LEG FROM	EAST LEG TO	EAST LEG LINK	SOUTH LEG FROM	SOUTH LEG TO	SOUTH LEG LINK	WEST LEG FROM	WEST LEG TO	WEST LEG LINK
DESIGN HOUR A.M.:													
CONTROL LINK VOLUMES		413	497	910	1773	-3	1770	701	479	1180	2	2008	2010
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		450	540	990	1897	3	1900	748	512	1260	2	2138	2140
2020	TURN SUMMARY	540	650	1190	1080	0	1080	730	500	1230	0	1200	1200
CONTROL LINK VOLUMES		491	589	1080	2077	3	2080	829	571	1400	2	2348	2350
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		553	667	1220	2283	7	2290	935	645	1580	3	2577	2580
2040	TURN SUMMARY	680	800	1480	1310	0	1310	890	620	1510	0	1460	1460
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		472	438	910	1774	-4	1770	597	583	1180	2	2008	2010
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		515	475	990	1898	2	1900	637	623	1260	2	2138	2140
2020	TURN SUMMARY	710	670	1380	1080	0	1080	740	790	1530	0	1070	1070
CONTROL LINK VOLUMES		561	519	1080	2078	2	2080	705	695	1400	2	2348	2350
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		632	588	1220	2285	5	2290	796	784	1580	3	2577	2580
2040	TURN SUMMARY	870	820	1690	1320	0	1320	910	970	1880	0	1310	1310

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD- FORCED AND BALANCED
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	WB SW 8 St. at SR 90/SW 8 Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	3,650	23,970	3,650	19,720
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**1.1%**	**CGR**	**0.9%**	**CGR**	**1.1%**	**CGR**	**0.9%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
			1		**1**		**1**		**1**	
		2013		3,650		23,970		3,650		19,720
NO. YEARS	7	2020	1.077	4,000	1.068	25,600	1.077	4,000	1.068	21,100
NO. YEARS	17	2030	1.198	4,500	1.172	28,100	1.198	4,500	1.172	23,100
NO. YEARS	27	2040	1.333	5,000	1.287	30,900	1.333	5,000	1.287	25,400

Percent Turns Calculated From Base Year AADTs:

JKTURNS	FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	3,650			23,970			3,650			19,720		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	19,720	3,650	23,970	3,650	19,720	3,650	23,970	3,650	19,720	3,650	23,970	3,650
	42%	8%	51%	14%	73%	14%	51%	8%	42%	12%	77%	12%
2020 2-WAY ADT	4,000			25,600			4,000			21,100		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	21,100	4,000	25,600	4,000	21,100	4,000	25,600	4,000	21,100	4,000	25,600	4,000
	42%	8%	50%	14%	73%	14%	50%	8%	42%	12%	76%	12%
2030 2-WAY ADT	4,500			28,100			4,500			23,100		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	23,100	4,500	28,100	4,500	23,100	4,500	28,100	4,500	23,100	4,500	28,100	4,500
	41%	8%	50%	14%	72%	14%	50%	8%	41%	12%	76%	12%
2040 2-WAY ADT	5,000			30,900			5,000			25,400		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	25,400	5,000	30,900	5,000	25,400	5,000	30,900	5,000	25,400	5,000	30,900	5,000
	41%	8%	50%	14%	72%	14%	50%	8%	41%	12%	76%	12%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	693			673			655			719			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	88	256	0	62	563	47	0	286	65	1	1	1	1,370
% TURNS:	26%	74%	0%	9%	84%	7%	0%	81%	19%	33%	33%	33%	
P.M.	2-Way Pk Hr Vol:	496			1,389			523			1,422			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	66	173	0	63	1,261	64	0	193	92	1	1	1	1,915
% TURNS:	28%	72%	0%	5%	91%	5%	0%	68%	32%	33%	33%	33%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	26%	74%	0%	9%	84%	7%	0%	81%	19%	33%	33%	33%
	2020	27%	68%	5%	10%	83%	8%	5%	74%	21%	31%	38%	31%
	2030	28%	66%	6%	10%	82%	8%	6%	72%	21%	31%	39%	31%
	2040	28%	63%	8%	10%	82%	8%	8%	69%	22%	30%	40%	30%
P.M.													
	2013	28%	72%	0%	5%	91%	5%	0%	68%	32%	33%	33%	33%
	2020	29%	66%	5%	5%	89%	6%	5%	62%	33%	31%	38%	31%
	2030	29%	64%	6%	6%	88%	6%	6%	60%	33%	31%	39%	31%
	2040	30%	62%	8%	6%	88%	6%	8%	58%	34%	30%	40%	30%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: WB SW 8 St. at SR 90/SW 8 Ave.
PREPARED BY: NC
FILE: BUILD- FORCED AND BALANCED

DATE: 12/30/2014
NOTES:

0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	3,650	23,970	3,650	19,720
24 HR EST. AADT	2020	4,000	25,600	4,000	21,100
24 HR EST. AADT	2030	4,500	28,100	4,500	23,100
24 HR EST. AADT	2040	5,000	30,900	5,000	25,400

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	49.6%	48.2%	99.9%	99.9%	53.6%	54.5%	0.1%	0.1%
2020	Approach D30 Factor	49.6%	48.2%	99.9%	99.9%	53.6%	54.5%	0.1%	0.1%
2030	Approach D30 Factor	49.6%	48.2%	99.9%	99.9%	53.6%	54.5%	0.1%	0.1%
2040	Approach D30 Factor	49.6%	48.2%	99.9%	99.9%	53.6%	54.5%	0.1%	0.1%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	100	280	0	90	900	60	0	310	70	0	0	0
2030	EST. TURNS												
2040	EST. TURNS	120	340	0	110	1100	70	0	380	90	0	0	0
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	70	190	0	90	810	90	0	210	100	0	0	0
2030	EST. TURNS												
2040	EST. TURNS	90	230	0	110	1100	110	0	260	130	0	0	0

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		163	167	330	2154	6	2160	176	154	330	2	1768	1770
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		179	181	360	2301	-1	2300	193	167	360	2	1898	1900
2020	TURN SUMMARY	380	400	780	1050	0	1050	380	340	720	0	1070	1070
CONTROL LINK VOLUMES		201	209	410	2525	5	2530	217	193	410	2	2078	2080
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		223	227	450	2777	3	2780	241	209	450	2	2288	2290
2040	TURN SUMMARY	460	490	950	1280	0	1280	470	410	880	0	1310	1310
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		158	172	330	2156	4	2160	179	151	330	2	1768	1770
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		173	187	360	2302	-2	2300	196	164	360	2	1898	1900
2020	TURN SUMMARY	260	300	560	990	0	990	310	280	590	0	980	980
CONTROL LINK VOLUMES		195	215	410	2527	3	2530	221	189	410	2	2078	2080
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		217	233	450	2779	1	2780	245	205	450	2	2288	2290
2040	TURN SUMMARY	320	370	690	1320	0	1320	390	340	730	0	1320	1320

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD- FORCED AND BALANCED
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	WB SW 8 St. at SW 5 Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	3,000	23,970	3,000	23,970
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**1.1%**	**CGR**	**0.9%**	**CGR**	**1.1%**	**CGR**	**0.9%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

			NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG		
					1		**1**		**1**		**1**
		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
		2013		3,000		23,970		3,000		23,970
NO. YEARS	7	2020	1.077	3,000	1.068	25,600	1.077	3,000	1.068	25,600
NO. YEARS	17	2030	1.198	3,500	1.172	28,100	1.198	3,500	1.172	28,100
NO. YEARS	27	2040	1.333	4,000	1.287	30,900	1.333	4,000	1.287	30,900

Percent Turns Calculated From Base Year AADTs:

JKTURNS		FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013	2-WAY ADT	3,000			23,970			3,000			23,970		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	23,970	3,000	23,970	3,000	23,970	3,000	23,970	3,000	23,970	3,000	23,970	3,000
	47%	6%	47%	10%	80%	10%	47%	6%	47%	10%	80%	10%
2020	2-WAY ADT	3,000			25,600			3,000			25,600		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	25,600	3,000	25,600	3,000	25,600	3,000	25,600	3,000	25,600	3,000	25,600	3,000
	47%	6%	47%	9%	81%	9%	47%	6%	47%	9%	81%	9%
2030	2-WAY ADT	3,500			28,100			3,500			28,100		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	28,100	3,500	28,100	3,500	28,100	3,500	28,100	3,500	28,100	3,500	28,100	3,500
	47%	6%	47%	10%	80%	10%	47%	6%	47%	10%	80%	10%
2040	2-WAY ADT	4,000			30,900			4,000			30,900		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	30,900	4,000	30,900	4,000	30,900	4,000	30,900	4,000	30,900	4,000	30,900	4,000
	47%	6%	47%	10%	79%	10%	47%	6%	47%	10%	79%	10%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	329			1,732			307			1,682			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	1	1	1	121	1,593	16	0	204	85	1	1	1	2,025
% TURNS:	33%	33%	33%	7%	92%	1%	0%	71%	29%	33%	33%	33%	
P.M.	2-Way Pk Hr Vol:	474			1,728			505			1,631			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	1	1	1	166	1,494	66	0	304	133	1	1	1	2,169
% TURNS:	33%	33%	33%	10%	87%	4%	0%	70%	30%	33%	33%	33%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	33%	33%	33%	7%	92%	1%	0%	71%	29%	33%	33%	33%
	2020	35%	31%	35%	7%	91%	2%	5%	64%	31%	31%	38%	31%
	2030	35%	30%	35%	7%	91%	2%	6%	62%	32%	30%	39%	30%
	2040	36%	29%	36%	8%	90%	2%	8%	60%	32%	29%	41%	29%
P.M.													
	2013	33%	33%	33%	10%	87%	4%	0%	70%	30%	33%	33%	33%
	2020	35%	31%	35%	10%	86%	4%	5%	63%	32%	31%	38%	31%
	2030	35%	30%	35%	10%	86%	5%	6%	62%	33%	30%	39%	30%
	2040	36%	29%	36%	10%	85%	5%	8%	59%	33%	29%	41%	29%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: WB SW 8 St. at SW 5 Ave.
PREPARED BY: NC
FILE: BUILD- FORCED AND BALANCED

DATE: 12/30/2014
NOTES:

0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	3,000	23,970	3,000	23,970
24 HR EST. AADT	2020	3,000	25,600	3,000	25,600
24 HR EST. AADT	2030	3,500	28,100	3,500	28,100
24 HR EST. AADT	2040	4,000	30,900	4,000	30,900

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	0.9%	0.6%	99.9%	99.9%	94.1%	86.5%	0.1%	0.1%
2020	Approach D30 Factor	0.9%	0.6%	99.9%	99.9%	94.1%	86.5%	0.1%	0.1%
2030	Approach D30 Factor	0.9%	0.6%	99.9%	99.9%	94.1%	86.5%	0.1%	0.1%
2040	Approach D30 Factor	0.9%	0.6%	99.9%	99.9%	94.1%	86.5%	0.1%	0.1%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	0	0	0	140	950	0	0	250	110	0	0	0
2030	EST. TURNS												
2040	EST. TURNS	0	0	0	160	1150	0	0	310	130	0	0	0
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	0	0	0	180	880	0	0	330	140	0	0	0
2030	EST. TURNS												
2040	EST. TURNS	0	0	0	260	1200	100	0	410	180	0	0	0

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		2	268	270	2155	5	2160	254	16	270	2	2158	2160
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		2	268	270	2301	-1	2300	254	16	270	2	2298	2300
2020	TURN SUMMARY	0	390	390	1090	0	1090	360	0	360	0	1060	1060
CONTROL LINK VOLUMES		3	317	320	2526	4	2530	297	23	320	3	2527	2530
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		3	357	360	2778	2	2780	339	21	360	3	2777	2780
2040	TURN SUMMARY	0	470	470	1310	0	1310	440	0	440	0	1280	1280
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		2	268	270	2155	5	2160	234	36	270	2	2158	2160
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		2	268	270	2301	-1	2300	234	36	270	2	2298	2300
2020	TURN SUMMARY	0	510	510	1060	0	1060	470	0	470	0	1020	1020
CONTROL LINK VOLUMES		2	318	320	2526	4	2530	273	47	320	3	2527	2530
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		2	358	360	2778	2	2780	312	48	360	3	2777	2780
2040	TURN SUMMARY	0	670	670	1560	0	1560	590	100	690	0	1380	1380

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD- FORCED AND BALANCED
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	WB SW 8 St. at SW 4 Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	14,300	13,870	1,510	23,970
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**1.1%**	**CGR**	**1.9%**	**CGR**	**1.1%**	**CGR**	**1.9%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

			NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG		
			1		**1**		**1**		**1**		
		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
		2013		14,300		13,870		1,510		23,970
NO. YEARS	7	2020	1.077	15,500	1.141	15,800	1.077	1,500	1.141	27,300
NO. YEARS	17	2030	1.198	17,000	1.377	19,100	1.198	2,000	1.377	33,000
NO. YEARS	27	2040	1.333	19,000	1.662	23,100	1.333	2,000	1.662	39,800

Percent Turns Calculated From Base Year AADTs:

JKTURNS	FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	14,300			13,870			1,510			23,970		
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
23,970	1,510	13,870	14,300	23,970	1,510	13,870	14,300	23,970	1,510	13,870	14,300
61%	4%	35%	36%	60%	4%	27%	27%	46%	5%	47%	48%
2020 2-WAY ADT	15,500			15,800			1,500			27,300	
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
27,300	1,500	15,800	15,500	27,300	1,500	15,800	15,500	27,300	1,500	15,800	15,500
61%	3%	35%	35%	62%	3%	27%	26%	47%	5%	48%	47%
2030 2-WAY ADT	17,000			19,100			2,000			33,000	
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
33,000	2,000	19,100	17,000	33,000	2,000	19,100	17,000	33,000	2,000	19,100	17,000
61%	4%	35%	33%	63%	4%	28%	25%	48%	5%	50%	45%
2040 2-WAY ADT	19,000			23,100			2,000			39,800	
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
39,800	2,000	23,100	19,000	39,800	2,000	23,100	19,000	39,800	2,000	23,100	19,000
61%	3%	36%	31%	65%	3%	28%	23%	49%	5%	52%	43%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	1,334			871			1,569			838			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	281	952	0	0	454	316	100	100	100	1	1	1	2,306
% TURNS:	23%	77%	0%	0%	59%	41%	33%	33%	33%	33%	33%	33%	
P.M.	2-Way Pk Hr Vol:	1,288			1,104			1,269			1,325			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	478	709	0	0	744	259	100	100	100	1	1	1	2,493
% TURNS:	40%	60%	0%	0%	74%	26%	33%	33%	33%	33%	33%	33%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		SB			WB			NB			EB	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
A.M.												
2013	23%	77%	0%	0%	59%	41%	33%	33%	33%	33%	33%	33%
2020	27%	70%	4%	3%	59%	37%	33%	33%	35%	30%	35%	35%
2030	28%	68%	4%	4%	60%	36%	33%	32%	35%	30%	35%	35%
2040	29%	65%	6%	5%	60%	35%	32%	32%	36%	29%	37%	35%
P.M.												
2013	40%	60%	0%	0%	74%	26%	33%	33%	33%	33%	33%	33%
2020	42%	54%	4%	3%	73%	24%	33%	33%	35%	30%	35%	35%
2030	43%	53%	4%	4%	73%	23%	33%	32%	35%	30%	35%	35%
2040	44%	50%	6%	5%	73%	22%	32%	32%	36%	29%	37%	35%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: WB SW 8 St. at SW 4 Ave.
PREPARED BY: NC
FILE: BUILD- FORCED AND BALANCED

DATE: 12/30/2014
NOTES:

0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	14,300	13,870	1,510	23,970
24 HR EST. AADT	2020	15,500	15,800	1,500	27,300
24 HR EST. AADT	2030	17,000	19,100	2,000	33,000
24 HR EST. AADT	2040	19,000	23,100	2,000	39,800

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	92.4%	92.2%	99.9%	99.9%	19.1%	23.6%	0.1%	0.1%
2020	Approach D30 Factor	92.4%	92.2%	99.9%	99.9%	19.1%	23.6%	0.1%	0.1%
2030	Approach D30 Factor	92.4%	92.2%	99.9%	99.9%	19.1%	23.6%	0.1%	0.1%
2040	Approach D30 Factor	92.4%	92.2%	99.9%	99.9%	19.1%	23.6%	0.1%	0.1%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	360	300	0	0	700	0	0	0	0	0	0	0
2030	EST. TURNS												
2040	EST. TURNS	440	370	0	0	1020	0	0	0	0	0	0	0
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	620	110	0	0	550	0	0	0	0	0	0	0
2030	EST. TURNS												
2040	EST. TURNS	770	140	0	0	970	0	0	0	0	0	0	0

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		1190	100	1290	1247	3	1250	26	114	140	2	2158	2160
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		1289	111	1400	1421	-1	1420	26	114	140	2	2458	2460
2020	TURN SUMMARY	660	0	660	700	0	700	0	300	300	0	1060	1060
CONTROL LINK VOLUMES		1414	116	1530	1717	3	1720	34	146	180	3	2967	2970
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		1581	129	1710	2077	3	2080	34	146	180	4	3576	3580
2040	TURN SUMMARY	810	0	810	1020	0	1020	0	370	370	0	1460	1460
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		1186	104	1290	1247	3	1250	32	108	140	2	2158	2160
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		1286	114	1400	1421	-1	1420	32	108	140	2	2458	2460
2020	TURN SUMMARY	730	0	730	550	0	550	0	110	110	0	1170	1170
CONTROL LINK VOLUMES		1410	120	1530	1717	3	1720	43	137	180	3	2967	2970
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		1576	134	1710	2077	3	2080	43	137	180	4	3576	3580
2040	TURN SUMMARY	910	0	910	970	0	970	0	140	140	0	1740	1740

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD- FORCED AND BALANCED
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	WB SW 8 St. at SW 3 Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	2,790	28,230	3,340	13,870
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**1.1%**	**CGR**	**1.9%**	**CGR**	**1.1%**	**CGR**	**1.9%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
			1		**1**		**1**		**1**	
		2013		2,790		28,230		3,340		13,870
NO. YEARS	7	2020	1.077	3,000	1.141	32,200	1.077	3,500	1.141	15,800
NO. YEARS	17	2030	1.198	3,500	1.377	38,900	1.198	4,000	1.377	19,100
NO. YEARS	27	2040	1.333	3,500	1.662	46,900	1.333	4,500	1.662	23,100

Percent Turns Calculated From Base Year AADTs:

JKTURNS	FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT		2,790			28,230			3,340			13,870	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	13,870	3,340	28,230	2,790	13,870	3,340	28,230	2,790	13,870	3,340	28,230	2,790
	31%	7%	62%	14%	69%	17%	63%	6%	31%	10%	82%	8%
2020 2-WAY ADT		3,000			32,200			3,500			15,800	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	15,800	3,500	32,200	3,000	15,800	3,500	32,200	3,000	15,800	3,500	32,200	3,000
	31%	7%	63%	13%	71%	16%	63%	6%	31%	9%	83%	8%
2030 2-WAY ADT		3,500			38,900			4,000			19,100	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	19,100	4,000	38,900	3,500	19,100	4,000	38,900	3,500	19,100	4,000	38,900	3,500
	31%	6%	63%	13%	72%	15%	63%	6%	31%	9%	84%	8%
2040 2-WAY ADT		3,500			46,900			4,500			23,100	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	23,100	4,500	46,900	3,500	23,100	4,500	46,900	3,500	23,100	4,500	46,900	3,500
	31%	6%	63%	11%	74%	14%	64%	5%	31%	8%	85%	6%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	157			1,069			392			860			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	1	1	1	81	762	224	0	72	94	1	1	1	1,239
% TURNS:	33%	33%	33%	8%	71%	21%	0%	43%	57%	33%	33%	33%	
P.M.	2-Way Pk Hr Vol:	324			1,424			546			1,118			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	1	1	1	164	992	266	0	156	122	1	1	1	1,706
% TURNS:	33%	33%	33%	12%	70%	19%	0%	56%	44%	33%	33%	33%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	33%	33%	33%	8%	71%	21%	0%	43%	57%	33%	33%	33%
	2020	33%	31%	36%	8%	71%	20%	6%	40%	54%	31%	38%	31%
	2030	33%	30%	37%	8%	71%	20%	8%	39%	53%	30%	40%	30%
	2040	33%	29%	38%	8%	72%	20%	11%	37%	52%	29%	42%	29%
P.M.													
	2013	33%	33%	33%	12%	70%	19%	0%	56%	44%	33%	33%	33%
	2020	33%	31%	36%	12%	70%	18%	6%	51%	43%	31%	38%	31%
	2030	33%	30%	37%	12%	70%	18%	8%	50%	42%	30%	40%	30%
	2040	33%	29%	38%	11%	71%	18%	11%	48%	42%	29%	42%	29%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: WB SW 8 St. at SW 3 Ave.
PREPARED BY: NC
FILE: BUILD- FORCED AND BALANCED

DATE: 12/30/2014
NOTES:

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ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	2,790	28,230	3,340	13,870
24 HR EST. AADT	2020	3,000	32,200	3,500	15,800
24 HR EST. AADT	2030	3,500	38,900	4,000	19,100
24 HR EST. AADT	2040	3,500	46,900	4,500	23,100

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	1.9%	0.9%	99.9%	99.9%	42.3%	50.9%	0.1%	0.1%
2020	Approach D30 Factor	1.9%	0.9%	99.9%	99.9%	42.3%	50.9%	0.1%	0.1%
2030	Approach D30 Factor	1.9%	0.9%	99.9%	99.9%	42.3%	50.9%	0.1%	0.1%
2040	Approach D30 Factor	1.9%	0.9%	99.9%	99.9%	42.3%	50.9%	0.1%	0.1%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	170	0	0	230	2400	0	0	250	100	0	0	0
2030	EST. TURNS												
2040	EST. TURNS	210	0	0	330	3500	0	0	310	130	0	0	0
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	240	0	0	360	2370	0	0	410	140	0	0	0
2030	EST. TURNS												
2040	EST. TURNS	0	0	0	530	3450	0	0	500	170	0	0	0

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		5	245	250	2538	2	2540	127	173	300	1	1249	1250
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		5	265	270	2895	5	2900	133	187	320	1	1419	1420
2020	TURN SUMMARY	170	480	650	2630	0	2630	350	0	350	0	2670	2670
CONTROL LINK VOLUMES		6	314	320	3497	3	3500	152	208	360	2	1718	1720
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		6	314	320	4217	3	4220	172	238	410	2	2078	2080
2040	TURN SUMMARY	210	640	850	3830	0	3830	440	0	440	0	3840	3840
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		2	248	250	2537	3	2540	153	147	300	1	1249	1250
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		3	267	270	2894	6	2900	160	160	320	1	1419	1420
2020	TURN SUMMARY	240	770	1010	2730	0	2730	550	0	550	0	2750	2750
CONTROL LINK VOLUMES		3	317	320	3496	4	3500	183	177	360	2	1718	1720
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		3	317	320	4215	5	4220	206	204	410	2	2078	2080
2040	TURN SUMMARY	0	1030	1030	3980	0	3980	670	0	670	0	3620	3620

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD- FORCED AND BALANCED
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	WB SR 90 at SW 2 Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	12,840	27,710	11,970	28,230
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**1.1%**	**CGR**	**1.9%**	**CGR**	**1.1%**	**CGR**	**1.9%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

			NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG		
			1		**1**		**1**		**1**		
		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
		2013		12,840		27,710		11,970		28,230
NO. YEARS	7	2020	1.077	14,000	1.141	31,600	1.077	13,000	1.141	32,200
NO. YEARS	17	2030	1.198	15,500	1.377	38,200	1.198	14,500	1.377	38,900
NO. YEARS	27	2040	1.333	17,000	1.662	46,100	1.333	16,000	1.662	46,900

Percent Turns Calculated From Base Year AADTs:

JKTURNS		FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013	2-WAY ADT	12,840			27,710			11,970			28,230		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	28,230	11,970	27,710	12,840	28,230	11,970	27,710	12,840	28,230	11,970	27,710	12,840
	42%	18%	41%	24%	53%	23%	40%	19%	41%	23%	53%	24%
2020	2-WAY ADT	14,000			31,600			13,000			32,200		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	32,200	13,000	31,600	14,000	32,200	13,000	31,600	14,000	32,200	13,000	31,600	14,000
	42%	17%	41%	24%	54%	22%	41%	18%	41%	22%	54%	24%
2030	2-WAY ADT	15,500			38,200			14,500			38,900		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	38,900	14,500	38,200	15,500	38,900	14,500	38,200	15,500	38,900	14,500	38,200	15,500
	42%	16%	42%	22%	56%	21%	41%	17%	42%	21%	56%	23%
2040	2-WAY ADT	17,000			46,100			16,000			46,900		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	46,900	16,000	46,100	17,000	46,900	16,000	46,100	17,000	46,900	16,000	46,100	17,000
	43%	15%	42%	21%	59%	20%	42%	15%	43%	20%	58%	21%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	1,038			858			1,195			995			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	85	214	0	106	655	96	0	632	252	1	1	1	2,043
% TURNS:	28%	72%	0%	12%	76%	11%	0%	71%	29%	33%	33%	33%	
P.M.	2-Way Pk Hr Vol:	986			1,319			1,062			1,583			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	179	264	0	84	1,148	86	0	458	253	1	1	1	2,475
% TURNS:	40%	60%	0%	6%	87%	7%	0%	64%	36%	33%	33%	33%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	28%	72%	0%	12%	76%	11%	0%	71%	29%	33%	33%	33%
	2020	30%	66%	4%	13%	74%	12%	4%	66%	30%	32%	35%	32%
	2030	30%	65%	5%	14%	74%	12%	5%	65%	30%	32%	36%	32%
	2040	31%	62%	7%	14%	73%	13%	7%	62%	31%	31%	37%	31%
P.M.													
	2013	40%	60%	0%	6%	87%	7%	0%	64%	36%	33%	33%	33%
	2020	41%	55%	4%	8%	84%	8%	4%	60%	36%	32%	35%	32%
	2030	41%	54%	5%	8%	83%	8%	5%	58%	36%	32%	36%	32%
	2040	41%	52%	7%	9%	82%	9%	7%	56%	37%	31%	37%	31%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: WB SR 90 at SW 2 Ave.
PREPARED BY: NC
FILE: BUILD- FORCED AND BALANCED

DATE: 12/30/2014
NOTES:

0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	12,840	27,710	11,970	28,230
24 HR EST. AADT	2020	14,000	31,600	13,000	32,200
24 HR EST. AADT	2030	15,500	38,200	14,500	38,900
24 HR EST. AADT	2040	17,000	46,100	16,000	46,900

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	28.8%	44.9%	99.9%	99.9%	74.0%	66.9%	0.1%	0.1%
2020	Approach D30 Factor	28.8%	44.9%	99.9%	99.9%	74.0%	66.9%	0.1%	0.1%
2030	Approach D30 Factor	28.8%	44.9%	99.9%	99.9%	74.0%	66.9%	0.1%	0.1%
2040	Approach D30 Factor	28.8%	44.9%	99.9%	99.9%	74.0%	66.9%	0.1%	0.1%

A.M. DESIGN HR. TURNS		NORTH LEG RIGHT	NORTH LEG THRU	NORTH LEG LEFT	EAST LEG RIGHT	EAST LEG THRU	EAST LEG LEFT	SOUTH LEG RIGHT	SOUTH LEG THRU	SOUTH LEG LEFT	WEST LEG RIGHT	WEST LEG THRU	WEST LEG LEFT
2013	EST. TURNS												
2020	EST. TURNS	130	360	0	130	2400	120	0	720	290	0	0	0
2030	EST. TURNS												
2040	EST. TURNS	160	500	0	190	3500	180	0	890	360	0	0	0
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	340	420	0	120	2200	130	0	570	300	0	0	0
2030	EST. TURNS												
2040	EST. TURNS	420	620	0	180	3300	190	0	710	380	0	0	0

LINK VOLUME CHECK

		NORTH LEG FROM	NORTH LEG TO	NORTH LEG LINK	EAST LEG FROM	EAST LEG TO	EAST LEG LINK	SOUTH LEG FROM	SOUTH LEG TO	SOUTH LEG LINK	WEST LEG FROM	WEST LEG TO	WEST LEG LINK
DESIGN HOUR A.M.:													
CONTROL LINK VOLUMES		333	827	1160	2491	-1	2490	797	283	1080	3	2537	2540
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		363	897	1260	2841	-1	2840	866	304	1170	3	2897	2900
2020	TURN SUMMARY	490	850	1340	2650	0	2650	1010	480	1490	0	2820	2820
CONTROL LINK VOLUMES		402	998	1400	3434	6	3440	965	345	1310	4	3496	3500
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		441	1089	1530	4144	6	4150	1065	375	1440	4	4216	4220
2040	TURN SUMMARY	660	1080	1740	3870	0	3870	1250	680	1930	0	4020	4020
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		519	641	1160	2492	-2	2490	721	359	1080	3	2537	2540
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		566	694	1260	2842	-2	2840	783	387	1170	3	2897	2900
2020	TURN SUMMARY	760	690	1450	2450	0	2450	870	550	1420	0	2840	2840
CONTROL LINK VOLUMES		627	773	1400	3435	5	3440	874	436	1310	4	3496	3500
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		687	843	1530	4146	4	4150	964	476	1440	4	4216	4220
2040	TURN SUMMARY	1040	890	1930	3670	0	3670	1090	810	1900	0	4100	4100

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD- FORCED AND BALANCED
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	WB SW 8 St. at SW 1 Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	7,130	27,710	8,280	27,710
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**1.1%**	**CGR**	**1.9%**	**CGR**	**1.1%**	**CGR**	**1.9%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

			NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG		
					1		**1**		**1**		**1**
		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	
		2013		7,130		27,710		8,280		27,710	
NO. YEARS	7	2020	1.077	7,500	1.141	31,600	1.077	9,000	1.141	31,600	
NO. YEARS	17	2030	1.198	8,500	1.377	38,200	1.198	10,000	1.377	38,200	
NO. YEARS	27	2040	1.333	9,500	1.662	46,100	1.333	11,000	1.662	46,100	

Percent Turns Calculated From Base Year AADTs:

JKTURNS	FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	7,130			27,710			8,280			27,710		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	27,710	8,280	27,710	7,130	27,710	8,280	27,710	7,130	27,710	8,280	27,710	7,130
	44%	13%	44%	17%	64%	19%	44%	11%	44%	19%	64%	17%
2020 2-WAY ADT	7,500				31,600			9,000			31,600	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	31,600	9,000	31,600	7,500	31,600	9,000	31,600	7,500	31,600	9,000	31,600	7,500
	44%	12%	44%	16%	66%	19%	45%	11%	45%	19%	66%	16%
2030 2-WAY ADT	8,500				38,200			10,000			38,200	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	38,200	10,000	38,200	8,500	38,200	10,000	38,200	8,500	38,200	10,000	38,200	8,500
	44%	12%	44%	15%	67%	18%	45%	10%	45%	18%	67%	15%
2040 2-WAY ADT	9,500				46,100			11,000			46,100	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	46,100	11,000	46,100	9,500	46,100	11,000	46,100	9,500	46,100	11,000	46,100	9,500
	45%	11%	45%	14%	69%	17%	45%	9%	45%	17%	69%	14%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	1,016			1,010			1,038			1,190			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	304	611	0	0	783	126	100	100	100	1	1	1	2,127
% TURNS:	33%	67%	0%	0%	86%	14%	33%	33%	33%	33%	33%	33%	
P.M.	2-Way Pk Hr Vol:	1,033			1,482			1,150			1,567			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	286	646	0	0	1,178	203	100	100	100	1	1	1	2,616
% TURNS:	31%	69%	0%	0%	85%	15%	33%	33%	33%	33%	33%	33%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	33%	67%	0%	0%	86%	14%	33%	33%	33%	33%	33%	33%
	2020	34%	61%	4%	2%	84%	14%	34%	31%	34%	32%	37%	32%
	2030	35%	60%	6%	2%	84%	14%	35%	30%	35%	31%	38%	31%
	2040	35%	57%	7%	2%	83%	14%	35%	29%	35%	31%	39%	30%
P.M.													
	2013	31%	69%	0%	0%	85%	15%	33%	33%	33%	33%	33%	33%
	2020	32%	64%	4%	2%	83%	15%	34%	31%	34%	32%	37%	32%
	2030	32%	62%	6%	2%	83%	15%	35%	30%	35%	31%	38%	31%
	2040	33%	60%	7%	2%	83%	15%	35%	29%	35%	31%	39%	30%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: WB SW 8 St. at SW 1 Ave.
PREPARED BY: NC
FILE: BUILD- FORCED AND BALANCED

DATE: 12/30/2014
NOTES:

0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	7,130	27,710	8,280	27,710
24 HR EST. AADT	2020	7,500	31,600	9,000	31,600
24 HR EST. AADT	2030	8,500	38,200	10,000	38,200
24 HR EST. AADT	2040	9,500	46,100	11,000	46,100

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	90.1%	90.2%	99.9%	99.9%	28.9%	26.1%	0.1%	0.1%
2020	Approach D30 Factor	90.1%	90.2%	99.9%	99.9%	28.9%	26.1%	0.1%	0.1%
2030	Approach D30 Factor	90.1%	90.2%	99.9%	99.9%	28.9%	26.1%	0.1%	0.1%
2040	Approach D30 Factor	90.1%	90.2%	99.9%	99.9%	28.9%	26.1%	0.1%	0.1%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	400	940	0	0	2100	250	0	0	0	0	0	0
2030	EST. TURNS												
2040	EST. TURNS	490	1,160	0	0	3060	370	0	0	0	0	0	0
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	390	1,060	0	0	2000	430	0	0	0	0	0	0
2030	EST. TURNS												
2040	EST. TURNS	490	1,310	0	0	2910	630	0	0	0	0	0	0

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		578	62	640	2491	-1	2490	215	535	750	2	2488	2490
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		608	72	680	2841	-1	2840	234	576	810	3	2837	2840
2020	TURN SUMMARY	1340	0	1340	2350	0	2350	0	1190	1190	0	2500	2500
CONTROL LINK VOLUMES		689	81	770	3435	5	3440	260	640	900	3	3437	3440
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		770	90	860	4145	5	4150	286	704	990	4	4146	4150
2040	TURN SUMMARY	1650	0	1650	3430	0	3430	0	1530	1530	0	3550	3550
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		579	61	640	2491	-1	2490	194	556	750	2	2488	2490
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		609	71	680	2841	-1	2840	211	599	810	3	2837	2840
2020	TURN SUMMARY	1450	0	1450	2430	0	2430	0	1490	1490	0	2390	2390
CONTROL LINK VOLUMES		690	80	770	3435	5	3440	235	665	900	3	3437	3440
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		771	89	860	4145	5	4150	258	732	990	4	4146	4150
2040	TURN SUMMARY	1800	0	1800	3540	0	3540	0	1940	1940	0	3400	3400

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD- FORCED AND BALANCED
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	WB SR 90 at S. Miami Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	8,620	22,540	14,040	27,710
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**1.1%**	**CGR**	**1.9%**	**CGR**	**1.1%**	**CGR**	**1.9%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
					1		**1**		**1**	
		2013		8,620		22,540		14,040		27,710
NO. YEARS	7	2020	1.077	9,500	1.141	25,700	1.077	15,000	1.141	31,600
NO. YEARS	17	2030	1.198	10,500	1.377	31,000	1.198	17,000	1.377	38,200
NO. YEARS	27	2040	1.333	11,500	1.662	37,500	1.333	18,500	1.662	46,100

Percent Turns Calculated From Base Year AADTs:

JKTURNS		FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT		8,620			22,540			14,040			27,710		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	
	27,710	14,040	22,540	8,620	27,710	14,040	22,540	8,620	27,710	14,040	22,540	8,620	
	43%	22%	35%	17%	55%	28%	38%	15%	47%	31%	50%	19%	
2020 2-WAY ADT		9,500			25,700			15,000			31,600		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	
	31,600	15,000	25,700	9,500	31,600	15,000	25,700	9,500	31,600	15,000	25,700	9,500	
	44%	21%	36%	17%	56%	27%	38%	14%	47%	30%	51%	19%	
2030 2-WAY ADT		10,500			31,000			17,000			38,200		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	
	38,200	17,000	31,000	10,500	38,200	17,000	31,000	10,500	38,200	17,000	31,000	10,500	
	44%	20%	36%	16%	58%	26%	39%	13%	48%	29%	53%	18%	
2040 2-WAY ADT		11,500			37,500			18,500			46,100		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	
	46,100	18,500	37,500	11,500	46,100	18,500	37,500	11,500	46,100	18,500	37,500	11,500	
	45%	18%	37%	15%	61%	24%	39%	12%	48%	27%	56%	17%	

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	609			736			816			947			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	1	1	1	74	660	0	0	531	283	1	1	1	1,554
% TURNS:	33%	33%	33%	10%	90%	0%	0%	65%	35%	33%	33%	33%	
P.M.	2-Way Pk Hr Vol:	626			1,126			933			1,437			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	1	1	1	113	1,011	0	0	509	422	1	1	1	2,061
% TURNS:	33%	33%	33%	10%	90%	0%	0%	55%	45%	33%	33%	33%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	33%	33%	33%	10%	90%	0%	0%	65%	35%	33%	33%	33%
	2020	34%	32%	34%	11%	87%	3%	4%	60%	36%	33%	35%	32%
	2030	35%	32%	34%	11%	86%	3%	5%	59%	36%	33%	36%	31%
	2040	35%	31%	34%	11%	85%	4%	7%	56%	37%	32%	37%	31%
P.M.													
	2013	33%	33%	33%	10%	90%	0%	0%	55%	45%	33%	33%	33%
	2020	34%	32%	34%	11%	87%	3%	4%	51%	46%	33%	35%	32%
	2030	35%	32%	34%	11%	86%	3%	5%	49%	46%	33%	36%	31%
	2040	35%	31%	34%	11%	85%	4%	7%	48%	46%	32%	37%	31%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: WB SR 90 at S. Miami Ave.
PREPARED BY: NC
FILE: BUILD- FORCED AND BALANCED

DATE: 12/30/2014
NOTES:

0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	8,620	22,540	14,040	27,710
24 HR EST. AADT	2020	9,500	25,700	15,000	31,600
24 HR EST. AADT	2030	10,500	31,000	17,000	38,200
24 HR EST. AADT	2040	11,500	37,500	18,500	46,100

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	0.5%	0.5%	99.9%	99.9%	99.8%	99.8%	0.1%	0.1%
2020	Approach D30 Factor	0.5%	0.5%	99.9%	99.9%	99.8%	99.8%	0.1%	0.1%
2030	Approach D30 Factor	0.5%	0.5%	99.9%	99.9%	99.8%	99.8%	0.1%	0.1%
2040	Approach D30 Factor	0.5%	0.5%	99.9%	99.9%	99.8%	99.8%	0.1%	0.1%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	0	0	0	170	2000	0	0	720	360	0	0	0
2030	EST. TURNS												
2040	EST. TURNS	0	0	0	240	2970	0	0	890	450	0	0	0
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	0	0	0	450	1900	0	0	1090	720	0	0	0
2030	EST. TURNS												
2040	EST. TURNS	0	0	0	660	2700	0	0	1350	890	0	0	0

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		4	776	780	2027	3	2030	1261	-1	1260	2	2488	2490
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		4	856	860	2311	-1	2310	1347	3	1350	3	2837	2840
2020	TURN SUMMARY	0	890	890	2170	0	2170	1080	0	1080	0	2360	2360
CONTROL LINK VOLUMES		5	945	950	2787	3	2790	1526	4	1530	3	3437	3440
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		5	1035	1040	3372	8	3380	1661	9	1670	4	4146	4150
2040	TURN SUMMARY	0	1130	1130	3210	0	3210	1340	0	1340	0	3420	3420
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		4	776	780	2027	3	2030	1261	-1	1260	2	2488	2490
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		4	856	860	2311	-1	2310	1347	3	1350	3	2837	2840
2020	TURN SUMMARY	0	1540	1540	2350	0	2350	1810	0	1810	0	2620	2620
CONTROL LINK VOLUMES		5	945	950	2787	3	2790	1527	3	1530	3	3437	3440
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		5	1035	1040	3372	8	3380	1661	9	1670	4	4146	4150
2040	TURN SUMMARY	0	2010	2010	3360	0	3360	2240	0	2240	0	3590	3590

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD- FORCED AND BALANCED
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	WB SW 8 St. at Brickell Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	43,890	15,380	40,780	22,540
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**1.1%**	**CGR**	**1.9%**	**CGR**	**1.1%**	**CGR**	**1.9%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
					1		**1**		**1**	
		2013		43,890		15,380		40,780		22,540
NO. YEARS	7	2020	1.077	47,500	1.141	17,500	1.077	44,000	1.141	25,700
NO. YEARS	17	2030	1.198	52,500	1.377	21,200	1.198	49,000	1.377	31,000
NO. YEARS	27	2040	1.333	58,500	1.662	25,600	1.333	54,500	1.662	37,500

Percent Turns Calculated From Base Year AADTs:

JKTURNS	FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	43,890			15,380			40,780			22,540		
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
22,540	40,780	15,380	43,890	22,540	40,780	15,380	43,890	22,540	40,780	15,380	43,890
29%	52%	20%	41%	21%	38%	19%	54%	28%	41%	15%	44%
2020 2-WAY ADT	47,500			17,500			44,000			25,700	
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
25,700	44,000	17,500	47,500	25,700	44,000	17,500	47,500	25,700	44,000	17,500	47,500
29%	50%	20%	41%	22%	38%	19%	52%	28%	40%	16%	44%
2030 2-WAY ADT	52,500			21,200			49,000			31,000	
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
31,000	49,000	21,200	52,500	31,000	49,000	21,200	52,500	31,000	49,000	21,200	52,500
31%	48%	21%	40%	23%	37%	20%	50%	30%	40%	17%	43%
2040 2-WAY ADT	58,500			25,600			54,500			37,500	
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
37,500	54,500	25,600	58,500	37,500	54,500	25,600	58,500	37,500	54,500	25,600	58,500
32%	46%	22%	39%	25%	36%	21%	48%	31%	39%	18%	42%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	3,559			2,130			2,983			990			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	206	816	1,051	177	412	233	256	1,308	369	1	1	1	4,831
% TURNS:	10%	39%	51%	22%	50%	28%	13%	68%	19%	33%	33%	33%	
P.M.	2-Way Pk Hr Vol:	3,774			1,569			3,068			1,481			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	597	1,065	761	155	363	278	11	1,195	518	1	1	1	4,946
% TURNS:	25%	44%	31%	19%	46%	35%	1%	69%	30%	33%	33%	33%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	10%	39%	51%	22%	50%	28%	13%	68%	19%	33%	33%	33%
	2020	12%	40%	48%	23%	47%	29%	14%	66%	20%	34%	32%	34%
	2030	13%	40%	47%	24%	47%	29%	14%	65%	20%	34%	31%	35%
	2040	14%	41%	46%	24%	46%	30%	15%	64%	21%	34%	31%	35%
P.M.													
	2013	25%	44%	31%	19%	46%	35%	1%	69%	30%	33%	33%	33%
	2020	25%	45%	30%	22%	43%	35%	3%	68%	30%	34%	32%	34%
	2030	25%	45%	30%	22%	43%	35%	3%	67%	30%	34%	31%	35%
	2040	26%	44%	30%	23%	42%	35%	4%	66%	30%	34%	31%	35%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: WB SW 8 St. at Brickell Ave.
PREPARED BY: NC
FILE: BUILD- FORCED AND BALANCED

DATE: 12/30/2014
NOTES:

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ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	43,890	15,380	40,780	22,540
24 HR EST. AADT	2020	47,500	17,500	44,000	25,700
24 HR EST. AADT	2030	52,500	21,200	49,000	31,000
24 HR EST. AADT	2040	58,500	25,600	54,500	37,500

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	58.2%	64.2%	99.9%	99.9%	64.8%	56.2%	0.1%	0.1%
2020	Approach D30 Factor	58.2%	64.2%	99.9%	99.9%	64.8%	56.2%	0.1%	0.1%
2030	Approach D30 Factor	58.2%	64.2%	99.9%	99.9%	64.8%	56.2%	0.1%	0.1%
2040	Approach D30 Factor	58.2%	64.2%	99.9%	99.9%	64.8%	56.2%	0.1%	0.1%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	520	1,110	850	200	810	280	250	1,200	780	0	0	0
2030	EST. TURNS												
2040	EST. TURNS	790	1,350	1,050	310	1180	380	310	1490	970	0	0	0
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	810	1,700	850	210	640	450	210	1380	870	0	0	0
2030	EST. TURNS												
2040	EST. TURNS	1,030	2,100	1,050	330	930	660	260	1710	1080	0	0	0

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		2301	1649	3950	1383	-3	1380	2378	1292	3670	2	2028	2030
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		2490	1790	4280	1573	7	1580	2566	1394	3960	2	2308	2310
2020	TURN SUMMARY	2480	1400	3880	1290	1100	2390	2230	1390	3620	0	2110	2110
CONTROL LINK VOLUMES		2752	1978	4730	1906	4	1910	2858	1552	4410	3	2787	2790
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		3067	2203	5270	2302	-2	2300	3178	1732	4910	3	3377	3380
2040	TURN SUMMARY	3190	1800	4990	1870	1360	3230	2770	1730	4500	0	2940	2940
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		2536	1414	3950	1383	-3	1380	2062	1608	3670	2	2028	2030
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		2745	1535	4280	1573	7	1580	2225	1735	3960	2	2308	2310
2020	TURN SUMMARY	3360	1590	4950	1300	1060	2360	2460	2150	4610	0	2320	2320
CONTROL LINK VOLUMES		3034	1696	4730	1906	4	1910	2478	1932	4410	3	2787	2790
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		3380	1890	5270	2302	-2	2300	2756	2154	4910	3	3377	3380
2040	TURN SUMMARY	4180	2040	6220	1920	1310	3230	3050	2760	5810	0	3040	3040

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD- FORCED AND BALANCED
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	EB SW 7 St. at SR 9		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	46,700	30,270	51,470	100
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**1.1%**	**CGR**	**0.9%**	**CGR**	**1.1%**	**CGR**	**0.9%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
				1		**1**		**1**		**1**
		2013		46,700		30,270		51,470		100
NO. YEARS	7	2020	1.077	50,500	1.068	32,300	1.077	55,500	1.068	100
NO. YEARS	17	2030	1.198	56,000	1.172	35,500	1.198	61,500	1.172	100
NO. YEARS	27	2040	1.333	62,000	1.287	39,000	1.333	68,500	1.287	100

Percent Turns Calculated From Base Year AADTs:

JKTURNS		FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG	
2013	2-WAY ADT	46,700			30,270			51,470			100	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	100	51,470	30,270	46,700	100	51,470	30,270	46,700	100	51,470	30,270	46,700
	0%	63%	37%	48%	0%	52%	39%	61%	0%	40%	24%	36%
2020	2-WAY ADT	50,500			32,300			55,500			100	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	100	55,500	32,300	50,500	100	55,500	32,300	50,500	100	55,500	32,300	50,500
	0%	63%	37%	48%	0%	52%	39%	61%	0%	40%	23%	37%
2030	2-WAY ADT	56,000			35,500			61,500			100	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	100	61,500	35,500	56,000	100	61,500	35,500	56,000	100	61,500	35,500	56,000
	0%	63%	37%	48%	0%	52%	39%	61%	0%	40%	23%	37%
2040	2-WAY ADT	62,000			39,000			68,500			100	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	100	68,500	39,000	62,000	100	68,500	39,000	62,000	100	68,500	39,000	62,000
	0%	64%	36%	47%	0%	52%	39%	61%	0%	40%	23%	37%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)		
A.M.	2-Way Pk Hr Vol:	3,230			2,749			3,484			2,557		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	94	1,366	190	21	1,102	0	317	1,559	182	60	1,119	0	6,010
% TURNS:	6%	83%	12%	2%	98%	0%	15%	76%	9%	5%	95%	0%	
P.M.	2-Way Pk Hr Vol:	3,085			2,673			3,095			2,509		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	136	1,320	262	38	1,265	0	223	1,329	180	43	885	0	5,681
% TURNS:	8%	77%	15%	3%	97%	0%	13%	77%	10%	5%	95%	0%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	6%	83%	12%	2%	98%	0%	15%	76%	9%	5%	95%	0%
	2020	5%	81%	14%	6%	88%	5%	18%	74%	8%	9%	88%	4%
	2030	5%	80%	15%	8%	86%	7%	18%	74%	8%	9%	86%	5%
	2040	5%	80%	16%	9%	82%	9%	19%	73%	7%	11%	83%	6%
P.M.													
	2013	8%	77%	15%	3%	97%	0%	13%	77%	10%	5%	95%	0%
	2020	7%	75%	17%	7%	87%	5%	15%	75%	9%	8%	88%	4%
	2030	7%	75%	18%	9%	85%	7%	16%	75%	9%	9%	86%	5%
	2040	7%	75%	19%	10%	81%	9%	17%	74%	9%	11%	83%	6%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: EB SW 7 St. at SR 9
PREPARED BY: NC
FILE: BUILD- FORCED AND BALANCED

DATE: 12/30/2014
NOTES:

0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	46,700	30,270	51,470	100
24 HR EST. AADT	2020	50,500	32,300	55,500	100
24 HR EST. AADT	2030	56,000	35,500	61,500	100
24 HR EST. AADT	2040	62,000	39,000	68,500	100

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	51.1%	55.7%	0.1%	0.1%	59.1%	56.0%	99.9%	99.9%
2020	Approach D30 Factor	51.1%	55.7%	0.1%	0.1%	59.1%	56.0%	99.9%	99.9%
2030	Approach D30 Factor	51.1%	55.7%	0.1%	0.1%	59.1%	56.0%	99.9%	99.9%
2040	Approach D30 Factor	51.1%	55.7%	0.1%	0.1%	59.1%	56.0%	99.9%	99.9%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	30	2,120	220	0	0	0	1,630	1,680	0	40	0	150
2030	EST. TURNS												
2040	EST. TURNS	40	2,620	270	0	0	0	2010	2080	0	50	0	180
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	0	1,680	450	0	0	0	1520	1600	0	20	10	120
2030	EST. TURNS												
2040	EST. TURNS	0	2,080	560	0	0	0	1880	1980	0	0	10	0

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		2147	2053	4200	3	2717	2720	2736	1894	4630	9	1	10
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		2322	2228	4550	3	2907	2910	2951	2049	5000	9	1	10
2020	TURN SUMMARY	2370	1830	4200	0	1850	1850	3310	2160	5470	190	30	220
CONTROL LINK VOLUMES		2575	2465	5040	3	3197	3200	3270	2270	5540	9	1	10
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		2850	2730	5580	4	3506	3510	3642	2528	6170	9	1	10
2040	TURN SUMMARY	2930	2260	5190	0	2280	2280	4090	2670	6760	230	40	270
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		2341	1859	4200	3	2717	2720	2592	2038	4630	9	1	10
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		2531	2019	4550	3	2907	2910	2795	2205	5000	9	1	10
2020	TURN SUMMARY	2130	1720	3850	0	1980	1980	3120	1700	4820	150	0	150
CONTROL LINK VOLUMES		2807	2233	5040	3	3197	3200	3097	2443	5540	9	1	10
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		3107	2473	5580	4	3506	3510	3450	2720	6170	9	1	10
2040	TURN SUMMARY	2640	1980	4620	0	2450	2450	3860	2080	5940	10	0	10

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD-FORCED AND BALANCED
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	EB SW 7 St. at SW 24 Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	46,700	24,540	51,470	30,270
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**1.1%**	**CGR**	**0.9%**	**CGR**	**1.1%**	**CGR**	**0.9%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

			NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG		
			1		**1**		**1**		**1**		
		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
		2013		46,700		24,540		51,470		30,270
NO. YEARS	7	2020	1.077	50,500	1.068	26,200	1.077	55,500	1.068	32,300
NO. YEARS	17	2030	1.198	56,000	1.172	28,800	1.198	61,500	1.172	35,500
NO. YEARS	27	2040	1.333	62,000	1.287	31,600	1.333	68,500	1.287	39,000

Percent Turns Calculated From Base Year AADTs:

JKTURNS	FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	46,700			24,540			51,470			30,270		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	30,270	51,470	24,540	46,700	30,270	51,470	24,540	46,700	30,270	51,470	24,540	46,700
	28%	48%	23%	36%	24%	40%	24%	46%	30%	42%	20%	38%
2020 2-WAY ADT	1,500			26,200			55,500			32,300		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	32,300	55,500	26,200	1,500	32,300	55,500	26,200	1,500	32,300	55,500	26,200	1,500
	28%	49%	23%	2%	36%	62%	44%	3%	54%	67%	31%	2%
2030 2-WAY ADT	1,500			28,800			61,500			35,500		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	35,500	61,500	28,800	1,500	35,500	61,500	28,800	1,500	35,500	61,500	28,800	1,500
	28%	49%	23%	2%	36%	62%	44%	2%	54%	67%	31%	2%
2040 2-WAY ADT	2,000			31,600			68,500			39,000		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	39,000	68,500	31,600	2,000	39,000	68,500	31,600	2,000	39,000	68,500	31,600	2,000
	28%	49%	23%	2%	36%	63%	44%	3%	54%	67%	31%	2%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	334			1,757			174			1,841			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	0	57	37	1	1	1	67	49	0	0	1,650	190	2,053
% TURNS:	0%	61%	39%	33%	33%	33%	58%	42%	0%	0%	90%	10%	
P.M.	2-Way Pk Hr Vol:	325			1,562			186			1,581			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	0	88	59	1	1	1	50	47	0	0	1,450	130	1,827
% TURNS:	0%	60%	40%	33%	33%	33%	52%	48%	0%	0%	92%	8%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		SB			WB			NB			EB	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
A.M.												
2013	0%	61%	39%	33%	33%	33%	58%	42%	0%	0%	90%	10%
2020	3%	59%	38%	30%	34%	36%	56%	38%	5%	7%	84%	9%
2030	4%	59%	37%	29%	34%	37%	56%	37%	7%	8%	82%	9%
2040	5%	59%	37%	28%	34%	38%	55%	36%	9%	11%	80%	9%
P.M.												
2013	0%	60%	40%	33%	33%	33%	52%	48%	0%	0%	92%	8%
2020	3%	59%	38%	30%	34%	36%	51%	44%	5%	7%	86%	8%
2030	4%	58%	38%	29%	34%	37%	51%	43%	7%	8%	84%	7%
2040	5%	58%	37%	28%	34%	38%	50%	41%	9%	11%	82%	7%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: EB SW 7 St. at SW 24 Ave.
PREPARED BY: NC
FILE: BUILD-FORCED AND BALANCED

DATE: 12/30/2014
NOTES:

0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	46,700	24,540	51,470	30,270
24 HR EST. AADT	2020	1,500	26,200	55,500	32,300
24 HR EST. AADT	2030	1,500	28,800	61,500	35,500
24 HR EST. AADT	2040	2,000	31,600	68,500	39,000

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	28.1%	45.2%	0.1%	0.1%	66.7%	52.2%	99.9%	99.9%
2020	Approach D30 Factor	28.1%	45.2%	0.1%	0.1%	66.7%	52.2%	99.9%	99.9%
2030	Approach D30 Factor	28.1%	45.2%	0.1%	0.1%	66.7%	52.2%	99.9%	99.9%
2040	Approach D30 Factor	28.1%	45.2%	0.1%	0.1%	66.7%	52.2%	99.9%	99.9%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	0	320	550	0	0	0	100	270	0	50	1,700	50
2030	EST. TURNS												
2040	EST. TURNS	0	400	680	0	0	0	120	330	0	60	2,050	60
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	0	340	330	0	0	0	100	240	0	50	1,900	170
2030	EST. TURNS												
2040	EST. TURNS	0	430	400	0	0	0	120	290	0	60	2,240	210

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		1183	3017	4200	2	2208	2210	3088	1542	4630	2723	-3	2720
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		1279	3271	4550	2	2358	2360	3330	1670	5000	2905	5	2910
2020	TURN SUMMARY	870	320	1190	0	2350	2350	370	370	740	1800	0	1800
CONTROL LINK VOLUMES		1418	3622	5040	3	2587	2590	3690	1850	5540	3193	7	3200
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		1570	4010	5580	3	2837	2840	4110	2060	6170	3508	2	3510
2040	TURN SUMMARY	1080	390	1470	0	2850	2850	450	460	910	2170	0	2170
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		1901	2299	4200	2	2208	2210	2416	2214	4630	2723	-3	2720
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		2056	2494	4550	2	2358	2360	2605	2395	5000	2905	5	2910
2020	TURN SUMMARY	670	410	1080	0	2330	2330	340	390	730	2120	0	2120
CONTROL LINK VOLUMES		2280	2760	5040	3	2587	2590	2887	2653	5540	3193	7	3200
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		2524	3056	5580	3	2837	2840	3215	2955	6170	3508	2	3510
2040	TURN SUMMARY	830	500	1330	0	2760	2760	410	490	900	2510	0	2510

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD- FORCED AND BALANCED
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	EB SW 7 St. at SW 22 Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	22,470	32,190	28,770	24,540
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**1.1%**	**CGR**	**0.9%**	**CGR**	**1.1%**	**CGR**	**0.9%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
		2013		22,470		32,190		28,770		24,540
NO. YEARS	7	2020	1.077	24,000	1.068	34,400	1.077	31,000	1.068	26,200
NO. YEARS	17	2030	1.198	27,000	1.172	37,700	1.198	34,500	1.172	28,800
NO. YEARS	27	2040	1.333	30,000	1.287	41,400	1.333	38,500	1.287	31,600

Percent Turns Calculated From Base Year AADTs:

JKTURNS	FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	22,470			32,190			28,770			24,540		
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
24,540	28,770	32,190	22,470	24,540	28,770	32,190	22,470	24,540	28,770	32,190	22,470
29%	34%	38%	30%	32%	38%	41%	28%	31%	34%	39%	27%
2020 2-WAY ADT	24,000			34,400			31,000			26,200	
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
26,200	31,000	34,400	24,000	26,200	31,000	34,400	24,000	26,200	31,000	34,400	24,000
29%	34%	38%	30%	32%	38%	41%	28%	31%	35%	38%	27%
2030 2-WAY ADT	27,000			37,700			34,500			28,800	
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
28,800	34,500	37,700	27,000	28,800	34,500	37,700	27,000	28,800	34,500	37,700	27,000
29%	34%	37%	30%	32%	38%	40%	29%	31%	35%	38%	27%
2040 2-WAY ADT	30,000			41,400			38,500			31,600	
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
31,600	38,500	41,400	30,000	31,600	38,500	41,400	30,000	31,600	38,500	41,400	30,000
28%	35%	37%	30%	32%	38%	40%	29%	31%	35%	38%	27%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	2,055			1,743			2,064			1,620			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	0	1,010	130	1	1	1	162	817	0	74	1,448	97	3,741
% TURNS:	0%	89%	11%	33%	33%	33%	17%	83%	0%	5%	89%	6%	
P.M.	2-Way Pk Hr Vol:	2,007			1,678			1,902			1,597			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	0	1,099	154	1	1	1	126	614	0	62	1,395	139	3,592
% TURNS:	0%	88%	12%	33%	33%	33%	17%	83%	0%	4%	87%	9%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	0%	89%	11%	33%	33%	33%	17%	83%	0%	5%	89%	6%
	2020	3%	83%	14%	33%	33%	34%	19%	78%	3%	8%	84%	8%
	2030	4%	82%	15%	33%	33%	34%	20%	77%	4%	8%	83%	9%
	2040	5%	80%	16%	33%	33%	34%	20%	74%	5%	10%	81%	10%
P.M.													
	2013	0%	88%	12%	33%	33%	33%	17%	83%	0%	4%	87%	9%
	2020	3%	82%	15%	33%	33%	34%	19%	78%	3%	7%	83%	11%
	2030	4%	81%	15%	33%	33%	34%	20%	76%	4%	8%	81%	11%
	2040	5%	79%	16%	33%	33%	34%	21%	74%	5%	9%	79%	12%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: EB SW 7 St. at SW 22 Ave.
PREPARED BY: NC
FILE: BUILD- FORCED AND BALANCED

DATE: 12/30/2014
NOTES:

0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	22,470	32,190	28,770	24,540
24 HR EST. AADT	2020	24,000	34,400	31,000	26,200
24 HR EST. AADT	2030	27,000	37,700	34,500	28,800
24 HR EST. AADT	2040	30,000	41,400	38,500	31,600

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	55.5%	62.4%	0.1%	0.1%	47.4%	38.9%	99.9%	99.9%
2020	Approach D30 Factor	55.5%	62.4%	0.1%	0.1%	47.4%	38.9%	99.9%	99.9%
2030	Approach D30 Factor	55.5%	62.4%	0.2%	0.2%	47.4%	38.9%	99.9%	99.9%
2040	Approach D30 Factor	55.5%	62.4%	0.2%	0.2%	47.4%	38.9%	99.8%	99.8%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	0	1,230	180	0	0	0	190	1,200	0	80	2,000	100
2030	EST. TURNS												
2040	EST. TURNS	0	1,480	260	0	0	0	230	1490	0	100	2,600	130
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	0	1,200	60	0	0	0	150	720	0	70	2,100	150
2030	EST. TURNS												
2040	EST. TURNS	0	1,490	80	0	0	0	190	890	0	80	2,540	180

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		1122	898	2020	3	2897	2900	1228	1362	2590	2207	3	2210
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		1198	962	2160	4	3096	3100	1323	1467	2790	2356	4	2360
2020	TURN SUMMARY	1410	1300	2710	0	2370	2370	1390	1310	2700	2180	0	2180
CONTROL LINK VOLUMES		1348	1082	2430	6	3384	3390	1473	1637	3110	2588	2	2590
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		1498	1202	2700	7	3723	3730	1644	1826	3470	2838	2	2840
2040	TURN SUMMARY	1740	1620	3360	0	3090	3090	1720	1580	3300	2830	0	2830
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		1263	757	2020	3	2897	2900	1007	1583	2590	2207	3	2210
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		1349	811	2160	4	3096	3100	1085	1705	2790	2356	4	2360
2020	TURN SUMMARY	1260	870	2130	0	2310	2310	870	1270	2140	2320	0	2320
CONTROL LINK VOLUMES		1517	913	2430	6	3384	3390	1208	1902	3110	2588	2	2590
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		1686	1014	2700	7	3723	3730	1348	2122	3470	2838	2	2840
2040	TURN SUMMARY	1570	1070	2640	0	2810	2810	1080	1570	2650	2800	0	2800

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD- FORCED AND BALANCED
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	EB SW 7 St. at SW 17 Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	9,760	32,140	11,230	32,190
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**1.1%**	**CGR**	**0.9%**	**CGR**	**1.1%**	**CGR**	**0.9%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
		2013		9,760		32,140		11,230		32,190
NO. YEARS	7	2020	1.077	10,500	1.068	34,300	1.077	12,000	1.068	34,400
NO. YEARS	17	2030	1.198	11,500	1.172	37,700	1.198	13,500	1.172	37,700
NO. YEARS	27	2040	1.333	13,000	1.287	41,400	1.333	15,000	1.287	41,400

Percent Turns Calculated From Base Year AADTs:

JKTURNS		FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG	
2013 2-WAY ADT		9,760			32,140			11,230			32,190	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	32,190	11,230	32,140	9,760	32,190	11,230	32,140	9,760	32,190	11,230	32,140	9,760
	43%	15%	43%	18%	61%	21%	43%	13%	43%	21%	60%	18%
2020 2-WAY ADT		10,500			34,300			12,000			34,400	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	34,400	12,000	34,300	10,500	34,400	12,000	34,300	10,500	34,400	12,000	34,300	10,500
	43%	15%	43%	18%	60%	21%	43%	13%	43%	21%	60%	18%
2030 2-WAY ADT		11,500			37,700			13,500			37,700	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	37,700	13,500	37,700	11,500	37,700	13,500	37,700	11,500	37,700	13,500	37,700	11,500
	42%	15%	42%	18%	60%	22%	43%	13%	43%	22%	60%	18%
2040 2-WAY ADT		13,000			41,400			15,000			41,400	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	41,400	15,000	41,400	13,000	41,400	15,000	41,400	13,000	41,400	15,000	41,400	13,000
	42%	15%	42%	19%	60%	22%	43%	14%	43%	22%	60%	19%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)		
A.M.	2-Way Pk Hr Vol:	2,081			1,932			1,944			1,789		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	0	978	217	1	1	1	189	698	0	78	1,523	187	3,873
% TURNS:	0%	82%	18%	33%	33%	33%	21%	79%	0%	4%	85%	10%	
P.M.	2-Way Pk Hr Vol:	1,626			1,824			1,550			1,718		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	0	703	194	1	1	1	140	602	0	104	1,487	126	3,359
% TURNS:	0%	78%	22%	33%	33%	33%	19%	81%	0%	6%	87%	7%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	0%	82%	18%	33%	33%	33%	21%	79%	0%	4%	85%	10%
	2020	4%	75%	21%	32%	36%	32%	24%	72%	4%	6%	83%	11%
	2030	5%	74%	21%	31%	37%	32%	24%	71%	5%	7%	82%	11%
	2040	7%	71%	22%	31%	38%	31%	25%	68%	7%	7%	81%	12%
P.M.													
	2013	0%	78%	22%	33%	33%	33%	19%	81%	0%	6%	87%	7%
	2020	4%	72%	24%	32%	36%	32%	21%	74%	4%	8%	84%	8%
	2030	5%	70%	24%	31%	37%	32%	22%	73%	5%	8%	83%	9%
	2040	7%	68%	25%	31%	38%	31%	23%	70%	7%	9%	82%	9%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: EB SW 7 St. at SW 17 Ave.
PREPARED BY: NC
FILE: BUILD- FORCED AND BALANCED

DATE: 12/30/2014
NOTES:

0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	9,760	32,140	11,230	32,190
24 HR EST. AADT	2020	10,500	34,300	12,000	34,400
24 HR EST. AADT	2030	11,500	37,700	13,500	37,700
24 HR EST. AADT	2040	13,000	41,400	15,000	41,400

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	57.4%	55.2%	0.1%	0.1%	45.6%	47.9%	99.9%	99.9%
2020	Approach D30 Factor	57.4%	55.2%	0.1%	0.1%	45.6%	47.9%	99.9%	99.9%
2030	Approach D30 Factor	57.4%	55.2%	0.1%	0.1%	45.6%	47.9%	99.9%	99.9%
2040	Approach D30 Factor	57.4%	55.2%	0.1%	0.1%	45.6%	47.9%	99.9%	99.9%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	0	1,020	250	0	0	0	220	750	0	160	2,000	150
2030	EST. TURNS												
2040	EST. TURNS	0	1,260	310	0	0	0	290	930	0	200	2,410	190
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	0	900	240	0	0	0	200	630	0	110	2,150	140
2030	EST. TURNS												
2040	EST. TURNS	0	1,110	300	0	0	0	270	770	0	130	2,600	160

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		504	376	880	3	2887	2890	461	549	1010	2895	5	2900
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		543	407	950	3	3087	3090	493	587	1080	3094	6	3100
2020	TURN SUMMARY	1270	900	2170	0	2470	2470	970	1180	2150	2310	0	2310
CONTROL LINK VOLUMES		594	446	1040	3	3387	3390	554	666	1220	3391	-1	3390
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		672	498	1170	4	3726	3730	616	734	1350	3724	6	3730
2040	TURN SUMMARY	1570	1120	2690	0	3010	3010	1220	1460	2680	2800	0	2800
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		485	395	880	3	2887	2890	484	526	1010	2895	5	2900
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		521	429	950	3	3087	3090	517	563	1080	3094	6	3100
2020	TURN SUMMARY	1140	770	1910	0	2590	2590	830	1010	1840	2400	0	2400
CONTROL LINK VOLUMES		571	469	1040	3	3387	3390	582	638	1220	3391	-1	3390
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		645	525	1170	4	3726	3730	646	704	1350	3724	6	3730
2040	TURN SUMMARY	1410	930	2340	0	3170	3170	1040	1240	2280	2890	0	2890

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD- FORCED AND BALANCED
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	EB SW 7 St. at SW 12 Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	7,390	26,360	10,080	32,140
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**1.1%**	**CGR**	**0.9%**	**CGR**	**1.1%**	**CGR**	**0.9%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

			NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG		
			1		**1**		**1**		**1**		
		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
		2013		7,390		26,360		10,080		32,140
NO. YEARS	7	2020	1.077	8,000	1.068	28,100	1.077	11,000	1.068	34,300
NO. YEARS	17	2030	1.198	9,000	1.172	30,900	1.198	12,000	1.172	37,700
NO. YEARS	27	2040	1.333	10,000	1.287	33,900	1.333	13,500	1.287	41,400

Percent Turns Calculated From Base Year AADTs:

JKTURNS	FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	7,390			26,360			10,080			32,140		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	32,140	10,080	26,360	7,390	32,140	10,080	26,360	7,390	32,140	10,080	26,360	7,390
	47%	15%	38%	15%	65%	20%	40%	11%	49%	23%	60%	17%
2020 2-WAY ADT	8,000				28,100			11,000			34,300	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	34,300	11,000	28,100	8,000	34,300	11,000	28,100	8,000	34,300	11,000	28,100	8,000
	47%	15%	38%	15%	64%	21%	40%	11%	49%	23%	60%	17%
2030 2-WAY ADT	9,000				30,900			12,000			37,700	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	37,700	12,000	30,900	9,000	37,700	12,000	30,900	9,000	37,700	12,000	30,900	9,000
	47%	15%	38%	15%	64%	20%	40%	12%	49%	23%	60%	17%
2040 2-WAY ADT	10,000				33,900			13,500			41,400	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	41,400	13,500	33,900	10,000	41,400	13,500	33,900	10,000	41,400	13,500	33,900	10,000
	47%	15%	38%	15%	64%	21%	40%	12%	49%	24%	59%	17%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	1,103			2,046			971			2,122			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	0	333	124	1	1	1	88	452	0	97	1,831	193	3,121
% TURNS:	0%	73%	27%	33%	33%	33%	16%	84%	0%	5%	86%	9%	
P.M.	2-Way Pk Hr Vol:	1,306			1,656			1,134			1,656			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	0	516	163	1	1	1	87	452	0	78	1,403	174	2,876
% TURNS:	0%	76%	24%	33%	33%	33%	16%	84%	0%	5%	85%	11%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	0%	73%	27%	33%	33%	33%	16%	84%	0%	5%	86%	9%
	2020	5%	67%	28%	32%	36%	32%	19%	76%	5%	6%	84%	10%
	2030	6%	66%	29%	31%	37%	32%	19%	75%	6%	7%	83%	10%
	2040	8%	63%	29%	30%	38%	31%	20%	72%	8%	8%	82%	10%
P.M.													
	2013	0%	76%	24%	33%	33%	33%	16%	84%	0%	5%	85%	11%
	2020	5%	70%	25%	32%	36%	32%	19%	77%	5%	7%	82%	11%
	2030	6%	68%	26%	31%	37%	32%	19%	75%	6%	7%	82%	11%
	2040	8%	66%	26%	30%	38%	31%	20%	72%	8%	8%	80%	12%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: EB SW 7 St. at SW 12 Ave.
PREPARED BY: NC
FILE: BUILD- FORCED AND BALANCED

DATE: 12/30/2014
NOTES:

0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	7,390	26,360	10,080	32,140
24 HR EST. AADT	2020	8,000	28,100	11,000	34,300
24 HR EST. AADT	2030	9,000	30,900	12,000	37,700
24 HR EST. AADT	2040	10,000	33,900	13,500	41,400

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	41.4%	52.0%	0.2%	0.2%	55.6%	47.5%	99.8%	99.8%
2020	Approach D30 Factor	41.4%	52.0%	0.2%	0.2%	55.6%	47.5%	99.8%	99.8%
2030	Approach D30 Factor	41.4%	52.0%	0.2%	0.2%	55.6%	47.5%	99.8%	99.8%
2040	Approach D30 Factor	41.4%	52.0%	0.2%	0.2%	55.6%	47.5%	99.8%	99.8%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	0	360	150	0	0	0	160	490	0	200	2,100	210
2030	EST. TURNS												
2040	EST. TURNS	0	450	180	0	0	0	210	610	0	240	2,530	250
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	0	580	200	0	0	0	160	500	0	100	2,280	200
2030	EST. TURNS												
2040	EST. TURNS	0	710	250	0	0	0	200	620	0	120	2,750	240

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		276	394	670	5	2365	2370	505	405	910	2887	3	2890
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		298	422	720	5	2525	2530	551	439	990	3081	9	3090
2020	TURN SUMMARY	510	700	1210	0	2410	2410	650	560	1210	2510	0	2510
CONTROL LINK VOLUMES		336	474	810	6	2774	2780	601	479	1080	3386	4	3390
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		373	527	900	6	3044	3050	676	544	1220	3719	11	3730
2040	TURN SUMMARY	630	860	1490	0	2920	2920	820	690	1510	3020	0	3020
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		346	324	670	5	2365	2370	431	479	910	2887	3	2890
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		374	346	720	5	2525	2530	471	519	990	3081	9	3090
2020	TURN SUMMARY	780	700	1480	0	2640	2640	660	680	1340	2580	0	2580
CONTROL LINK VOLUMES		421	389	810	6	2774	2780	513	567	1080	3386	4	3390
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		468	432	900	6	3044	3050	578	642	1220	3719	11	3730
2040	TURN SUMMARY	960	860	1820	0	3200	3200	820	830	1650	3110	0	3110

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD- FORCED AND BALANCED
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	EB SW 7 St. at SR 7/SW 8 Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	6,470	27,200	3,650	26,360
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**1.1%**	**CGR**	**0.9%**	**CGR**	**1.1%**	**CGR**	**0.9%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
		2013		6,470		27,200		3,650		26,360
NO. YEARS	7	2020	1.077	7,000	1.068	29,000	1.077	4,000	1.068	28,100
NO. YEARS	17	2030	1.198	8,000	1.172	31,900	1.198	4,500	1.172	30,900
NO. YEARS	27	2040	1.333	8,500	1.287	35,000	1.333	5,000	1.287	33,900

Percent Turns Calculated From Base Year AADTs:

JKTURNS		FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG	
2013 2-WAY ADT		6,470			27,200			3,650			26,360	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	26,360	3,650	27,200	6,470	26,360	3,650	27,200	6,470	26,360	3,650	27,200	6,470
	46%	6%	48%	18%	72%	10%	45%	11%	44%	10%	73%	17%
2020 2-WAY ADT		7,000			29,000			4,000			28,100	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	28,100	4,000	29,000	7,000	28,100	4,000	29,000	7,000	28,100	4,000	29,000	7,000
	46%	7%	47%	18%	72%	10%	45%	11%	44%	10%	73%	18%
2030 2-WAY ADT		8,000			31,900			4,500			30,900	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	30,900	4,500	31,900	8,000	30,900	4,500	31,900	8,000	30,900	4,500	31,900	8,000
	46%	7%	47%	18%	71%	10%	45%	11%	44%	10%	72%	18%
2040 2-WAY ADT		8,500			35,000			5,000			33,900	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	33,900	5,000	35,000	8,500	33,900	5,000	35,000	8,500	33,900	5,000	35,000	8,500
	46%	7%	47%	18%	72%	11%	45%	11%	44%	10%	72%	18%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)		
A.M.	2-Way Pk Hr Vol:	574			1,772			363			1,757		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	0	115	164	1	1	1	49	146	0	52	1,556	148	2,233
% TURNS:	0%	41%	59%	33%	33%	33%	25%	75%	0%	3%	89%	8%	
P.M.	2-Way Pk Hr Vol:	539			1,701			357			1,783		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	0	142	100	1	1	1	35	128	0	51	1,563	168	2,190
% TURNS:	0%	59%	41%	33%	33%	33%	21%	79%	0%	3%	88%	9%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	0%	41%	59%	33%	33%	33%	25%	75%	0%	3%	89%	8%
	2020	5%	38%	58%	32%	37%	31%	27%	68%	4%	4%	87%	9%
	2030	6%	37%	57%	31%	38%	30%	28%	67%	5%	4%	87%	10%
	2040	8%	35%	57%	31%	40%	30%	28%	64%	7%	4%	86%	10%
P.M.													
	2013	0%	59%	41%	33%	33%	33%	21%	79%	0%	3%	88%	9%
	2020	5%	53%	42%	32%	37%	31%	24%	72%	4%	4%	86%	10%
	2030	6%	52%	42%	31%	38%	30%	24%	70%	5%	4%	86%	11%
	2040	8%	50%	42%	31%	40%	30%	25%	67%	7%	4%	85%	11%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: EB SW 7 St. at SR 7/SW 8 Ave.
PREPARED BY: NC
FILE: BUILD- FORCED AND BALANCED

DATE: 12/30/2014
NOTES:

0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	6,470	27,200	3,650	26,360
24 HR EST. AADT	2020	7,000	29,000	4,000	28,100
24 HR EST. AADT	2030	8,000	31,900	4,500	30,900
24 HR EST. AADT	2040	8,500	35,000	5,000	33,900

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	48.6%	44.9%	0.1%	0.1%	53.7%	45.7%	99.9%	99.9%
2020	Approach D30 Factor	48.6%	44.9%	0.1%	0.1%	53.7%	45.7%	99.9%	99.9%
2030	Approach D30 Factor	48.6%	44.9%	0.1%	0.1%	53.7%	45.7%	99.9%	99.9%
2040	Approach D30 Factor	48.6%	44.9%	0.1%	0.1%	53.7%	45.7%	99.9%	99.9%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	0	290	200	0	0	0	70	290	0	60	2,100	190
2030	EST. TURNS												
2040	EST. TURNS	0	350	240	0	0	0	90	360	0	70	2,880	230
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	0	190	140	0	0	0	50	220	0	60	2,300	220
2030	EST. TURNS												
2040	EST. TURNS	0	230	180	0	0	0	70	270	0	70	2,700	270

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		283	297	580	2	2448	2450	176	154	330	2371	-1	2370
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		306	324	630	3	2607	2610	193	167	360	2528	2	2530
2020	TURN SUMMARY	490	480	970	0	2370	2370	360	350	710	2350	0	2350
CONTROL LINK VOLUMES		350	370	720	3	2867	2870	218	192	410	2779	1	2780
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		372	398	770	3	3147	3150	242	208	450	3049	1	3050
2040	TURN SUMMARY	590	590	1180	0	3210	3210	450	420	870	3180	0	3180
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		261	319	580	2	2448	2450	150	180	330	2371	-1	2370
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		283	347	630	3	2607	2610	164	196	360	2528	2	2530
2020	TURN SUMMARY	330	440	770	0	2490	2490	270	250	520	2580	0	2580
CONTROL LINK VOLUMES		323	397	720	3	2867	2870	185	225	410	2779	1	2780
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		343	427	770	3	3147	3150	205	245	450	3049	1	3050
2040	TURN SUMMARY	410	540	950	0	2950	2950	340	300	640	3040	0	3040

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD- FORCED AND BALANCED
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	EB SW 7 St. at SW 4 Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	12,970	32,550	14,300	31,480
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**1.1%**	**CGR**	**1.9%**	**CGR**	**1.1%**	**CGR**	**1.9%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
			1		**1**		**1**		**1**	
		2013		12,970		32,550		14,300		31,480
NO. YEARS	7	2020	1.077	14,000	1.141	37,100	1.077	15,500	1.141	35,900
NO. YEARS	17	2030	1.198	15,500	1.377	44,800	1.198	17,000	1.377	43,400
NO. YEARS	27	2040	1.333	17,500	1.662	54,100	1.333	19,000	1.662	52,300

Percent Turns Calculated From Base Year AADTs:

JKTURNS	FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	12,970			32,550			14,300			31,480		
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
31,480	14,300	32,550	12,970	31,480	14,300	32,550	12,970	31,480	14,300	32,550	12,970
40%	18%	42%	22%	54%	24%	42%	17%	41%	24%	54%	22%
2020 2-WAY ADT	14,000			37,100			15,500			35,900	
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
35,900	15,500	37,100	14,000	35,900	15,500	37,100	14,000	35,900	15,500	37,100	14,000
41%	18%	42%	21%	55%	24%	43%	16%	41%	23%	56%	21%
2030 2-WAY ADT	15,500			44,800			17,000			43,400	
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
43,400	17,000	44,800	15,500	43,400	17,000	44,800	15,500	43,400	17,000	44,800	15,500
41%	16%	43%	20%	57%	22%	43%	15%	42%	22%	58%	20%
2040 2-WAY ADT	17,500			54,100			19,000			52,300	
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
52,300	19,000	54,100	17,500	52,300	19,000	54,100	17,500	52,300	19,000	54,100	17,500
42%	15%	43%	20%	59%	21%	44%	14%	42%	21%	60%	19%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	2,981			4,068			602			1,685			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	0	523	2,456	1	1	1	1	1	1	75	1,608	0	4,668
% TURNS:	0%	18%	82%	33%	33%	33%	33%	33%	33%	4%	96%	0%	
P.M.	2-Way Pk Hr Vol:	2,053			3,002			760			1,705			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	0	627	1,424	1	1	1	1	1	1	129	1,574	0	3,760
% TURNS:	0%	31%	69%	33%	33%	33%	33%	33%	33%	8%	92%	0%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	0%	18%	82%	33%	33%	33%	33%	33%	33%	4%	96%	0%
	2020	4%	18%	78%	32%	35%	32%	34%	32%	34%	6%	92%	2%
	2030	5%	17%	77%	32%	36%	32%	35%	31%	34%	7%	91%	3%
	2040	7%	17%	76%	31%	38%	31%	35%	30%	35%	7%	90%	3%
P.M.													
	2013	0%	31%	69%	33%	33%	33%	33%	33%	33%	8%	92%	0%
	2020	4%	29%	67%	32%	35%	32%	34%	32%	34%	9%	89%	2%
	2030	5%	29%	66%	32%	36%	32%	35%	31%	34%	9%	88%	3%
	2040	7%	28%	65%	31%	38%	31%	35%	30%	35%	10%	87%	3%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: EB SW 7 St. at SW 4 Ave.
PREPARED BY: NC
FILE: BUILD- FORCED AND BALANCED

DATE: 12/30/2014
NOTES:

0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	12,970	32,550	14,300	31,480
24 HR EST. AADT	2020	14,000	37,100	15,500	35,900
24 HR EST. AADT	2030	15,500	44,800	17,000	43,400
24 HR EST. AADT	2040	17,500	54,100	19,000	52,300

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	99.9%	99.9%	0.2%	0.2%	0.5%	0.4%	99.8%	99.8%
2020	Approach D30 Factor	99.9%	99.9%	0.2%	0.2%	0.5%	0.4%	99.8%	99.8%
2030	Approach D30 Factor	99.9%	99.9%	0.2%	0.2%	0.5%	0.4%	99.8%	99.8%
2040	Approach D30 Factor	99.9%	99.9%	0.2%	0.2%	0.5%	0.4%	99.8%	99.8%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	0	350	1,510	0	0	0	0	0	0	270	2,150	0
2030	EST. TURNS												
2040	EST. TURNS	0	430	1,870	0	0	0	0	0	0	390	3,140	0
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	0	580	1,000	0	0	0	0	0	0	210	2,450	0
2030	EST. TURNS												
2040	EST. TURNS	0	720	1,240	0	0	0	0	0	0	260	3,450	0

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		1167	3	1170	6	2924	2930	6	1284	1290	2828	2	2830
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		1259	1	1260	7	3333	3340	7	1393	1400	3225	5	3230
2020	TURN SUMMARY	1860	0	1860	0	3660	3660	0	620	620	2420	0	2420
CONTROL LINK VOLUMES		1394	6	1400	8	4022	4030	8	1522	1530	3898	12	3910
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		1574	6	1580	10	4860	4870	9	1701	1710	4698	12	4710
2040	TURN SUMMARY	2300	0	2300	0	5010	5010	0	820	820	3530	0	3530
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		1166	4	1170	6	2924	2930	5	1285	1290	2828	2	2830
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		1259	1	1260	7	3333	3340	6	1394	1400	3225	5	3230
2020	TURN SUMMARY	1580	0	1580	0	3450	3450	0	790	790	2660	0	2660
CONTROL LINK VOLUMES		1394	6	1400	8	4022	4030	6	1524	1530	3898	12	3910
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		1573	7	1580	10	4860	4870	7	1703	1710	4698	12	4710
2040	TURN SUMMARY	1960	0	1960	0	4690	4690	0	980	980	3710	0	3710

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD- FORCED AND BALANCED
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	EB SW 7 St. at SW 3 Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	170	24,040	2,790	32,550
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**1.1%**	**CGR**	**1.9%**	**CGR**	**1.1%**	**CGR**	**1.9%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

				1		**1**		**1**		**1**
		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
		2013		20,000		24,040		2,790		32,550
NO. YEARS	7	2020	1.077	21,500	1.141	27,400	1.077	3,000	1.141	37,100
NO. YEARS	17	2030	1.198	24,000	1.377	33,100	1.198	3,500	1.377	44,800
NO. YEARS	27	2040	1.333	26,500	1.662	40,000	1.333	3,500	1.662	54,100

Percent Turns Calculated From Base Year AADTs:

JKTURNS	FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	20,000			24,040			2,790			32,550		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	32,550	2,790	24,040	20,000	32,550	2,790	24,040	20,000	32,550	2,790	24,040	20,000
	55%	5%	40%	36%	59%	5%	31%	26%	42%	6%	51%	43%
2020 2-WAY ADT	21,500			27,400			3,000			37,100		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	37,100	3,000	27,400	21,500	37,100	3,000	27,400	21,500	37,100	3,000	27,400	21,500
	55%	4%	41%	35%	60%	5%	32%	25%	43%	6%	53%	41%
2030 2-WAY ADT	24,000			33,100			3,500			44,800		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	44,800	3,500	33,100	24,000	44,800	3,500	33,100	24,000	44,800	3,500	33,100	24,000
	55%	4%	41%	33%	62%	5%	32%	24%	44%	6%	55%	40%
2040 2-WAY ADT	26,500			40,000			3,500			54,100		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	54,100	3,500	40,000	26,500	54,100	3,500	40,000	26,500	54,100	3,500	40,000	26,500
	55%	4%	41%	32%	64%	4%	33%	22%	45%	5%	57%	38%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	569			2,314			935			2,276			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	0	327	15	1	1	1	233	194	0	180	2,063	32	3,047
% TURNS:	0%	96%	4%	33%	33%	33%	55%	45%	0%	8%	91%	1%	
P.M.	2-Way Pk Hr Vol:	750			1,661			887			1,620			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	0	466	15	1	1	1	176	180	0	64	1,467	88	2,459
% TURNS:	0%	97%	3%	33%	33%	33%	49%	51%	0%	4%	91%	5%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	0%	96%	4%	33%	33%	33%	55%	45%	0%	8%	91%	1%
	2020	5%	86%	8%	33%	36%	30%	52%	43%	4%	8%	87%	5%
	2030	7%	84%	9%	33%	37%	30%	52%	43%	5%	8%	86%	6%
	2040	9%	80%	10%	33%	38%	28%	51%	42%	7%	7%	85%	7%
P.M.													
	2013	0%	97%	3%	33%	33%	33%	49%	51%	0%	4%	91%	5%
	2020	5%	88%	7%	33%	36%	30%	48%	48%	4%	4%	87%	9%
	2030	7%	85%	8%	33%	37%	30%	47%	47%	5%	4%	86%	10%
	2040	9%	81%	9%	33%	38%	28%	47%	46%	7%	4%	85%	11%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: EB SW 7 St. at SW 3 Ave.
PREPARED BY: NC
FILE: BUILD- FORCED AND BALANCED

DATE: 12/30/2014
NOTES:

0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	20,000	24,040	2,790	32,550
24 HR EST. AADT	2020	21,500	27,400	3,000	37,100
24 HR EST. AADT	2030	24,000	33,100	3,500	44,800
24 HR EST. AADT	2040	26,500	40,000	3,500	54,100

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	60.1%	64.1%	0.1%	0.1%	45.7%	40.1%	99.9%	99.9%
2020	Approach D30 Factor	60.1%	64.1%	0.1%	0.1%	45.7%	40.1%	99.9%	99.9%
2030	Approach D30 Factor	60.1%	64.1%	0.1%	0.1%	45.7%	40.1%	99.9%	99.9%
2040	Approach D30 Factor	60.1%	64.1%	0.1%	0.1%	45.7%	40.1%	99.9%	99.9%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	0	0	0	0	0	0	410	260	0	170	2,150	160
2030	EST. TURNS												
2040	EST. TURNS	0	0	0	0	0	0	510	320	0	230	3,250	230
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	0	0	0	0	0	0	470	280	0	240	2,420	300
2030	EST. TURNS												
2040	EST. TURNS	0	190	350	0	0	0	350	590	0	0	3,200	370

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		1082	718	1800	3	2157	2160	115	135	250	2927	3	2930
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		1163	777	1940	3	2467	2470	123	147	270	3336	4	3340
2020	TURN SUMMARY	0	420	420	0	2560	2560	670	170	840	2480	0	2480
CONTROL LINK VOLUMES		1298	862	2160	4	2976	2980	144	176	320	4028	2	4030
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		1434	956	2390	5	3595	3600	144	176	320	4864	6	4870
2040	TURN SUMMARY	0	550	550	0	3760	3760	830	230	1060	3710	0	3710
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		1154	646	1800	2	2158	2160	101	149	250	2928	2	2930
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		1241	699	1940	2	2468	2470	108	162	270	3337	3	3340
2020	TURN SUMMARY	0	580	580	0	2890	2890	750	240	990	2960	0	2960
CONTROL LINK VOLUMES		1385	775	2160	3	2977	2980	126	194	320	4030	0	4030
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		1530	860	2390	4	3596	3600	126	194	320	4866	4	4870
2040	TURN SUMMARY	540	960	1500	0	3900	3900	940	190	1130	3570	0	3570

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD- FORCED AND BALANCED
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	EB SW 7 St. at SW 2 Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	18,490	16,300	12,840	24,040
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**1.1%**	**CGR**	**1.9%**	**CGR**	**1.1%**	**CGR**	**1.9%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

			NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG		
					1		**1**		**1**		**1**
		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
		2013		18,490		16,300		12,840		24,040
NO. YEARS	7	2020	1.077	20,000	1.141	18,600	1.077	14,000	1.141	27,400
NO. YEARS	17	2030	1.198	22,000	1.377	22,400	1.198	15,500	1.377	33,100
NO. YEARS	27	2040	1.333	24,500	1.662	27,100	1.333	17,000	1.662	40,000

Percent Turns Calculated From Base Year AADTs:

JKTURNS	FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	18,490			16,300			12,840			24,040		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	24,040	12,840	16,300	18,490	24,040	12,840	16,300	18,490	24,040	12,840	16,300	18,490
	45%	24%	31%	33%	43%	23%	28%	31%	41%	27%	34%	39%
2020 2-WAY ADT	20,000			18,600			14,000			27,400		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	27,400	14,000	18,600	20,000	27,400	14,000	18,600	20,000	27,400	14,000	18,600	20,000
	46%	23%	31%	33%	45%	23%	28%	30%	42%	27%	35%	38%
2030 2-WAY ADT	22,000			22,400			15,500			33,100		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	33,100	15,500	22,400	22,000	33,100	15,500	22,400	22,000	33,100	15,500	22,400	22,000
	47%	22%	32%	31%	47%	22%	29%	28%	43%	26%	37%	37%
2040 2-WAY ADT	24,500			27,100			17,000			40,000		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	40,000	17,000	27,100	24,500	40,000	17,000	27,100	24,500	40,000	17,000	27,100	24,500
	48%	20%	32%	30%	49%	21%	30%	27%	44%	25%	40%	36%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	1,628			1,864			1,442			2,286			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	0	216	129	1	1	1	81	896	0	248	1,651	386	3,610
% TURNS:	0%	63%	37%	33%	33%	33%	8%	92%	0%	11%	72%	17%	
P.M.	2-Way Pk Hr Vol:	1,683			1,361			1,678			1,822			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	0	351	146	1	1	1	82	869	0	375	1,130	316	3,272
% TURNS:	0%	71%	29%	33%	33%	33%	9%	91%	0%	21%	62%	17%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	0%	63%	37%	33%	33%	33%	8%	92%	0%	11%	72%	17%
	2020	5%	59%	37%	33%	34%	32%	10%	86%	4%	12%	69%	19%
	2030	6%	58%	37%	33%	35%	32%	11%	84%	5%	13%	68%	19%
	2040	8%	56%	37%	33%	36%	31%	12%	81%	7%	13%	67%	20%
P.M.													
	2013	0%	71%	29%	33%	33%	33%	9%	91%	0%	21%	62%	17%
	2020	5%	66%	30%	33%	34%	32%	11%	85%	4%	21%	59%	19%
	2030	6%	65%	30%	33%	35%	32%	11%	84%	5%	21%	59%	20%
	2040	8%	62%	30%	33%	36%	31%	12%	81%	7%	21%	58%	20%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: EB SW 7 St. at SW 2 Ave.
PREPARED BY: NC
FILE: BUILD- FORCED AND BALANCED

DATE: 12/30/2014
NOTES:

0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	18,490	16,300	12,840	24,040
24 HR EST. AADT	2020	20,000	18,600	14,000	27,400
24 HR EST. AADT	2030	22,000	22,400	15,500	33,100
24 HR EST. AADT	2040	24,500	27,100	17,000	40,000

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	21.2%	29.5%	0.1%	0.1%	67.8%	56.7%	99.9%	99.9%
2020	Approach D30 Factor	21.2%	29.5%	0.1%	0.1%	67.8%	56.7%	99.9%	99.9%
2030	Approach D30 Factor	21.2%	29.5%	0.1%	0.1%	67.8%	56.7%	99.9%	99.9%
2040	Approach D30 Factor	21.2%	29.5%	0.1%	0.1%	67.8%	56.7%	99.9%	99.9%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	0	230	140	0	0	0	90	760	0	300	1,860	660
2030	EST. TURNS												
2040	EST. TURNS	0	290	180	0	0	0	110	860	0	440	2,710	960
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	0	380	190	0	0	0	110	650	0	460	1,800	640
2030	EST. TURNS												
2040	EST. TURNS	0	470	240	0	0	0	130	800	0	670	2,700	940

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		353	1307	1660	1	1469	1470	783	377	1160	2161	-1	2160
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		381	1419	1800	2	1668	1670	854	406	1260	2464	6	2470
2020	TURN SUMMARY	370	1420	1790	0	2090	2090	850	530	1380	2820	0	2820
CONTROL LINK VOLUMES		420	1560	1980	2	2018	2020	945	455	1400	2976	4	2980
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		467	1743	2210	2	2438	2440	1037	493	1530	3596	4	3600
2040	TURN SUMMARY	470	1820	2290	0	3000	3000	970	730	1700	4110	0	4110
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		491	1169	1660	1	1469	1470	655	505	1160	2162	-2	2160
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		532	1268	1800	2	1668	1670	714	546	1260	2465	5	2470
2020	TURN SUMMARY	570	1290	1860	0	2100	2100	760	840	1600	2900	0	2900
CONTROL LINK VOLUMES		585	1395	1980	2	2018	2020	791	609	1400	2977	3	2980
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		651	1559	2210	2	2438	2440	867	663	1530	3598	2	3600
2040	TURN SUMMARY	710	1740	2450	0	3070	3070	930	1140	2070	4310	0	4310

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD- FORCED AND BALANCED
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	EB SW 7 St. at SW 1 Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	3,880	16,300	7,130	16,300
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**1.1%**	**CGR**	**1.9%**	**CGR**	**1.1%**	**CGR**	**1.9%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

				1		**1**		**1**		**1**
		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
		2013		3,880		16,300		7,130		16,300
NO. YEARS	7	2020	1.077	4,000	1.141	18,600	1.077	7,500	1.141	18,600
NO. YEARS	17	2030	1.198	4,500	1.377	22,400	1.198	8,500	1.377	22,400
NO. YEARS	27	2040	1.333	5,000	1.662	27,100	1.333	9,500	1.662	27,100

Percent Turns Calculated From Base Year AADTs:

JKTURNS	FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	3,880			16,300			7,130			16,300		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	16,300	7,130	16,300	3,880	16,300	7,130	16,300	3,880	16,300	7,130	16,300	3,880
	41%	18%	41%	14%	60%	26%	45%	11%	45%	26%	60%	14%
2020 2-WAY ADT	4,000			18,600			7,500			18,600		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	18,600	7,500	18,600	4,000	18,600	7,500	18,600	4,000	18,600	7,500	18,600	4,000
	42%	17%	42%	13%	62%	25%	45%	10%	45%	25%	62%	13%
2030 2-WAY ADT	4,500			22,400			8,500			22,400		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	22,400	8,500	22,400	4,500	22,400	8,500	22,400	4,500	22,400	8,500	22,400	4,500
	42%	16%	42%	13%	63%	24%	45%	9%	45%	24%	63%	13%
2040 2-WAY ADT	5,000			27,100			9,500			27,100		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	27,100	9,500	27,100	5,000	27,100	9,500	27,100	5,000	27,100	9,500	27,100	5,000
	43%	15%	43%	12%	65%	23%	46%	8%	46%	23%	65%	12%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	672			1,765			960			2,049			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	0	463	207	1	1	1	1	1	1	493	1,554	0	2,723
% TURNS:	0%	69%	31%	33%	33%	33%	33%	33%	33%	24%	76%	0%	
P.M.	2-Way Pk Hr Vol:	852			1,186			1,056			1,386			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	0	712	138	1	1	1	1	1	1	340	1,044	0	2,240
% TURNS:	0%	84%	16%	33%	33%	33%	33%	33%	33%	25%	75%	0%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	0%	69%	31%	33%	33%	33%	33%	33%	33%	24%	76%	0%
	2020	4%	64%	32%	31%	36%	32%	35%	31%	35%	24%	75%	1%
	2030	5%	62%	32%	31%	37%	32%	35%	30%	35%	24%	74%	2%
	2040	7%	60%	33%	30%	39%	32%	35%	29%	35%	24%	74%	2%
P.M.													
	2013	0%	84%	16%	33%	33%	33%	33%	33%	33%	25%	75%	0%
	2020	4%	77%	19%	31%	36%	32%	35%	31%	35%	25%	74%	1%
	2030	5%	75%	19%	31%	37%	32%	35%	30%	35%	24%	74%	2%
	2040	7%	72%	21%	30%	39%	32%	35%	29%	35%	24%	74%	2%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: EB SW 7 St. at SW 1 Ave.
PREPARED BY: NC
FILE: BUILD- FORCED AND BALANCED

DATE: 12/30/2014
NOTES:

0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	3,880	16,300	7,130	16,300
24 HR EST. AADT	2020	4,000	18,600	7,500	18,600
24 HR EST. AADT	2030	4,500	22,400	8,500	22,400
24 HR EST. AADT	2040	5,000	27,100	9,500	27,100

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	99.7%	99.8%	0.1%	0.1%	0.3%	0.3%	99.9%	99.9%
2020	Approach D30 Factor	99.7%	99.8%	0.1%	0.1%	0.3%	0.3%	99.9%	99.9%
2030	Approach D30 Factor	99.7%	99.8%	0.1%	0.1%	0.3%	0.3%	99.9%	99.9%
2040	Approach D30 Factor	99.7%	99.8%	0.1%	0.1%	0.3%	0.3%	99.9%	99.9%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	0	630	530	0	0	0	0	0	0	580	1,720	0
2030	EST. TURNS												
2040	EST. TURNS	0	790	660	0	0	0	0	0	0	720	2,510	0
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	0	990	490	0	0	0	0	0	0	450	1,800	0
2030	EST. TURNS												
2040	EST. TURNS	0	1,220	600	0	0	0	0	0	0	650	2,720	0

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		348	2	350	1	1469	1470	2	638	640	1466	4	1470
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		359	1	360	2	1668	1670	2	678	680	1672	-2	1670
2020	TURN SUMMARY	1160	0	1160	0	2250	2250	0	1210	1210	2300	0	2300
CONTROL LINK VOLUMES		404	6	410	2	2018	2020	2	768	770	2014	6	2020
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		449	1	450	2	2438	2440	3	857	860	2437	3	2440
2040	TURN SUMMARY	1450	0	1450	0	3170	3170	0	1510	1510	3230	0	3230
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		348	2	350	1	1469	1470	2	638	640	1465	5	1470
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		359	1	360	2	1668	1670	2	678	680	1672	-2	1670
2020	TURN SUMMARY	1480	0	1480	0	2290	2290	0	1440	1440	2250	0	2250
CONTROL LINK VOLUMES		404	6	410	2	2018	2020	2	768	770	2013	7	2020
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		449	1	450	2	2438	2440	2	858	860	2435	5	2440
2040	TURN SUMMARY	1820	0	1820	0	3320	3320	0	1870	1870	3370	0	3370

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD- FORCED AND BALANCED
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	EB SW 7 St. at S Miami Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	6,000	17,360	8,620	16,300
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**1.1%**	**CGR**	**1.9%**	**CGR**	**1.1%**	**CGR**	**1.9%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
			1		**1**		**1**		**1**	
		2013		6,000		17,360		8,620		16,300
NO. YEARS	7	2020	1.077	6,500	1.141	19,800	1.077	9,500	1.141	18,600
NO. YEARS	17	2030	1.198	7,000	1.377	23,900	1.198	10,500	1.377	22,400
NO. YEARS	27	2040	1.333	8,000	1.662	28,900	1.333	11,500	1.662	27,100

Percent Turns Calculated From Base Year AADTs:

JKTURNS	FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	6,000			17,360			8,620			16,300		
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
16,300	8,620	17,360	6,000	16,300	8,620	17,360	6,000	16,300	8,620	17,360	6,000
39%	20%	41%	19%	53%	28%	44%	15%	41%	27%	54%	19%
2020 2-WAY ADT	6,500			19,800			9,500			18,600	
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
18,600	9,500	19,800	6,500	18,600	9,500	19,800	6,500	18,600	9,500	19,800	6,500
39%	20%	41%	19%	54%	27%	44%	14%	41%	27%	55%	18%
2030 2-WAY ADT	7,000			23,900			10,500			22,400	
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
22,400	10,500	23,900	7,000	22,400	10,500	23,900	7,000	22,400	10,500	23,900	7,000
39%	18%	42%	18%	56%	26%	45%	13%	42%	25%	58%	17%
2040 2-WAY ADT	8,000			28,900			11,500			27,100	
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
27,100	11,500	28,900	8,000	27,100	11,500	28,900	8,000	27,100	11,500	28,900	8,000
40%	17%	43%	17%	58%	25%	45%	13%	42%	24%	60%	17%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	832			1,711			668			1,871			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	1	1	1	1	1	1	69	597	0	0	1,638	231	2,541
% TURNS:	33%	33%	33%	33%	33%	33%	10%	90%	0%	0%	88%	12%	
P.M.	2-Way Pk Hr Vol:	976			1,006			739			1,239			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	1	1	1	1	1	1	51	686	0	0	951	286	1,980
% TURNS:	33%	33%	33%	33%	33%	33%	7%	93%	0%	0%	77%	23%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	33%	33%	33%	33%	33%	33%	10%	90%	0%	0%	88%	12%
	2020	34%	32%	34%	32%	35%	33%	14%	82%	4%	3%	84%	13%
	2030	34%	31%	34%	31%	36%	32%	15%	80%	5%	3%	84%	13%
	2040	34%	31%	35%	31%	37%	32%	16%	77%	7%	4%	83%	13%
P.M.													
	2013	33%	33%	33%	33%	33%	33%	7%	93%	0%	0%	77%	23%
	2020	34%	32%	34%	32%	35%	33%	11%	85%	4%	3%	75%	23%
	2030	34%	31%	34%	31%	36%	32%	12%	83%	5%	3%	74%	22%
	2040	34%	31%	35%	31%	37%	32%	13%	80%	7%	4%	74%	22%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: EB SW 7 St. at S Miami Ave.
PREPARED BY: NC
FILE: BUILD- FORCED AND BALANCED

DATE: 12/30/2014
NOTES:

0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	6,000	17,360	8,620	16,300
24 HR EST. AADT	2020	6,500	19,800	9,500	18,600
24 HR EST. AADT	2030	7,000	23,900	10,500	22,400
24 HR EST. AADT	2040	8,000	28,900	11,500	27,100

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	0.4%	0.3%	0.1%	0.1%	99.7%	99.7%	99.9%	99.9%
2020	Approach D30 Factor	0.4%	0.3%	0.1%	0.1%	99.7%	99.7%	99.9%	99.9%
2030	Approach D30 Factor	0.4%	0.3%	0.1%	0.1%	99.7%	99.7%	99.9%	99.9%
2040	Approach D30 Factor	0.4%	0.3%	0.1%	0.1%	99.7%	99.7%	99.9%	99.9%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	0	0	0	0	0	0	120	720	0	0	1,720	390
2030	EST. TURNS												
2040	EST. TURNS	0	0	0	0	0	0	140	890	0	0	2,400	560
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	0	0	0	0	0	0	200	1190	0	0	1,520	990
2030	EST. TURNS												
2040	EST. TURNS	0	0	0	0	0	0	250	1580	0	0	2,210	1,450

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		2	538	540	2	1558	1560	773	7	780	1465	5	1470
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		2	588	590	2	1778	1780	852	8	860	1672	-2	1670
2020	TURN SUMMARY	0	1110	1110	0	1840	1840	840	0	840	2110	0	2110
CONTROL LINK VOLUMES		2	628	630	2	2148	2150	942	8	950	2014	6	2020
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		3	717	720	3	2597	2600	1032	8	1040	2436	4	2440
2040	TURN SUMMARY	0	1450	1450	0	2540	2540	1030	0	1030	2960	0	2960
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		2	538	540	2	1558	1560	774	6	780	1466	4	1470
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		2	588	590	2	1778	1780	853	7	860	1672	-2	1670
2020	TURN SUMMARY	0	2180	2180	0	1720	1720	1390	0	1390	2510	0	2510
CONTROL LINK VOLUMES		2	628	630	2	2148	2150	942	8	950	2014	6	2020
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		2	718	720	3	2597	2600	1032	8	1040	2437	3	2440
2040	TURN SUMMARY	0	3030	3030	0	2460	2460	1830	0	1830	3660	0	3660

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD- FORCED AND BALANCED
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	EB SW 7 St. at Brickell Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	48,560	11,740	43,890	17,360
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**1.1%**	**CGR**	**1.9%**	**CGR**	**1.1%**	**CGR**	**1.9%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
		2013		48,560		11,740		43,890		17,360
NO. YEARS	7	2020	1.077	52,500	1.141	13,400	1.077	47,500	1.141	19,800
NO. YEARS	17	2030	1.198	58,000	1.377	16,200	1.198	52,500	1.377	23,900
NO. YEARS	27	2040	1.333	64,500	1.662	19,500	1.333	58,500	1.662	28,900

Percent Turns Calculated From Base Year AADTs:

JKTURNS		FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG	
2013 2-WAY ADT		48,560			11,740			43,890			17,360	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	17,360	43,890	11,740	48,560	17,360	43,890	11,740	48,560	17,360	43,890	11,740	48,560
	24%	60%	16%	44%	16%	40%	15%	63%	22%	42%	11%	47%
2020 2-WAY ADT		52,500			13,400			47,500			19,800	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	19,800	47,500	13,400	52,500	19,800	47,500	13,400	52,500	19,800	47,500	13,400	52,500
	25%	59%	17%	44%	17%	40%	16%	61%	23%	42%	12%	46%
2030 2-WAY ADT		58,000			16,200			52,500			23,900	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	23,900	52,500	16,200	58,000	23,900	52,500	16,200	58,000	23,900	52,500	16,200	58,000
	26%	57%	17%	43%	18%	39%	17%	59%	24%	41%	13%	46%
2040 2-WAY ADT		64,500			19,500			58,500			28,900	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	28,900	58,500	19,500	64,500	28,900	58,500	19,500	64,500	28,900	58,500	19,500	64,500
	27%	55%	18%	42%	19%	39%	17%	57%	26%	41%	14%	45%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)		
A.M.	2-Way Pk Hr Vol:	3,133			2,107			2,351			1,461		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	0	816	346	589	1	233	233	848	0	221	705	534	4,526
% TURNS:	0%	70%	30%	72%	0%	28%	22%	78%	0%	15%	48%	37%	
P.M.	2-Way Pk Hr Vol:	3,108			1,749			2,682			907		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	0	1,095	313	518	1	278	191	921	0	197	448	261	4,223
% TURNS:	0%	78%	22%	65%	0%	35%	17%	83%	0%	22%	49%	29%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	0%	70%	30%	72%	0%	28%	22%	78%	0%	15%	48%	37%
	2020	2%	69%	28%	69%	2%	29%	21%	77%	2%	18%	45%	38%
	2030	3%	69%	28%	68%	2%	30%	21%	76%	3%	18%	44%	38%
	2040	5%	68%	28%	67%	3%	30%	21%	75%	4%	19%	43%	38%
P.M.													
	2013	0%	78%	22%	65%	0%	35%	17%	83%	0%	22%	49%	29%
	2020	2%	76%	22%	63%	2%	35%	17%	81%	2%	24%	46%	31%
	2030	3%	75%	22%	62%	2%	35%	17%	80%	3%	24%	45%	31%
	2040	5%	74%	22%	61%	3%	35%	17%	79%	4%	25%	43%	32%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: EB SW 7 St. at Brickell Ave.
PREPARED BY: NC
FILE: BUILD- FORCED AND BALANCED

DATE: 12/30/2014
NOTES:

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ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	48,560	11,740	43,890	17,360
24 HR EST. AADT	2020	52,500	13,400	47,500	19,800
24 HR EST. AADT	2030	58,000	16,200	52,500	23,900
24 HR EST. AADT	2040	64,500	19,500	58,500	28,900

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	37.1%	45.3%	0.2%	0.2%	46.0%	41.5%	99.8%	99.8%
2020	Approach D30 Factor	37.1%	45.3%	0.2%	0.2%	46.0%	41.5%	99.8%	99.8%
2030	Approach D30 Factor	37.1%	45.3%	0.2%	0.2%	46.0%	41.5%	99.8%	99.8%
2040	Approach D30 Factor	37.1%	45.3%	0.2%	0.2%	46.0%	41.5%	99.8%	99.8%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	0	1,860	220	50	0	50	270	1,250	0	800	250	610
2030	EST. TURNS												
2040	EST. TURNS	0	2,300	270	60	0	60	340	1550	0	1,170	360	750
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	0	1,900	30	110	0	80	10	1550	0	1,080	30	440
2030	EST. TURNS												
2040	EST. TURNS	0	2,380	30	140	0	90	20	1930	0	1,640	30	540

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		1621	2749	4370	2	1058	1060	1816	2134	3950	1559	1	1560
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		1752	2978	4730	2	1208	1210	1966	2314	4280	1778	2	1780
2020	TURN SUMMARY	2080	1910	3990	100	740	840	1520	2710	4230	1660	0	1660
CONTROL LINK VOLUMES		1936	3284	5220	3	1457	1460	2173	2557	4730	2147	3	2150
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		2153	3657	5810	4	1756	1760	2421	2849	5270	2596	4	2600
2040	TURN SUMMARY	2570	2360	4930	120	970	1090	1890	3530	5420	2280	0	2280
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		1980	2390	4370	2	1058	1060	1638	2312	3950	1559	1	1560
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		2141	2589	4730	2	1208	1210	1772	2508	4280	1778	2	1780
2020	TURN SUMMARY	1930	2100	4030	190	70	260	1560	3060	4620	1550	0	1550
CONTROL LINK VOLUMES		2365	2855	5220	3	1457	1460	1959	2771	4730	2147	3	2150
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		2630	3180	5810	4	1756	1760	2183	3087	5270	2596	4	2600
2040	TURN SUMMARY	2410	2610	5020	230	80	310	1950	4110	6060	2210	0	2210

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD-FORCED AND BALANCED
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	EB SR 90 at SR 9		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	50,930	34,500	41,470	36,570
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**0.9%**	**CGR**	**1.0%**	**CGR**	**0.9%**	**CGR**	**1.0%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
				1		**1**		**1**		**1**
		2013		50,930		34,500		41,470		36,570
NO. YEARS	7	2020	1.063	54,000	1.074	37,100	1.063	44,000	1.074	39,300
NO. YEARS	17	2030	1.161	59,000	1.190	41,100	1.161	48,000	1.190	43,500
NO. YEARS	27	2040	1.267	64,500	1.319	45,500	1.267	52,500	1.319	48,200

Percent Turns Calculated From Base Year AADTs:

JKTURNS	FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	50,930			34,500			41,470			36,570		
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
36,570	41,470	34,500	50,930	36,570	41,470	34,500	50,930	36,570	41,470	34,500	50,930
32%	37%	31%	39%	28%	32%	28%	42%	30%	33%	27%	40%
2020 2-WAY ADT	54,000			37,100			44,000			39,300	
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
39,300	44,000	37,100	54,000	39,300	44,000	37,100	54,000	39,300	44,000	37,100	54,000
33%	37%	31%	39%	29%	32%	28%	41%	30%	33%	27%	40%
2030 2-WAY ADT	59,000			41,100			48,000			43,500	
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
43,500	48,000	41,100	59,000	43,500	48,000	41,100	59,000	43,500	48,000	41,100	59,000
33%	36%	31%	39%	29%	32%	29%	41%	30%	32%	28%	40%
2040 2-WAY ADT	64,500			45,500			52,500			48,200	
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
48,200	52,500	45,500	64,500	48,200	52,500	45,500	64,500	48,200	52,500	45,500	64,500
33%	36%	31%	39%	29%	32%	29%	41%	30%	32%	28%	40%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	3,230			2,749			3,484			2,557			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	94	1,366	190	21	1,102	0	317	1,559	182	60	1,119	0	6,010
% TURNS:	6%	83%	12%	2%	98%	0%	15%	76%	9%	5%	95%	0%	
P.M.	2-Way Pk Hr Vol:	3,085			2,673			3,095			2,509			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	136	1,320	262	38	1,265	0	223	1,329	180	43	885	0	5,681
% TURNS:	8%	77%	15%	3%	97%	0%	13%	77%	10%	5%	95%	0%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	6%	83%	12%	2%	98%	0%	15%	76%	9%	5%	95%	0%
	2020	8%	78%	13%	6%	91%	3%	17%	72%	11%	8%	88%	4%
	2030	9%	77%	14%	7%	89%	4%	17%	71%	12%	9%	87%	5%
	2040	10%	75%	15%	8%	87%	5%	18%	70%	12%	10%	84%	7%
P.M.													
	2013	8%	77%	15%	3%	97%	0%	13%	77%	10%	5%	95%	0%
	2020	10%	73%	17%	7%	90%	3%	14%	73%	12%	7%	89%	4%
	2030	11%	72%	17%	7%	89%	4%	15%	72%	13%	8%	87%	5%
	2040	12%	70%	18%	9%	86%	5%	16%	71%	14%	9%	84%	7%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: EB SR 90 at SR 9
PREPARED BY: NC
FILE: BUILD-FORCED AND BALANCED

DATE: 12/30/2014
NOTES:

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ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	50,930	34,500	41,470	36,570
24 HR EST. AADT	2020	54,000	37,100	44,000	39,300
24 HR EST. AADT	2030	59,000	41,100	48,000	43,500
24 HR EST. AADT	2040	64,500	45,500	52,500	48,200

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	51.1%	48.9%	58.9%	41.1%	59.1%	40.9%	41.5%	58.9%
2020	Approach D30 Factor	51.1%	48.9%	58.9%	41.1%	59.1%	40.9%	41.5%	58.9%
2030	Approach D30 Factor	51.1%	48.9%	58.9%	41.1%	59.1%	40.9%	41.5%	58.9%
2040	Approach D30 Factor	51.1%	48.9%	58.9%	41.1%	59.1%	40.9%	41.5%	58.9%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	220	2,100	210	50	1180	0	360	1,660	190	60	1,270	0
2030	EST. TURNS												
2040	EST. TURNS	320	2,500	260	80	1450	0	430	1980	230	80	1,570	0
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	150	1,400	310	40	1360	0	430	1420	190	50	1,100	0
2030	EST. TURNS												
2040	EST. TURNS	180	1,670	370	50	1670	0	510	1690	230	70	1,350	0

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		2342	2238	4580	1829	1281	3110	2205	1525	3730	1366	1924	3290
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		2483	2377	4860	1967	1373	3340	2339	1621	3960	1468	2072	3540
2020	TURN SUMMARY	2530	1710	4240	1230	1840	3070	2210	2160	4370	1330	1590	2920
CONTROL LINK VOLUMES		2713	2597	5310	2179	1521	3700	2552	1768	4320	1625	2295	3920
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		2965	2845	5810	2412	1688	4100	2791	1939	4730	1800	2540	4340
2040	TURN SUMMARY	3080	2060	5140	1530	2260	3790	2640	2580	5220	1650	2000	3650
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		2241	2339	4580	1276	1834	3110	1527	2203	3730	1939	1351	3290
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		2377	2483	4860	1372	1968	3340	1620	2340	3960	2083	1457	3540
2020	TURN SUMMARY	1860	1460	3320	1400	1840	3240	2040	1450	3490	1150	1700	2850
CONTROL LINK VOLUMES		2597	2713	5310	1520	2180	3700	1767	2553	4320	2306	1614	3920
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		2839	2971	5810	1683	2417	4100	1933	2797	4730	2555	1785	4340
2040	TURN SUMMARY	2220	1740	3960	1720	2230	3950	2430	1740	4170	1420	2080	3500

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD-FORCED AND BALANCED
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	EB SR 90 at SW 24 Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	1,360	23,200	1,360	34,500
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**0.9%**	**CGR**	**1.0%**	**CGR**	**0.9%**	**CGR**	**1.0%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
				1		**1**		**1**		**1**
		2013		1,360		23,200		1,360		34,500
NO. YEARS	7	2020	1.063	1,500	1.074	24,900	1.063	1,500	1.074	37,100
NO. YEARS	17	2030	1.161	1,500	1.190	27,600	1.161	1,500	1.190	41,100
NO. YEARS	27	2040	1.267	1,500	1.319	30,600	1.267	1,500	1.319	45,500

Percent Turns Calculated From Base Year AADTs:

JKTURNS	FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	1,360			23,200			1,360			34,500		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	34,500	1,360	23,200	1,360	34,500	1,360	23,200	1,360	34,500	1,360	23,200	1,360
	58%	2%	39%	4%	93%	4%	39%	2%	58%	5%	90%	5%
2020 2-WAY ADT	1,500			24,900			1,500			37,100		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	37,100	1,500	24,900	1,500	37,100	1,500	24,900	1,500	37,100	1,500	24,900	1,500
	58%	2%	39%	4%	93%	4%	39%	2%	58%	5%	89%	5%
2030 2-WAY ADT	1,500			27,600			1,500			41,100		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	41,100	1,500	27,600	1,500	41,100	1,500	27,600	1,500	41,100	1,500	27,600	1,500
	59%	2%	39%	3%	93%	3%	39%	2%	59%	5%	90%	5%
2040 2-WAY ADT	1,500			30,600			1,500			45,500		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	45,500	1,500	30,600	1,500	45,500	1,500	30,600	1,500	45,500	1,500	30,600	1,500
	59%	2%	39%	3%	94%	3%	39%	2%	59%	4%	91%	4%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	193			1,485			211			1,465			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	0	57	37	1	1	1	67	49	0	37	1,378	49	1,677
% TURNS:	0%	61%	39%	33%	33%	33%	58%	42%	0%	3%	94%	3%	
P.M.	2-Way Pk Hr Vol:	244			1,454			218			1,424			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	0	88	59	1	1	1	50	47	0	32	1,342	49	1,670
% TURNS:	0%	60%	40%	33%	33%	33%	52%	48%	0%	2%	94%	3%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	0%	61%	39%	33%	33%	33%	58%	42%	0%	3%	94%	3%
	2020	6%	55%	39%	30%	39%	30%	56%	38%	6%	3%	94%	4%
	2030	7%	53%	39%	30%	41%	30%	55%	37%	7%	3%	94%	4%
	2040	10%	51%	39%	28%	43%	28%	55%	36%	10%	3%	94%	4%
P.M.													
	2013	0%	60%	40%	33%	33%	33%	52%	48%	0%	2%	94%	3%
	2020	6%	54%	40%	30%	39%	30%	50%	44%	6%	3%	94%	4%
	2030	7%	53%	40%	30%	41%	30%	50%	43%	7%	3%	94%	4%
	2040	10%	50%	40%	28%	43%	28%	50%	41%	10%	3%	94%	4%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: EB SR 90 at SW 24 Ave.
PREPARED BY: NC
FILE: BUILD-FORCED AND BALANCED

DATE: 12/30/2014
NOTES:

0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	1,360	23,200	1,360	34,500
24 HR EST. AADT	2020	1,500	24,900	1,500	37,100
24 HR EST. AADT	2030	1,500	27,600	1,500	41,100
24 HR EST. AADT	2040	1,500	30,600	1,500	45,500

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	48.7%	60.2%	0.2%	0.2%	55.0%	44.5%	99.9%	99.9%
2020	Approach D30 Factor	48.7%	60.2%	0.2%	0.2%	55.0%	44.5%	99.9%	99.9%
2030	Approach D30 Factor	48.7%	60.2%	0.2%	0.2%	55.0%	44.5%	99.9%	99.9%
2040	Approach D30 Factor	48.7%	60.2%	0.2%	0.2%	55.0%	44.5%	99.9%	99.9%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	0	60	40	0	0	0	80	50	0	40	1,600	60
2030	EST. TURNS												
2040	EST. TURNS	0	70	50	0	0	0	90	60	0	50	1,960	70
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	0	100	60	0	0	0	50	110	0	30	1,620	50
2030	EST. TURNS												
2040	EST. TURNS	0	120	80	0	0	0	60	130	0	40	1,990	70

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		60	60	120	4	2086	2090	67	53	120	3103	7	3110
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		66	74	140	5	2235	2240	74	66	140	3337	3	3340
2020	TURN SUMMARY	100	110	210	0	1720	1720	130	100	230	1700	0	1700
CONTROL LINK VOLUMES		66	74	140	5	2475	2480	74	66	140	3696	4	3700
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		66	74	140	6	2744	2750	74	66	140	4092	8	4100
2040	TURN SUMMARY	120	130	250	0	2100	2100	150	120	270	2080	0	2080
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		74	46	120	4	2086	2090	54	66	120	3103	7	3110
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		81	59	140	5	2235	2240	60	80	140	3337	3	3340
2020	TURN SUMMARY	160	160	320	0	1730	1730	160	130	290	1700	0	1700
CONTROL LINK VOLUMES		81	59	140	5	2475	2480	60	80	140	3696	4	3700
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		81	59	140	6	2744	2750	60	80	140	4092	8	4100
2040	TURN SUMMARY	200	200	400	0	2130	2130	190	160	350	2100	0	2100

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD-FORCED AND BALANCED
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	EB SR 90 at SW 22 Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	35,660	31,250	37,200	23,200
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**0.9%**	**CGR**	**1.0%**	**CGR**	**0.9%**	**CGR**	**1.0%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
			1		**1**		**1**		**1**	
		2013		35,660		31,250		37,200		23,200
NO. YEARS	7	2020	1.063	38,000	1.074	33,600	1.063	39,500	1.074	24,900
NO. YEARS	17	2030	1.161	41,500	1.190	37,200	1.161	43,000	1.190	27,600
NO. YEARS	27	2040	1.267	45,000	1.319	41,200	1.267	47,000	1.319	30,600

Percent Turns Calculated From Base Year AADTs:

JKTURNS	FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	35,660			31,250			37,200			23,200		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	23,200	37,200	31,250	35,660	23,200	37,200	31,250	35,660	23,200	37,200	31,250	35,660
	25%	41%	34%	37%	24%	39%	35%	40%	26%	36%	30%	34%
2020 2-WAY ADT	38,000			33,600			39,500			24,900		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	24,900	39,500	33,600	38,000	24,900	39,500	33,600	38,000	24,900	39,500	33,600	38,000
	25%	40%	34%	37%	24%	39%	35%	39%	26%	36%	30%	34%
2030 2-WAY ADT	41,500			37,200			43,000			27,600		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	27,600	43,000	37,200	41,500	27,600	43,000	37,200	41,500	27,600	43,000	37,200	41,500
	26%	40%	35%	37%	25%	38%	35%	39%	26%	35%	31%	34%
2040 2-WAY ADT	45,000			41,200			47,000			30,600		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	30,600	47,000	41,200	45,000	30,600	47,000	41,200	45,000	30,600	47,000	41,200	45,000
	26%	40%	35%	37%	25%	38%	35%	39%	26%	35%	31%	34%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	2,154			2,040			2,163			1,719			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	0	1,010	130	100	100	100	162	817	0	74	1,448	97	4,038
% TURNS:	0%	89%	11%	33%	33%	33%	17%	83%	0%	5%	89%	6%	
P.M.	2-Way Pk Hr Vol:	2,106			1,975			2,001			1,696			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	0	1,099	154	100	100	100	126	614	0	62	1,395	139	3,889
% TURNS:	0%	88%	12%	33%	33%	33%	17%	83%	0%	4%	87%	9%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	0%	89%	11%	33%	33%	33%	17%	83%	0%	5%	89%	6%
	2020	3%	84%	14%	34%	32%	34%	18%	79%	3%	8%	84%	9%
	2030	3%	83%	14%	34%	32%	34%	19%	78%	3%	8%	82%	10%
	2040	4%	80%	15%	34%	32%	34%	20%	76%	4%	10%	80%	11%
P.M.													
	2013	0%	88%	12%	33%	33%	33%	17%	83%	0%	4%	87%	9%
	2020	3%	83%	14%	34%	32%	34%	19%	79%	3%	7%	82%	11%
	2030	3%	82%	15%	34%	32%	34%	19%	77%	3%	8%	80%	12%
	2040	4%	80%	16%	34%	32%	34%	20%	76%	4%	9%	78%	13%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: EB SR 90 at SW 22 Ave.
PREPARED BY: NC
FILE: BUILD-FORCED AND BALANCED

DATE: 12/30/2014
NOTES:

0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	35,660	31,250	37,200	23,200
24 HR EST. AADT	2020	38,000	33,600	39,500	24,900
24 HR EST. AADT	2030	41,500	37,200	43,000	27,600
24 HR EST. AADT	2040	45,000	41,200	47,000	30,600

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	52.9%	59.5%	0.1%	0.1%	45.3%	37.0%	99.9%	99.9%
2020	Approach D30 Factor	52.9%	59.5%	0.1%	0.1%	45.3%	37.0%	99.9%	99.9%
2030	Approach D30 Factor	52.9%	59.5%	0.1%	0.1%	45.3%	37.0%	99.9%	99.9%
2040	Approach D30 Factor	52.9%	59.5%	0.1%	0.1%	45.3%	37.0%	99.9%	99.9%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	0	1,070	150	0	0	0	180	870	0	80	1,670	100
2030	EST. TURNS												
2040	EST. TURNS	0	1,280	180	0	0	0	220	1040	0	100	2,050	130
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	0	1,170	60	0	0	0	150	650	0	70	1,690	150
2030	EST. TURNS												
2040	EST. TURNS	0	1,390	80	0	0	0	180	780	0	80	2,080	180

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		1699	1511	3210	3	2807	2810	1515	1835	3350	2086	4	2090
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		1810	1610	3420	3	3017	3020	1609	1951	3560	2239	1	2240
2020	TURN SUMMARY	1220	970	2190	0	2000	2000	1050	1150	2200	1850	0	1850
CONTROL LINK VOLUMES		1977	1763	3740	3	3347	3350	1752	2118	3870	2482	-2	2480
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		2143	1907	4050	4	3706	3710	1915	2315	4230	2751	-1	2750
2040	TURN SUMMARY	1460	1170	2630	0	2450	2450	1260	1380	2640	2280	0	2280
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		1909	1301	3210	3	2807	2810	1238	2112	3350	2086	4	2090
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		2035	1385	3420	3	3017	3020	1315	2245	3560	2239	1	2240
2020	TURN SUMMARY	1230	800	2030	0	1900	1900	800	1240	2040	1910	0	1910
CONTROL LINK VOLUMES		2222	1518	3740	3	3347	3350	1431	2439	3870	2482	-2	2480
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		2410	1640	4050	4	3706	3710	1564	2666	4230	2751	-1	2750
2040	TURN SUMMARY	1470	960	2430	0	2340	2340	960	1470	2430	2340	0	2340

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD-FORCED AND BALANCED
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	EB SR 90 at SW 17 Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	7,850	33,150	11,550	31,250
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**0.9%**	**CGR**	**1.0%**	**CGR**	**0.9%**	**CGR**	**1.0%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
			1		**1**		**1**		**1**	
		2013		7,850		33,150		11,550		31,250
NO. YEARS	7	2020	1.063	8,500	1.074	35,600	1.063	12,500	1.074	33,600
NO. YEARS	17	2030	1.161	9,000	1.190	39,500	1.161	13,500	1.190	37,200
NO. YEARS	27	2040	1.267	10,000	1.319	43,700	1.267	14,500	1.319	41,200

Percent Turns Calculated From Base Year AADTs:

JKTURNS	FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	7,850			33,150			11,550			31,250		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	31,250	11,550	33,150	7,850	31,250	11,550	33,150	7,850	31,250	11,550	33,150	7,850
	41%	15%	44%	15%	62%	23%	46%	11%	43%	22%	63%	15%
2020 2-WAY ADT	8,500			35,600			12,500			33,600		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	33,600	12,500	35,600	8,500	33,600	12,500	35,600	8,500	33,600	12,500	35,600	8,500
	41%	15%	44%	16%	62%	23%	46%	11%	43%	22%	63%	15%
2030 2-WAY ADT	9,000			39,500			13,500			37,200		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	37,200	13,500	39,500	9,000	37,200	13,500	39,500	9,000	37,200	13,500	39,500	9,000
	41%	15%	44%	15%	62%	23%	46%	11%	43%	22%	64%	15%
2040 2-WAY ADT	10,000			43,700			14,500			41,200		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	41,200	14,500	43,700	10,000	41,200	14,500	43,700	10,000	41,200	14,500	43,700	10,000
	41%	15%	44%	15%	63%	22%	46%	11%	43%	21%	64%	15%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	2,081			1,932			1,944			1,789			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	0	978	217	1	1	1	189	698	0	78	1,523	187	3,873
% TURNS:	0%	82%	18%	33%	33%	33%	21%	79%	0%	4%	85%	10%	
P.M.	2-Way Pk Hr Vol:	1,626			1,824			1,550			1,718			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	0	703	194	1	1	1	140	602	0	104	1,487	126	3,359
% TURNS:	0%	78%	22%	33%	33%	33%	19%	81%	0%	6%	87%	7%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	0%	82%	18%	33%	33%	33%	21%	79%	0%	4%	85%	10%
	2020	4%	75%	21%	32%	36%	32%	24%	72%	4%	6%	83%	11%
	2030	5%	73%	21%	31%	37%	32%	24%	70%	5%	7%	82%	11%
	2040	7%	71%	22%	30%	38%	31%	25%	67%	7%	7%	82%	11%
P.M.													
	2013	0%	78%	22%	33%	33%	33%	19%	81%	0%	6%	87%	7%
	2020	4%	72%	24%	32%	36%	32%	22%	74%	4%	8%	84%	8%
	2030	5%	70%	24%	31%	37%	32%	22%	72%	5%	8%	84%	8%
	2040	7%	68%	25%	30%	38%	31%	23%	69%	7%	9%	83%	9%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: EB SR 90 at SW 17 Ave.
PREPARED BY: NC
FILE: BUILD-FORCED AND BALANCED

DATE: 12/30/2014
NOTES:

0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	7,850	33,150	11,550	31,250
24 HR EST. AADT	2020	8,500	35,600	12,500	33,600
24 HR EST. AADT	2030	9,000	39,500	13,500	37,200
24 HR EST. AADT	2040	10,000	43,700	14,500	41,200

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	57.4%	55.2%	0.2%	0.2%	45.6%	47.9%	99.9%	99.9%
2020	Approach D30 Factor	57.4%	55.2%	0.2%	0.2%	45.6%	47.9%	99.9%	99.9%
2030	Approach D30 Factor	57.4%	55.2%	0.2%	0.2%	45.6%	47.9%	99.9%	99.9%
2040	Approach D30 Factor	57.4%	55.2%	0.2%	0.2%	45.6%	47.9%	99.9%	99.9%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	0	1,040	250	0	0	0	300	740	0	80	1,780	200
2030	EST. TURNS												
2040	EST. TURNS	0	1,240	300	0	0	0	360	880	0	100	2,190	250
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	0	950	240	0	0	0	170	640	0	110	1,840	140
2030	EST. TURNS												
2040	EST. TURNS	0	1,130	280	0	0	0	200	760	0	140	2,250	170

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		406	304	710	5	2975	2980	474	566	1040	2811	-1	2810
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		439	331	770	5	3195	3200	513	617	1130	3022	-2	3020
2020	TURN SUMMARY	1290	940	2230	0	2330	2330	1040	1120	2160	2060	0	2060
CONTROL LINK VOLUMES		465	345	810	6	3554	3560	554	666	1220	3346	4	3350
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		517	383	900	6	3924	3930	595	715	1310	3706	4	3710
2040	TURN SUMMARY	1540	1130	2670	0	2850	2850	1240	1340	2580	2540	0	2540
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		390	320	710	5	2975	2980	498	542	1040	2811	-1	2810
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		422	348	770	5	3195	3200	539	591	1130	3022	-2	3020
2020	TURN SUMMARY	1190	780	1970	0	2250	2250	810	1060	1870	2090	0	2090
CONTROL LINK VOLUMES		447	363	810	6	3554	3560	582	638	1220	3346	4	3350
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		496	404	900	6	3924	3930	625	685	1310	3706	4	3710
2040	TURN SUMMARY	1410	930	2340	0	2730	2730	960	1270	2230	2560	0	2560

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD-BASED ON FIELD K&D
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	EB SR 90 at SW 12 Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	8,910	27,290	11,970	33,150
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**0.9%**	**CGR**	**1.0%**	**CGR**	**0.9%**	**CGR**	**1.0%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
			1		**1**		**1**		**1**	
		2013		8,910		27,290		11,970		33,150
NO. YEARS	7	2020	1.063	9,500	1.074	29,300	1.063	12,500	1.074	35,600
NO. YEARS	17	2030	1.161	10,500	1.190	32,500	1.161	14,000	1.190	39,500
NO. YEARS	27	2040	1.267	11,500	1.319	36,000	1.267	15,000	1.319	43,700

Percent Turns Calculated From Base Year AADTs:

JKTURNS		FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG	
2013 2-WAY ADT		8,910			27,290			11,970			33,150	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	33,150	11,970	27,290	8,910	33,150	11,970	27,290	8,910	33,150	11,970	27,290	8,910
	46%	17%	38%	16%	61%	22%	39%	13%	48%	25%	57%	18%
2020 2-WAY ADT		9,500			29,300			12,500			35,600	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	35,600	12,500	29,300	9,500	35,600	12,500	29,300	9,500	35,600	12,500	29,300	9,500
	46%	16%	38%	16%	62%	22%	39%	13%	48%	24%	57%	19%
2030 2-WAY ADT		10,500			32,500			14,000			39,500	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	39,500	14,000	32,500	10,500	39,500	14,000	32,500	10,500	39,500	14,000	32,500	10,500
	46%	16%	38%	16%	62%	22%	39%	13%	48%	25%	57%	18%
2040 2-WAY ADT		11,500			36,000			15,000			43,700	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	43,700	15,000	36,000	11,500	43,700	15,000	36,000	11,500	43,700	15,000	36,000	11,500
	46%	16%	38%	16%	62%	21%	39%	13%	48%	24%	58%	18%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)		
A.M.	2-Way Pk Hr Vol:	1,103			2,046			971			2,122		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	0	333	124	1	1	1	88	452	0	97	1,831	193	3,121
% TURNS:	0%	73%	27%	33%	33%	33%	16%	84%	0%	5%	86%	9%	
P.M.	2-Way Pk Hr Vol:	1,306			1,656			1,134			1,656		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	0	516	163	1	1	1	87	452	0	78	1,403	174	2,876
% TURNS:	0%	76%	24%	33%	33%	33%	16%	84%	0%	5%	85%	11%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	0%	73%	27%	33%	33%	33%	16%	84%	0%	5%	86%	9%
	2020	5%	67%	28%	32%	36%	32%	19%	77%	5%	7%	83%	10%
	2030	6%	66%	28%	31%	37%	32%	19%	75%	6%	7%	83%	10%
	2040	8%	63%	29%	31%	38%	31%	20%	72%	8%	8%	82%	11%
P.M.													
	2013	0%	76%	24%	33%	33%	33%	16%	84%	0%	5%	85%	11%
	2020	5%	70%	25%	32%	36%	32%	18%	77%	5%	7%	82%	11%
	2030	6%	69%	26%	31%	37%	32%	19%	75%	6%	7%	81%	12%
	2040	8%	66%	26%	31%	38%	31%	20%	72%	8%	8%	80%	12%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: EB SR 90 at SW 12 Ave.
PREPARED BY: NC
FILE: BUILD-BASED ON FIELD K&D

DATE: 12/30/2014
NOTES:

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ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	8,910	27,290	11,970	33,150
24 HR EST. AADT	2020	9,500	29,300	12,500	35,600
24 HR EST. AADT	2030	10,500	32,500	14,000	39,500
24 HR EST. AADT	2040	11,500	36,000	15,000	43,700

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	41.4%	52.0%	0.1%	0.2%	55.6%	47.5%	99.9%	99.9%
2020	Approach D30 Factor	41.4%	52.0%	0.1%	0.2%	55.6%	47.5%	99.9%	99.9%
2030	Approach D30 Factor	41.4%	52.0%	0.1%	0.2%	55.6%	47.5%	99.9%	99.9%
2040	Approach D30 Factor	41.4%	52.0%	0.1%	0.2%	55.6%	47.5%	99.9%	99.9%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	0	360	150	0	0	0	110	490	0	110	2,140	210
2030	EST. TURNS												
2040	EST. TURNS	0	430	180	0	0	0	130	580	0	140	2,630	250
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	0	560	200	0	0	0	120	500	0	100	1,770	200
2030	EST. TURNS												
2040	EST. TURNS	0	670	240	0	0	0	140	590	0	120	2,170	230

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		332	468	800	4	2456	2460	599	481	1080	2981	-1	2980
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		354	506	860	4	2636	2640	626	504	1130	3201	-1	3200
2020	TURN SUMMARY	510	700	1210	0	2400	2400	600	470	1070	2460	0	2460
CONTROL LINK VOLUMES		392	558	950	4	2926	2930	701	559	1260	3551	9	3560
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		429	611	1040	5	3235	3240	751	599	1350	3929	1	3930
2040	TURN SUMMARY	610	830	1440	0	2940	2940	710	570	1280	3020	0	3020
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		417	383	800	4	2456	2460	512	568	1080	2982	-2	2980
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		445	415	860	5	2635	2640	535	595	1130	3202	-2	3200
2020	TURN SUMMARY	760	700	1460	0	2090	2090	620	660	1280	2070	0	2070
CONTROL LINK VOLUMES		491	459	950	5	2925	2930	599	661	1260	3553	7	3560
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		538	502	1040	6	3234	3240	642	708	1350	3931	-1	3930
2040	TURN SUMMARY	910	820	1730	0	2550	2550	730	790	1520	2520	0	2520

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD-FORCED AND BALANCED
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	EB SR 90 at SR 7/SW 8 Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	2,950	31,020	2,950	27,290
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**0.9%**	**CGR**	**1.0%**	**CGR**	**0.9%**	**CGR**	**1.0%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
			1		**1**		**1**		**1**	
		2013		2,950		31,020		2,950		27,290
NO. YEARS	7	2020	1.063	3,000	1.074	33,300	1.063	3,000	1.074	29,300
NO. YEARS	17	2030	1.161	3,500	1.190	36,900	1.161	3,500	1.190	32,500
NO. YEARS	27	2040	1.267	3,500	1.319	40,900	1.267	3,500	1.319	36,000

Percent Turns Calculated From Base Year AADTs:

JKTURNS	FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	2,950			31,020			2,950			27,290		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	27,290	2,950	31,020	2,950	27,290	2,950	31,020	2,950	27,290	2,950	31,020	2,950
	45%	5%	51%	9%	82%	9%	51%	5%	45%	8%	84%	8%
2020 2-WAY ADT	3,000			33,300			3,000			29,300		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	29,300	3,000	33,300	3,000	29,300	3,000	33,300	3,000	29,300	3,000	33,300	3,000
	45%	5%	51%	8%	83%	8%	51%	5%	45%	8%	85%	8%
2030 2-WAY ADT	3,500			36,900			3,500			32,500		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	32,500	3,500	36,900	3,500	32,500	3,500	36,900	3,500	32,500	3,500	36,900	3,500
	45%	5%	51%	9%	82%	9%	51%	5%	45%	8%	84%	8%
2040 2-WAY ADT	3,500			40,900			3,500			36,000		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	36,000	3,500	40,900	3,500	36,000	3,500	40,900	3,500	36,000	3,500	40,900	3,500
	45%	4%	51%	8%	84%	8%	51%	4%	45%	7%	85%	7%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	574			1,772			363			1,757			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	0	115	164	1	1	1	49	146	0	52	1,556	148	2,233
% TURNS:	0%	41%	59%	33%	33%	33%	25%	75%	0%	3%	89%	8%	
P.M.	2-Way Pk Hr Vol:	539			1,701			357			1,783			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	0	142	100	1	1	1	35	128	0	51	1,563	168	2,190
% TURNS:	0%	59%	41%	33%	33%	33%	21%	79%	0%	3%	88%	9%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	0%	41%	59%	33%	33%	33%	25%	75%	0%	3%	89%	8%
	2020	4%	38%	58%	31%	38%	31%	28%	68%	4%	3%	88%	8%
	2030	6%	37%	58%	30%	39%	30%	28%	66%	6%	4%	88%	8%
	2040	7%	35%	57%	29%	42%	29%	29%	63%	7%	4%	88%	8%
P.M.													
	2013	0%	59%	41%	33%	33%	33%	21%	79%	0%	3%	88%	9%
	2020	4%	53%	42%	31%	38%	31%	24%	71%	4%	3%	87%	9%
	2030	6%	52%	42%	30%	39%	30%	25%	69%	6%	4%	87%	9%
	2040	7%	50%	43%	29%	42%	29%	26%	66%	7%	4%	87%	9%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: EB SR 90 at SR 7/SW 8 Ave.
PREPARED BY: NC
FILE: BUILD-FORCED AND BALANCED

DATE: 12/30/2014
NOTES:

0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	2,950	31,020	2,950	27,290
24 HR EST. AADT	2020	3,000	33,300	3,000	29,300
24 HR EST. AADT	2030	3,500	36,900	3,500	32,500
24 HR EST. AADT	2040	3,500	40,900	3,500	36,000

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	48.6%	44.9%	0.2%	0.2%	53.7%	45.7%	99.9%	99.9%
2020	Approach D30 Factor	48.6%	44.9%	0.2%	0.2%	53.7%	45.7%	99.9%	99.9%
2030	Approach D30 Factor	48.6%	44.9%	0.2%	0.2%	53.7%	45.7%	99.9%	99.9%
2040	Approach D30 Factor	48.6%	44.9%	0.2%	0.2%	53.7%	45.7%	99.9%	99.9%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	0	160	190	0	0	0	60	200	0	60	1,940	160
2030	EST. TURNS												
2040	EST. TURNS	0	200	230	0	0	0	70	240	0	80	2,380	200
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	0	150	120	0	0	0	40	140	0	70	2,000	180
2030	EST. TURNS												
2040	EST. TURNS	0	180	150	0	0	0	50	160	0	90	2,480	230

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		129	141	270	5	2785	2790	143	127	270	2455	5	2460
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		131	139	270	5	2995	3000	145	125	270	2635	5	2640
2020	TURN SUMMARY	350	360	710	0	2190	2190	260	220	480	2160	0	2160
CONTROL LINK VOLUMES		153	167	320	6	3314	3320	169	151	320	2923	7	2930
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		153	167	320	6	3674	3680	169	151	320	3238	2	3240
2040	TURN SUMMARY	430	440	870	0	2680	2680	310	280	590	2660	0	2660
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		119	151	270	5	2785	2790	121	149	270	2455	5	2460
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		121	149	270	5	2995	3000	123	147	270	2636	4	2640
2020	TURN SUMMARY	270	320	590	0	2160	2160	180	220	400	2250	0	2250
CONTROL LINK VOLUMES		141	179	320	6	3314	3320	144	176	320	2923	7	2930
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		141	179	320	6	3674	3680	144	176	320	3238	2	3240
2040	TURN SUMMARY	330	390	720	0	2680	2680	210	270	480	2800	0	2800

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD-FORCED AND BALANCED
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	EB SR 90 at SW 5 Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	3,000	31,020	3,000	31,020
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**0.9%**	**CGR**	**1.0%**	**CGR**	**0.9%**	**CGR**	**1.0%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

			1		**1**		**1**		**1**	
		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
		2013		3,000		31,020		3,000		31,020
NO. YEARS	7	2020	1.063	3,000	1.074	33,300	1.063	3,000	1.074	33,300
NO. YEARS	17	2030	1.161	3,500	1.190	36,900	1.161	3,500	1.190	36,900
NO. YEARS	27	2040	1.267	4,000	1.319	40,900	1.267	4,000	1.319	40,900

Percent Turns Calculated From Base Year AADTs:

JKTURNS	FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	3,000			31,020			3,000			31,020		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	31,020	3,000	31,020	3,000	31,020	3,000	31,020	3,000	31,020	3,000	31,020	3,000
	48%	5%	48%	8%	84%	8%	48%	5%	48%	8%	84%	8%
2020 2-WAY ADT	3,000			33,300			3,000			33,300		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	33,300	3,000	33,300	3,000	33,300	3,000	33,300	3,000	33,300	3,000	33,300	3,000
	48%	4%	48%	8%	85%	8%	48%	4%	48%	8%	85%	8%
2030 2-WAY ADT	3,500			36,900			3,500			36,900		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	36,900	3,500	36,900	3,500	36,900	3,500	36,900	3,500	36,900	3,500	36,900	3,500
	48%	5%	48%	8%	84%	8%	48%	5%	48%	8%	84%	8%
2040 2-WAY ADT	4,000			40,900			4,000			40,900		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	40,900	4,000	40,900	4,000	40,900	4,000	40,900	4,000	40,900	4,000	40,900	4,000
	48%	5%	48%	8%	84%	8%	48%	5%	48%	8%	84%	8%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	210			1,801			307			1,732			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	1	1	1	1	1	1	204	85	0	16	1,593	121	2,025
% TURNS:	33%	33%	33%	33%	33%	33%	71%	29%	0%	1%	92%	7%	
P.M.	2-Way Pk Hr Vol:	303			1,802			505			1,728			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	1	1	1	1	1	1	304	133	0	66	1,494	166	2,169
% TURNS:	33%	33%	33%	33%	33%	33%	70%	30%	0%	4%	87%	10%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		SB			WB			NB			EB	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
A.M.												
2013	33%	33%	33%	33%	33%	33%	71%	29%	0%	1%	92%	7%
2020	35%	30%	35%	31%	38%	31%	68%	27%	5%	2%	91%	7%
2030	35%	30%	35%	30%	40%	30%	68%	26%	6%	2%	91%	7%
2040	36%	29%	36%	29%	42%	29%	67%	25%	8%	2%	91%	7%
P.M.												
2013	33%	33%	33%	33%	33%	33%	70%	30%	0%	4%	87%	10%
2020	35%	30%	35%	31%	38%	31%	67%	28%	5%	4%	86%	9%
2030	35%	30%	35%	30%	40%	30%	67%	27%	6%	4%	86%	9%
2040	36%	29%	36%	29%	42%	29%	66%	26%	8%	5%	86%	9%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: EB SR 90 at SW 5 Ave.
PREPARED BY: NC
FILE: BUILD-FORCED AND BALANCED

DATE: 12/30/2014
NOTES:

0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	3,000	31,020	3,000	31,020
24 HR EST. AADT	2020	3,000	33,300	3,000	33,300
24 HR EST. AADT	2030	3,500	36,900	3,500	36,900
24 HR EST. AADT	2040	4,000	40,900	4,000	40,900

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	1.4%	1.0%	0.2%	0.2%	94.1%	86.5%	99.9%	99.9%
2020	Approach D30 Factor	1.4%	1.0%	0.2%	0.2%	94.1%	86.5%	99.9%	99.9%
2030	Approach D30 Factor	1.4%	1.0%	0.2%	0.2%	94.1%	86.5%	99.9%	99.9%
2040	Approach D30 Factor	1.4%	1.0%	0.2%	0.2%	94.1%	86.5%	99.9%	99.9%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	0	0	0	0	0	0	350	90	0	10	2,000	130
2030	EST. TURNS												
2040	EST. TURNS	0	0	0	0	0	0	420	110	0	20	2,460	160
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	0	0	0	0	0	0	460	140	0	70	1,940	210
2030	EST. TURNS												
2040	EST. TURNS	0	0	0	0	0	0	550	170	0	90	2,590	280

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		4	266	270	5	2785	2790	254	16	270	2789	1	2790
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		4	266	270	5	2995	3000	254	16	270	2994	6	3000
2020	TURN SUMMARY	0	220	220	0	2350	2350	440	10	450	2140	0	2140
CONTROL LINK VOLUMES		5	315	320	6	3314	3320	297	23	320	3317	3	3320
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		5	355	360	6	3674	3680	339	21	360	3677	3	3680
2040	TURN SUMMARY	0	270	270	0	2880	2880	530	20	550	2640	0	2640
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		3	267	270	5	2785	2790	234	36	270	2789	1	2790
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		3	267	270	5	2995	3000	234	36	270	2994	6	3000
2020	TURN SUMMARY	0	350	350	0	2400	2400	600	70	670	2220	0	2220
CONTROL LINK VOLUMES		3	317	320	6	3314	3320	273	47	320	3317	3	3320
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		4	356	360	6	3674	3680	312	48	360	3677	3	3680
2040	TURN SUMMARY	0	450	450	0	3140	3140	720	90	810	2960	0	2960

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD-FORCED AND BALANCED
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	EB SR 90 at SW 4 Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	1,060	32,750	2,700	31,020
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**0.9%**	**CGR**	**1.9%**	**CGR**	**0.9%**	**CGR**	**1.9%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

			1		**1**		**1**		**1**	
		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
		2013		1,060		32,750		2,700		31,020
NO. YEARS	7	2020	1.063	1,000	1.139	37,300	1.063	3,000	1.139	35,300
NO. YEARS	17	2030	1.161	1,000	1.372	44,900	1.161	3,000	1.372	42,600
NO. YEARS	27	2040	1.267	1,500	1.653	54,200	1.267	3,500	1.653	51,300

Percent Turns Calculated From Base Year AADTs:

JKTURNS	FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	1,060			32,750			2,700			31,020		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	31,020	2,700	32,750	1,060	31,020	2,700	32,750	1,060	31,020	2,700	32,750	1,060
	47%	4%	49%	3%	89%	8%	51%	2%	48%	7%	90%	3%
2020 2-WAY ADT	1,000			37,300			3,000			35,300		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	35,300	3,000	37,300	1,000	35,300	3,000	37,300	1,000	35,300	3,000	37,300	1,000
	47%	4%	49%	3%	90%	8%	51%	1%	48%	7%	90%	2%
2030 2-WAY ADT	1,000			44,900			3,000			42,600		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	42,600	3,000	44,900	1,000	42,600	3,000	44,900	1,000	42,600	3,000	44,900	1,000
	47%	3%	50%	2%	91%	6%	51%	1%	48%	6%	92%	2%
2040 2-WAY ADT	1,500			54,200			3,500			51,300		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	51,300	3,500	54,200	1,500	51,300	3,500	54,200	1,500	51,300	3,500	54,200	1,500
	47%	3%	50%	3%	91%	6%	51%	1%	48%	6%	92%	3%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	2,999			4,104			638			1,703			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	0	523	2,456	10	10	10	10	10	10	75	1,608	0	4,722
% TURNS:	0%	18%	82%	33%	33%	33%	33%	33%	33%	4%	96%	0%	
P.M.	2-Way Pk Hr Vol:	2,071			3,038			796			1,723			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	0	627	1,424	10	10	10	10	10	10	129	1,574	0	3,814
% TURNS:	0%	31%	69%	33%	33%	33%	33%	33%	33%	8%	92%	0%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	0%	18%	82%	33%	33%	33%	33%	33%	33%	4%	96%	0%
	2020	5%	16%	79%	30%	39%	31%	35%	30%	35%	5%	95%	0%
	2030	6%	16%	78%	29%	41%	30%	36%	29%	35%	5%	95%	0%
	2040	8%	15%	77%	28%	43%	29%	36%	28%	36%	5%	95%	0%
P.M.													
	2013	0%	31%	69%	33%	33%	33%	33%	33%	33%	8%	92%	0%
	2020	5%	28%	67%	30%	39%	31%	35%	30%	35%	8%	92%	0%
	2030	6%	27%	67%	29%	41%	30%	36%	29%	35%	7%	92%	0%
	2040	8%	26%	66%	28%	43%	29%	36%	28%	36%	7%	92%	0%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: EB SR 90 at SW 4 Ave.
PREPARED BY: NC
FILE: BUILD-FORCED AND BALANCED

DATE: 12/30/2014
NOTES:

0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	1,060	32,750	2,700	31,020
24 HR EST. AADT	2020	1,000	37,300	3,000	35,300
24 HR EST. AADT	2030	1,000	44,900	3,000	42,600
24 HR EST. AADT	2040	1,500	54,200	3,500	51,300

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	99.3%	99.0%	0.2%	0.2%	4.7%	3.8%	99.8%	99.8%
2020	Approach D30 Factor	99.3%	99.0%	0.2%	0.2%	4.7%	3.8%	99.8%	99.8%
2030	Approach D30 Factor	99.3%	99.0%	0.2%	0.2%	4.7%	3.8%	99.8%	99.8%
2040	Approach D30 Factor	99.3%	99.0%	0.2%	0.2%	4.7%	3.8%	99.8%	99.8%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	0	610	890	0	0	0	0	0	0	100	2,080	0
2030	EST. TURNS												
2040	EST. TURNS	0	720	1,070	0	0	0	0	0	0	150	3,020	0
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	0	500	590	0	0	0	0	0	0	210	2,170	0
2030	EST. TURNS												
2040	EST. TURNS	0	600	830	0	0	0	0	0	0	300	3,150	0

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		95	5	100	6	2944	2950	11	229	240	2786	4	2790
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		89	1	90	7	3353	3360	13	257	270	3171	9	3180
2020	TURN SUMMARY	1500	0	1500	0	2970	2970	0	710	710	2180	0	2180
CONTROL LINK VOLUMES		89	1	90	8	4032	4040	13	257	270	3826	4	3830
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		134	6	140	10	4870	4880	15	305	320	4608	12	4620
2040	TURN SUMMARY	1790	0	1790	0	4090	4090	0	870	870	3170	0	3170
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		94	6	100	6	2944	2950	9	231	240	2786	4	2790
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		89	1	90	7	3353	3360	10	260	270	3171	9	3180
2020	TURN SUMMARY	1090	0	1090	0	2760	2760	0	710	710	2380	0	2380
CONTROL LINK VOLUMES		89	1	90	8	4032	4040	10	260	270	3826	4	3830
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		134	6	140	10	4870	4880	12	308	320	4608	12	4620
2040	TURN SUMMARY	1430	0	1430	0	3980	3980	0	900	900	3450	0	3450

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD-FORCED AND BALANCED
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	EB SR 90 at SW 3 Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	2,350	26,720	6,810	32,750
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**0.9%**	**CGR**	**1.9%**	**CGR**	**0.9%**	**CGR**	**1.9%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
			1		**1**		**1**		**1**	
		2013		2,350		26,720		6,810		32,750
NO. YEARS	7	2020	1.063	2,500	1.139	30,400	1.063	7,000	1.139	37,300
NO. YEARS	17	2030	1.161	2,500	1.372	36,700	1.161	8,000	1.372	44,900
NO. YEARS	27	2040	1.267	3,000	1.653	44,200	1.267	8,500	1.653	54,200

Percent Turns Calculated From Base Year AADTs:

JKTURNS	FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT		2,350			26,720			6,810			32,750	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	32,750	6,810	26,720	2,350	32,750	6,810	26,720	2,350	32,750	6,810	26,720	2,350
	49%	10%	40%	6%	78%	16%	43%	4%	53%	19%	74%	7%
2020 2-WAY ADT		2,500			30,400			7,000			37,300	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	37,300	7,000	30,400	2,500	37,300	7,000	30,400	2,500	37,300	7,000	30,400	2,500
	50%	9%	41%	5%	80%	15%	43%	4%	53%	18%	76%	6%
2030 2-WAY ADT		2,500			36,700			8,000			44,900	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	44,900	8,000	36,700	2,500	44,900	8,000	36,700	2,500	44,900	8,000	36,700	2,500
	50%	9%	41%	5%	81%	14%	44%	3%	53%	17%	78%	5%
2040 2-WAY ADT		3,000			44,200			8,500			54,200	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	54,200	8,500	44,200	3,000	54,200	8,500	44,200	3,000	54,200	8,500	44,200	3,000
	51%	8%	41%	5%	82%	13%	44%	3%	53%	15%	79%	5%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	569			2,314			935			2,276			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	0	327	15	1	1	1	233	194	0	180	2,063	32	3,047
% TURNS:	0%	96%	4%	33%	33%	33%	55%	45%	0%	8%	91%	1%	
P.M.	2-Way Pk Hr Vol:	750			1,661			887			1,620			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	0	466	15	1	1	1	176	180	0	64	1,467	88	2,459
% TURNS:	0%	97%	3%	33%	33%	33%	49%	51%	0%	4%	91%	5%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	0%	96%	4%	33%	33%	33%	55%	45%	0%	8%	91%	1%
	2020	5%	87%	8%	31%	38%	31%	53%	41%	5%	9%	89%	2%
	2030	6%	85%	9%	30%	39%	31%	53%	40%	7%	9%	89%	2%
	2040	8%	81%	11%	29%	42%	30%	53%	38%	9%	9%	89%	2%
P.M.													
	2013	0%	97%	3%	33%	33%	33%	49%	51%	0%	4%	91%	5%
	2020	5%	88%	7%	31%	38%	31%	49%	46%	5%	5%	89%	6%
	2030	6%	86%	8%	30%	39%	31%	49%	45%	7%	6%	89%	5%
	2040	8%	82%	9%	29%	42%	30%	48%	43%	9%	6%	89%	5%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: EB SR 90 at SW 3 Ave.
PREPARED BY: NC
FILE: BUILD-FORCED AND BALANCED

DATE: 12/30/2014
NOTES:

0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	2,350	26,720	6,810	32,750
24 HR EST. AADT	2020	2,500	30,400	7,000	37,300
24 HR EST. AADT	2030	2,500	36,700	8,000	44,900
24 HR EST. AADT	2040	3,000	44,200	8,500	54,200

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	60.1%	64.1%	0.2%	0.2%	45.7%	40.1%	99.8%	99.8%
2020	Approach D30 Factor	60.1%	64.1%	0.2%	0.2%	45.7%	40.1%	99.8%	99.8%
2030	Approach D30 Factor	60.1%	64.1%	0.2%	0.2%	45.7%	40.1%	99.8%	99.8%
2040	Approach D30 Factor	60.1%	64.1%	0.2%	0.2%	45.7%	40.1%	99.8%	99.8%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	0	0	150	0	0	0	1,390	180	0	0	1,720	160
2030	EST. TURNS												
2040	EST. TURNS	0	0	180	0	0	0	1700	220	0	0	2,500	190
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	0	0	250	0	0	0	1030	260	0	0	1,720	300
2030	EST. TURNS												
2040	EST. TURNS	0	0	300	0	0	0	1280	310	0	0	2,210	430

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		127	83	210	5	2395	2400	280	330	610	2942	8	2950
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		135	95	230	5	2735	2740	288	342	630	3350	10	3360
2020	TURN SUMMARY	150	340	490	0	3260	3260	1570	0	1570	1880	0	1880
CONTROL LINK VOLUMES		135	95	230	7	3293	3300	329	391	720	4033	7	4040
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		162	108	270	8	3972	3980	349	421	770	4868	12	4880
2040	TURN SUMMARY	180	410	590	0	4380	4380	1920	0	1920	2690	0	2690
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		136	74	210	4	2396	2400	246	364	610	2942	8	2950
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		144	86	230	5	2735	2740	253	377	630	3350	10	3360
2020	TURN SUMMARY	250	560	810	0	3000	3000	1290	0	1290	2020	0	2020
CONTROL LINK VOLUMES		144	86	230	6	3294	3300	289	431	720	4033	7	4040
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		173	97	270	7	3973	3980	307	463	770	4868	12	4880
2040	TURN SUMMARY	300	740	1040	0	3790	3790	1590	0	1590	2640	0	2640

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD-FORCED AND BALANCED
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	EB SR 90 at SW 2 Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	18,590	17,060	12,130	26,720
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**0.9%**	**CGR**	**1.9%**	**CGR**	**0.9%**	**CGR**	**1.9%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

			NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG		
					1		**1**		**1**		**1**
		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
		2013		18,590		17,060		12,130		26,720
NO. YEARS	7	2020	1.063	20,000	1.139	19,400	1.063	13,000	1.139	30,400
NO. YEARS	17	2030	1.161	21,500	1.372	23,400	1.161	14,000	1.372	36,700
NO. YEARS	27	2040	1.267	23,500	1.653	28,200	1.267	15,500	1.653	44,200

Percent Turns Calculated From Base Year AADTs:

JKTURNS		FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013	2-WAY ADT	18,590			17,060			12,130			26,720		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	26,720	12,130	17,060	18,590	26,720	12,130	17,060	18,590	26,720	12,130	17,060	18,590
	48%	22%	31%	32%	47%	21%	27%	30%	43%	25%	36%	39%
2020	2-WAY ADT	20,000			19,400			13,000			30,400		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	30,400	13,000	19,400	20,000	30,400	13,000	19,400	20,000	30,400	13,000	19,400	20,000
	48%	21%	31%	32%	48%	21%	28%	29%	44%	25%	37%	38%
2030	2-WAY ADT	21,500			23,400			14,000			36,700		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	36,700	14,000	23,400	21,500	36,700	14,000	23,400	21,500	36,700	14,000	23,400	21,500
	50%	19%	32%	30%	51%	19%	29%	26%	45%	24%	40%	37%
2040	2-WAY ADT	23,500			28,200			15,500			44,200		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	44,200	15,500	28,200	23,500	44,200	15,500	28,200	23,500	44,200	15,500	28,200	23,500
	50%	18%	32%	28%	53%	19%	29%	25%	46%	23%	42%	35%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	1,628			1,864			1,442			2,286			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	0	216	129	1	1	1	81	896	0	248	1,651	386	3,610
% TURNS:	0%	63%	37%	33%	33%	33%	8%	92%	0%	11%	72%	17%	
P.M.	2-Way Pk Hr Vol:	1,683			1,361			1,678			1,822			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	0	351	146	1	1	1	82	869	0	375	1,130	316	3,272
% TURNS:	0%	71%	29%	33%	33%	33%	9%	91%	0%	21%	62%	17%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	0%	63%	37%	33%	33%	33%	8%	92%	0%	11%	72%	17%
	2020	5%	58%	37%	33%	35%	32%	10%	85%	4%	12%	69%	19%
	2030	6%	57%	37%	33%	36%	32%	11%	84%	6%	12%	68%	19%
	2040	8%	55%	37%	32%	37%	31%	12%	81%	8%	13%	67%	20%
P.M.													
	2013	0%	71%	29%	33%	33%	33%	9%	91%	0%	21%	62%	17%
	2020	5%	66%	30%	33%	35%	32%	11%	85%	4%	21%	60%	19%
	2030	6%	64%	30%	33%	36%	32%	11%	83%	6%	21%	59%	20%
	2040	8%	62%	30%	32%	37%	31%	12%	80%	8%	21%	59%	20%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: EB SR 90 at SW 2 Ave.
PREPARED BY: NC
FILE: BUILD-FORCED AND BALANCED

DATE: 12/30/2014
NOTES:

0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	18,590	17,060	12,130	26,720
24 HR EST. AADT	2020	20,000	19,400	13,000	30,400
24 HR EST. AADT	2030	21,500	23,400	14,000	36,700
24 HR EST. AADT	2040	23,500	28,200	15,500	44,200

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	21.2%	29.5%	0.3%	0.3%	67.8%	56.7%	99.7%	99.7%
2020	Approach D30 Factor	21.2%	29.5%	0.3%	0.3%	67.8%	56.7%	99.7%	99.7%
2030	Approach D30 Factor	21.2%	29.5%	0.3%	0.3%	67.8%	56.7%	99.7%	99.7%
2040	Approach D30 Factor	21.2%	29.5%	0.3%	0.3%	67.8%	56.7%	99.7%	99.7%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	0	230	130	0	0	0	110	950	0	300	2,390	480
2030	EST. TURNS												
2040	EST. TURNS	0	270	150	0	0	0	130	740	0	440	3,470	700
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	0	370	190	0	0	0	110	950	0	460	1,900	440
2030	EST. TURNS												
2040	EST. TURNS	0	440	230	0	0	0	130	1130	0	670	2,840	550

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		355	1315	1670	5	1535	1540	740	350	1090	2398	2	2400
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		381	1419	1800	5	1745	1750	793	377	1170	2728	12	2740
2020	TURN SUMMARY	360	1430	1790	0	2630	2630	1060	530	1590	3170	0	3170
CONTROL LINK VOLUMES		410	1530	1940	6	2104	2110	854	406	1260	3293	7	3300
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		448	1672	2120	8	2532	2540	945	455	1400	3966	14	3980
2040	TURN SUMMARY	420	1440	1860	0	3750	3750	870	710	1580	4610	0	4610
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		494	1176	1670	5	1535	1540	619	471	1090	2398	2	2400
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		532	1268	1800	5	1745	1750	663	507	1170	2728	12	2740
2020	TURN SUMMARY	560	1390	1950	0	2200	2200	1060	830	1890	2800	0	2800
CONTROL LINK VOLUMES		571	1369	1940	6	2104	2110	714	546	1260	3293	7	3300
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		625	1495	2120	8	2532	2540	791	609	1400	3966	14	3980
2040	TURN SUMMARY	670	1680	2350	0	3200	3200	1260	1110	2370	4060	0	4060

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD-FORCED AND BALANCED
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	EB SR 90 at SW 1 Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	4,790	17,060	7,220	17,060
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**0.9%**	**CGR**	**1.9%**	**CGR**	**0.9%**	**CGR**	**1.9%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

				1		**1**		**1**		**1**
		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
		2013		4,790		17,060		7,220		17,060
NO. YEARS	7	2020	1.063	5,000	1.139	19,400	1.063	7,500	1.139	19,400
NO. YEARS	17	2030	1.161	5,500	1.372	23,400	1.161	8,500	1.372	23,400
NO. YEARS	27	2040	1.267	6,000	1.653	28,200	1.267	9,000	1.653	28,200

Percent Turns Calculated From Base Year AADTs:

JKTURNS	FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	4,790			17,060			7,220			17,060		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	17,060	7,220	17,060	4,790	17,060	7,220	17,060	4,790	17,060	7,220	17,060	4,790
	41%	17%	41%	16%	59%	25%	44%	12%	44%	25%	59%	16%
2020 2-WAY ADT	5,000			19,400			7,500			19,400		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	19,400	7,500	19,400	5,000	19,400	7,500	19,400	5,000	19,400	7,500	19,400	5,000
	42%	16%	42%	16%	61%	24%	44%	11%	44%	24%	61%	16%
2030 2-WAY ADT	5,500			23,400			8,500			23,400		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	23,400	8,500	23,400	5,500	23,400	8,500	23,400	5,500	23,400	8,500	23,400	5,500
	42%	15%	42%	15%	63%	23%	45%	11%	45%	23%	63%	15%
2040 2-WAY ADT	6,000			28,200			9,000			28,200		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	28,200	9,000	28,200	6,000	28,200	9,000	28,200	6,000	28,200	9,000	28,200	6,000
	43%	14%	43%	14%	65%	21%	45%	10%	45%	21%	65%	14%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	681			1,774			987			2,058			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	0	463	207	1	1	1	10	10	10	493	1,554	0	2,750
% TURNS:	0%	69%	31%	33%	33%	33%	33%	33%	33%	24%	76%	0%	
P.M.	2-Way Pk Hr Vol:	861			1,195			1,083			1,395			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	0	712	138	1	1	1	10	10	10	340	1,044	0	2,267
% TURNS:	0%	84%	16%	33%	33%	33%	33%	33%	33%	25%	75%	0%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	0%	69%	31%	33%	33%	33%	33%	33%	33%	24%	76%	0%
	2020	4%	64%	32%	32%	36%	32%	34%	31%	34%	24%	74%	2%
	2030	5%	62%	32%	31%	37%	32%	35%	30%	35%	24%	74%	2%
	2040	7%	60%	33%	30%	39%	31%	35%	29%	35%	24%	74%	2%
P.M.													
	2013	0%	84%	16%	33%	33%	33%	33%	33%	33%	25%	75%	0%
	2020	4%	77%	19%	32%	36%	32%	34%	31%	34%	24%	74%	2%
	2030	5%	75%	19%	31%	37%	32%	35%	30%	35%	24%	74%	2%
	2040	7%	72%	21%	30%	39%	31%	35%	29%	35%	24%	74%	2%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: EB SR 90 at SW 1 Ave.
PREPARED BY: NC
FILE: BUILD-FORCED AND BALANCED

DATE: 12/30/2014
NOTES:

0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	4,790	17,060	7,220	17,060
24 HR EST. AADT	2020	5,000	19,400	7,500	19,400
24 HR EST. AADT	2030	5,500	23,400	8,500	23,400
24 HR EST. AADT	2040	6,000	28,200	9,000	28,200

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	98.4%	98.7%	0.2%	0.2%	3.0%	2.8%	99.8%	99.8%
2020	Approach D30 Factor	98.4%	98.7%	0.2%	0.2%	3.0%	2.8%	99.8%	99.8%
2030	Approach D30 Factor	98.4%	98.7%	0.2%	0.2%	3.0%	2.8%	99.8%	99.8%
2040	Approach D30 Factor	98.4%	98.7%	0.2%	0.2%	3.0%	2.8%	99.8%	99.8%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	0	600	530	0	0	0	0	0	0	580	2,260	0
2030	EST. TURNS												
2040	EST. TURNS	0	720	630	0	0	0	0	0	0	840	3,290	0
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	0	980	490	0	0	0	0	0	0	450	1,970	0
2030	EST. TURNS												
2040	EST. TURNS	0	1,170	580	0	0	0	0	0	0	650	2,860	0

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		424	6	430	3	1537	1540	20	630	650	1532	8	1540
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		443	7	450	3	1747	1750	21	659	680	1743	7	1750
2020	TURN SUMMARY	1130	0	1130	0	2790	2790	0	1180	1180	2840	0	2840
CONTROL LINK VOLUMES		487	13	500	4	2106	2110	23	747	770	2102	8	2110
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		531	9	540	5	2535	2540	25	785	810	2533	7	2540
2040	TURN SUMMARY	1350	0	1350	0	3920	3920	0	1560	1560	4130	0	4130
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		426	4	430	3	1537	1540	18	632	650	1532	8	1540
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		444	6	450	3	1747	1750	19	661	680	1743	7	1750
2020	TURN SUMMARY	1470	0	1470	0	2460	2460	0	1430	1430	2420	0	2420
CONTROL LINK VOLUMES		489	11	500	4	2106	2110	21	749	770	2102	8	2110
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		533	7	540	5	2535	2540	22	788	810	2533	7	2540
2040	TURN SUMMARY	1750	0	1750	0	3440	3440	0	1820	1820	3510	0	3510

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD-FORCED AND BALANCED
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	EB SR 90 at S Miami Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	11,080	20,170	15,180	17,060
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**0.9%**	**CGR**	**1.9%**	**CGR**	**0.9%**	**CGR**	**1.9%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
			1		**1**		**1**		**1**	
		2013		11,080		20,170		15,180		17,060
NO. YEARS	7	2020	1.063	12,000	1.139	23,000	1.063	16,000	1.139	19,400
NO. YEARS	17	2030	1.161	13,000	1.372	27,700	1.161	17,500	1.372	23,400
NO. YEARS	27	2040	1.267	14,000	1.653	33,400	1.267	19,000	1.653	28,200

Percent Turns Calculated From Base Year AADTs:

JKTURNS	FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	11,080			20,170			15,180			17,060		
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
17,060	15,180	20,170	11,080	17,060	15,180	20,170	11,080	17,060	15,180	20,170	11,080
33%	29%	38%	26%	39%	35%	42%	23%	35%	33%	43%	24%
2020 2-WAY ADT	12,000			23,000			16,000			19,400	
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
19,400	16,000	23,000	12,000	19,400	16,000	23,000	12,000	19,400	16,000	23,000	12,000
33%	27%	39%	25%	41%	34%	42%	22%	36%	31%	45%	24%
2030 2-WAY ADT	13,000			27,700			17,500			23,400	
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
23,400	17,500	27,700	13,000	23,400	17,500	27,700	13,000	23,400	17,500	27,700	13,000
34%	26%	40%	24%	43%	32%	43%	20%	37%	30%	48%	22%
2040 2-WAY ADT	14,000			33,400			19,000			28,200	
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
28,200	19,000	33,400	14,000	28,200	19,000	33,400	14,000	28,200	19,000	33,400	14,000
35%	24%	41%	23%	46%	31%	44%	19%	37%	29%	50%	21%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	832			1,711			668			1,871			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	1	1	1	1	1	1	69	597	0	0	1,638	231	2,541
% TURNS:	33%	33%	33%	33%	33%	33%	10%	90%	0%	0%	88%	12%	
P.M.	2-Way Pk Hr Vol:	976			1,006			739			1,239			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	1	1	1	1	1	1	51	686	0	0	951	286	1,980
% TURNS:	33%	33%	33%	33%	33%	33%	7%	93%	0%	0%	77%	23%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		SB			WB			NB			EB	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
A.M.												
2013	33%	33%	33%	33%	33%	33%	10%	90%	0%	0%	88%	12%
2020	33%	33%	34%	33%	34%	33%	14%	83%	4%	3%	83%	13%
2030	33%	32%	34%	32%	35%	33%	14%	81%	5%	4%	83%	14%
2040	34%	32%	35%	32%	35%	33%	16%	78%	6%	5%	81%	14%
P.M.												
2013	33%	33%	33%	33%	33%	33%	7%	93%	0%	0%	77%	23%
2020	33%	33%	34%	33%	34%	33%	10%	86%	4%	3%	74%	23%
2030	33%	32%	34%	32%	35%	33%	11%	84%	5%	4%	73%	23%
2040	34%	32%	35%	32%	35%	33%	13%	81%	6%	5%	72%	23%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: EB SR 90 at S Miami Ave.
PREPARED BY: NC
FILE: BUILD-FORCED AND BALANCED

DATE: 12/30/2014
NOTES:

0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	11,080	20,170	15,180	17,060
24 HR EST. AADT	2020	12,000	23,000	16,000	19,400
24 HR EST. AADT	2030	13,000	27,700	17,500	23,400
24 HR EST. AADT	2040	14,000	33,400	19,000	28,200

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	0.4%	0.3%	0.2%	0.2%	99.7%	99.7%	99.8%	99.8%
2020	Approach D30 Factor	0.4%	0.3%	0.2%	0.2%	99.7%	99.7%	99.8%	99.8%
2030	Approach D30 Factor	0.4%	0.3%	0.2%	0.2%	99.7%	99.7%	99.8%	99.8%
2040	Approach D30 Factor	0.4%	0.3%	0.2%	0.2%	99.7%	99.7%	99.8%	99.8%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	0	0	0	0	0	0	120	720	0	0	2,520	390
2030	EST. TURNS												
2040	EST. TURNS	0	0	0	0	0	0	140	860	0	0	3,660	560
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	0	0	0	0	0	0	100	940	0	0	1,520	990
2030	EST. TURNS												
2040	EST. TURNS	0	0	0	0	0	0	120	1050	0	0	2,200	1,440

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		4	996	1000	3	1817	1820	1362	8	1370	1532	8	1540
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		4	1076	1080	4	2066	2070	1436	4	1440	1743	7	1750
2020	TURN SUMMARY	0	1110	1110	0	2640	2640	840	0	840	2910	0	2910
CONTROL LINK VOLUMES		4	1166	1170	4	2486	2490	1570	10	1580	2102	8	2110
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		5	1255	1260	5	3005	3010	1705	5	1710	2533	7	2540
2040	TURN SUMMARY	0	1420	1420	0	3800	3800	1000	0	1000	4220	0	4220
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		3	997	1000	4	1816	1820	1363	7	1370	1533	7	1540
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		3	1077	1080	4	2066	2070	1436	4	1440	1743	7	1750
2020	TURN SUMMARY	0	1930	1930	0	1620	1620	1040	0	1040	2510	0	2510
CONTROL LINK VOLUMES		4	1166	1170	5	2485	2490	1571	9	1580	2103	7	2110
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		4	1256	1260	6	3004	3010	1705	5	1710	2534	6	2540
2040	TURN SUMMARY	0	2490	2490	0	2320	2320	1170	0	1170	3640	0	3640

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD-FORCED AND BALANCED
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	EB SR 90 at Brickell Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	53,340	21,930	40,860	20,170
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**0.9%**	**CGR**	**1.9%**	**CGR**	**0.9%**	**CGR**	**1.9%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
		2013		53,340		21,930		40,860		20,170
NO. YEARS	7	2020	1.063	56,500	1.139	25,000	1.063	43,500	1.139	23,000
NO. YEARS	17	2030	1.161	62,000	1.372	30,100	1.161	47,500	1.372	27,700
NO. YEARS	27	2040	1.267	67,500	1.653	36,300	1.267	52,000	1.653	33,400

Percent Turns Calculated From Base Year AADTs:

JKTURNS		FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG	
2013 2-WAY ADT		53,340			21,930			40,860			20,170	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	20,170	40,860	21,930	53,340	20,170	40,860	21,930	53,340	20,170	40,860	21,930	53,340
	24%	49%	26%	47%	18%	36%	23%	56%	21%	35%	19%	46%
2020 2-WAY ADT		56,500			25,000			43,500			23,000	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	23,000	43,500	25,000	56,500	23,000	43,500	25,000	56,500	23,000	43,500	25,000	56,500
	25%	48%	27%	46%	19%	35%	24%	54%	22%	35%	20%	45%
2030 2-WAY ADT		62,000			30,100			47,500			27,700	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	27,700	47,500	30,100	62,000	27,700	47,500	30,100	62,000	27,700	47,500	30,100	62,000
	26%	45%	29%	45%	20%	35%	25%	52%	23%	34%	22%	44%
2040 2-WAY ADT		67,500			36,300			52,000			33,400	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	33,400	52,000	36,300	67,500	33,400	52,000	36,300	67,500	33,400	52,000	36,300	67,500
	27%	43%	30%	44%	22%	34%	26%	49%	24%	33%	23%	43%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	3,133			2,107			2,351			1,461			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	0	816	346	589	1	233	233	848	0	221	705	534	4,526
% TURNS:	0%	70%	30%	72%	0%	28%	22%	78%	0%	15%	48%	37%	
P.M.	2-Way Pk Hr Vol:	3,108			1,749			2,682			907			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	0	1,095	313	518	1	278	191	921	0	197	448	261	4,223
% TURNS:	0%	78%	22%	65%	0%	35%	17%	83%	0%	22%	49%	29%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	0%	70%	30%	72%	0%	28%	22%	78%	0%	15%	48%	37%
	2020	3%	68%	30%	69%	2%	29%	22%	76%	2%	17%	45%	37%
	2030	3%	67%	30%	68%	3%	29%	22%	75%	3%	17%	45%	38%
	2040	5%	66%	30%	67%	4%	29%	22%	74%	4%	18%	44%	38%
P.M.													
	2013	0%	78%	22%	65%	0%	35%	17%	83%	0%	22%	49%	29%
	2020	3%	75%	23%	63%	2%	35%	18%	80%	2%	23%	47%	30%
	2030	3%	74%	23%	63%	3%	35%	18%	79%	3%	23%	46%	31%
	2040	5%	72%	23%	62%	4%	35%	19%	77%	4%	24%	45%	31%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: EB SR 90 at Brickell Ave.
PREPARED BY: NC
FILE: BUILD-FORCED AND BALANCED

DATE: 12/30/2014
NOTES:

0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	53,340	21,930	40,860	20,170
24 HR EST. AADT	2020	56,500	25,000	43,500	23,000
24 HR EST. AADT	2030	62,000	30,100	47,500	27,700
24 HR EST. AADT	2040	67,500	36,300	52,000	33,400

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	37.1%	45.3%	0.2%	0.2%	46.0%	41.5%	99.8%	99.8%
2020	Approach D30 Factor	37.1%	45.3%	0.2%	0.2%	46.0%	41.5%	99.8%	99.8%
2030	Approach D30 Factor	37.1%	45.3%	0.2%	0.2%	46.0%	41.5%	99.8%	99.8%
2040	Approach D30 Factor	37.1%	45.3%	0.2%	0.2%	46.0%	41.5%	99.8%	99.8%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	0	880	380	720	0	270	250	920	0	520	870	1,060
2030	EST. TURNS												
2040	EST. TURNS	0	1,050	450	850	0	320	300	1100	0	760	1,260	1,540
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	0	1,310	380	660	0	320	210	1120	0	330	630	540
2030	EST. TURNS												
2040	EST. TURNS	0	1,570	450	780	0	380	260	1340	0	480	920	790

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		1780	3020	4800	4	1966	1970	1691	1989	3680	1812	8	1820
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		1886	3204	5090	5	2245	2250	1800	2120	3920	2066	4	2070
2020	TURN SUMMARY	1260	2700	3960	990	1500	2490	1170	1670	2840	2450	0	2450
CONTROL LINK VOLUMES		2070	3510	5580	5	2705	2710	1966	2314	4280	2488	2	2490
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		2253	3827	6080	7	3263	3270	2152	2528	4680	3000	10	3010
2040	TURN SUMMARY	1500	3490	4990	1170	2010	3180	1400	2130	3530	3560	0	3560
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		2175	2625	4800	4	1966	1970	1525	2155	3680	1812	8	1820
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		2304	2786	5090	5	2245	2250	1623	2297	3920	2066	4	2070
2020	TURN SUMMARY	1690	2320	4010	980	1220	2200	1330	1960	3290	1500	0	1500
CONTROL LINK VOLUMES		2528	3052	5580	5	2705	2710	1772	2508	4280	2488	2	2490
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		2752	3328	6080	7	3263	3270	1940	2740	4680	3000	10	3010
2040	TURN SUMMARY	2020	2910	4930	1160	1630	2790	1600	2430	4030	2190	0	2190

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD-FORCED AND BALANCED
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	WB SR 90 at SR 9		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	40,860	30,740	50,930	1,500
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**0.9%**	**CGR**	**1.0%**	**CGR**	**0.9%**	**CGR**	**1.0%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
				1		**1**		**1**		**1**
		2013		40,860		30,740		50,930		1,500
NO. YEARS	7	2020	1.063	43,500	1.074	33,000	1.063	54,000	1.074	1,600
NO. YEARS	17	2030	1.161	47,500	1.190	36,600	1.161	59,000	1.190	1,800
NO. YEARS	27	2040	1.267	52,000	1.319	40,500	1.267	64,500	1.319	2,000

Percent Turns Calculated From Base Year AADTs:

JKTURNS	FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	40,860			30,740			50,930			1,500		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	1,500	50,930	30,740	40,860	1,500	50,930	30,740	40,860	1,500	50,930	30,740	40,860
	2%	61%	37%	44%	2%	55%	42%	56%	2%	42%	25%	33%
2020 2-WAY ADT	43,500			33,000			54,000			1,600		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	1,600	54,000	33,000	43,500	1,600	54,000	33,000	43,500	1,600	54,000	33,000	43,500
	2%	61%	37%	44%	2%	54%	42%	56%	2%	41%	25%	33%
2030 2-WAY ADT	47,500			36,600			59,000			1,800		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	1,800	59,000	36,600	47,500	1,800	59,000	36,600	47,500	1,800	59,000	36,600	47,500
	2%	61%	38%	44%	2%	54%	43%	55%	2%	41%	26%	33%
2040 2-WAY ADT	52,000			40,500			64,500			2,000		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	2,000	64,500	40,500	52,000	2,000	64,500	40,500	52,000	2,000	64,500	40,500	52,000
	2%	60%	38%	44%	2%	54%	43%	55%	2%	41%	26%	33%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	3,629			506			3,480			309			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	31	1,966	0	214	99	192	0	1,281	0	41	1	137	3,962
% TURNS:	2%	98%	0%	42%	20%	38%	0%	100%	0%	23%	1%	77%	
P.M.	2-Way Pk Hr Vol:	2,894			828			2,724			504			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	23	1,218	0	268	346	213	0	1,272	0	21	1	113	3,475
% TURNS:	2%	98%	0%	32%	42%	26%	0%	100%	0%	16%	1%	84%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	2%	98%	0%	42%	20%	38%	0%	100%	0%	23%	1%	77%
	2020	2%	95%	4%	43%	18%	40%	4%	96%	0%	25%	3%	72%
	2030	2%	94%	5%	43%	17%	40%	5%	94%	0%	25%	4%	71%
	2040	2%	92%	6%	43%	17%	41%	7%	93%	0%	26%	5%	69%
P.M.													
	2013	2%	98%	0%	32%	42%	26%	0%	100%	0%	16%	1%	84%
	2020	2%	94%	4%	34%	38%	29%	4%	96%	0%	18%	3%	79%
	2030	2%	93%	5%	34%	37%	29%	5%	94%	0%	19%	4%	77%
	2040	2%	92%	6%	34%	35%	31%	7%	93%	0%	20%	5%	75%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: WB SR 90 at SR 9
PREPARED BY: NC
FILE: BUILD-FORCED AND BALANCED

DATE: 12/30/2014
NOTES:

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ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	40,860	30,740	50,930	1,500
24 HR EST. AADT	2020	43,500	33,000	54,000	1,600
24 HR EST. AADT	2030	47,500	36,600	59,000	1,800
24 HR EST. AADT	2040	52,000	40,500	64,500	2,000

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	55.0%	42.9%	40.0%	60.0%	36.8%	46.7%	60.0%	40.0%
2020	Approach D30 Factor	55.0%	42.9%	40.0%	60.0%	36.8%	46.7%	60.0%	40.0%
2030	Approach D30 Factor	55.0%	42.9%	40.0%	60.0%	36.8%	46.7%	60.0%	40.0%
2040	Approach D30 Factor	55.0%	42.9%	40.0%	60.0%	36.8%	46.7%	60.0%	40.0%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	30	2,090	0	600	150	540	0	1,600	0	40	0	150
2030	EST. TURNS												
2040	EST. TURNS	40	2,490	0	740	180	660	0	1900	0	20	0	50
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	20	1,400	0	330	450	260	0	1350	0	40	0	120
2030	EST. TURNS												
2040	EST. TURNS	30	1,670	0	400	550	320	0	1610	0	50	0	150

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		2024	1656	3680	1107	1663	2770	1687	2893	4580	81	59	140
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		2154	1766	3920	1188	1782	2970	1789	3071	4860	86	54	140
2020	TURN SUMMARY	2120	2350	4470	1290	0	1290	1600	2670	4270	190	180	370
CONTROL LINK VOLUMES		2352	1928	4280	1318	1972	3290	1955	3355	5310	97	63	160
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		2575	2105	4680	1458	2192	3650	2137	3673	5810	108	72	180
2040	TURN SUMMARY	2530	2690	5220	1580	0	1580	1900	3170	5070	70	220	290
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		1577	2103	3680	1660	1110	2770	2140	2440	4580	54	86	140
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		1679	2241	3920	1782	1188	2970	2269	2591	4860	58	82	140
2020	TURN SUMMARY	1420	1800	3220	1040	0	1040	1350	1700	3050	160	470	630
CONTROL LINK VOLUMES		1833	2447	4280	1976	1314	3290	2480	2830	5310	65	95	160
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		2007	2673	4680	2187	1463	3650	2711	3099	5810	72	108	180
2040	TURN SUMMARY	1700	2160	3860	1270	0	1270	1610	2040	3650	200	580	780

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD-FORCED AND BALANCED
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	WB SR 90 at Beacom Blvd.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	28,490	12,400	17,040	30,740
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**0.9%**	**CGR**	**1.0%**	**CGR**	**0.9%**	**CGR**	**1.0%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
					1		**1**		**1**	
		2013		28,490		12,400		17,040		30,740
NO. YEARS	7	2020	1.063	30,500	1.074	13,300	1.063	18,000	1.074	33,000
NO. YEARS	17	2030	1.161	33,000	1.190	14,800	1.161	20,000	1.190	36,600
NO. YEARS	27	2040	1.267	36,000	1.319	16,400	1.267	21,500	1.319	40,500

Percent Turns Calculated From Base Year AADTs:

JKTURNS	FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	28,490			12,400			17,040			30,740		
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
30,740	17,040	12,400	28,490	30,740	17,040	12,400	28,490	30,740	17,040	12,400	28,490
51%	28%	21%	37%	40%	22%	17%	40%	43%	29%	21%	49%
2020 2-WAY ADT	30,500			13,300			18,000			33,000	
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
33,000	18,000	13,300	30,500	33,000	18,000	13,300	30,500	33,000	18,000	13,300	30,500
51%	28%	21%	37%	40%	22%	17%	40%	43%	29%	22%	49%
2030 2-WAY ADT	33,000			14,800			20,000			36,600	
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
36,600	20,000	14,800	33,000	36,600	20,000	14,800	33,000	36,600	20,000	14,800	33,000
51%	28%	21%	37%	41%	22%	18%	39%	43%	29%	22%	49%
2040 2-WAY ADT	36,000			16,400			21,500			40,500	
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
40,500	21,500	16,400	36,000	40,500	21,500	16,400	36,000	40,500	21,500	16,400	36,000
52%	27%	21%	37%	41%	22%	18%	39%	44%	29%	22%	49%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	913			946			1,141			1,050			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	367	297	0	0	515	430	0	248	165	1	1	1	2,025
% TURNS:	55%	45%	0%	0%	54%	46%	0%	60%	40%	33%	33%	33%	
P.M.	2-Way Pk Hr Vol:	843			1,192			1,258			1,031			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	302	319	0	0	600	591	0	221	126	1	1	1	2,162
% TURNS:	49%	51%	0%	0%	50%	50%	0%	64%	36%	33%	33%	33%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	55%	45%	0%	0%	54%	46%	0%	60%	40%	33%	33%	33%
	2020	55%	43%	2%	4%	53%	43%	2%	58%	40%	33%	32%	35%
	2030	55%	43%	3%	5%	53%	43%	2%	57%	40%	33%	32%	35%
	2040	55%	42%	3%	6%	52%	42%	3%	56%	41%	33%	31%	36%
P.M.													
	2013	49%	51%	0%	0%	50%	50%	0%	64%	36%	33%	33%	33%
	2020	49%	49%	2%	4%	49%	47%	2%	61%	37%	33%	32%	35%
	2030	49%	48%	3%	5%	49%	46%	2%	61%	37%	33%	32%	35%
	2040	49%	47%	3%	6%	49%	45%	3%	60%	38%	33%	31%	36%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: WB SR 90 at Beacom Blvd.
PREPARED BY: NC
FILE: BUILD-FORCED AND BALANCED

DATE: 12/30/2014
NOTES:

0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	28,490	12,400	17,040	30,740
24 HR EST. AADT	2020	30,500	13,300	18,000	33,000
24 HR EST. AADT	2030	33,000	14,800	20,000	36,600
24 HR EST. AADT	2040	36,000	16,400	21,500	40,500

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	72.7%	73.7%	99.9%	99.9%	36.2%	27.6%	0.1%	0.1%
2020	Approach D30 Factor	72.7%	73.7%	99.9%	99.9%	36.2%	27.6%	0.1%	0.1%
2030	Approach D30 Factor	72.7%	73.7%	99.9%	99.9%	36.2%	27.6%	0.1%	0.1%
2040	Approach D30 Factor	72.7%	73.7%	99.9%	99.9%	36.2%	27.6%	0.1%	0.1%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	540	320	0	0	580	490	0	260	180	0	0	0
2030	EST. TURNS												
2040	EST. TURNS	470	380	0	0	750	600	0	320	220	0	0	0
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	320	340	0	100	770	910	0	240	130	0	0	0
2030	EST. TURNS												
2040	EST. TURNS	380	400	0	120	950	1120	0	280	210	0	0	0

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		1865	695	2560	1115	5	1120	555	975	1530	3	2767	2770
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		1996	754	2750	1196	4	1200	586	1034	1620	3	2967	2970
2020	TURN SUMMARY	860	260	1120	1070	0	1070	440	810	1250	0	1300	1300
CONTROL LINK VOLUMES		2160	810	2970	1331	-1	1330	652	1148	1800	3	3287	3290
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		2356	884	3240	1474	6	1480	700	1240	1940	4	3646	3650
2040	TURN SUMMARY	850	320	1170	1350	0	1350	540	980	1520	0	1440	1440
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		1889	671	2560	1115	5	1120	423	1107	1530	3	2767	2770
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		2022	728	2750	1196	4	1200	447	1173	1620	3	2967	2970
2020	TURN SUMMARY	660	340	1000	1780	0	1780	370	1250	1620	0	1220	1220
CONTROL LINK VOLUMES		2188	782	2970	1331	-1	1330	497	1303	1800	3	3287	3290
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		2387	853	3240	1475	5	1480	534	1406	1940	4	3646	3650
2040	TURN SUMMARY	780	400	1180	2190	0	2190	490	1520	2010	0	1540	1540

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD-FORCED AND BALANCED
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	WB SR 90 at SW 22 Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	27,600	20,610	35,660	12,400
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**0.9%**	**CGR**	**1.0%**	**CGR**	**0.9%**	**CGR**	**1.0%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
			1		**1**		**1**		**1**	
		2013		27,600		20,610		35,660		12,400
NO. YEARS	7	2020	1.063	29,500	1.074	22,100	1.063	38,000	1.074	13,300
NO. YEARS	17	2030	1.161	32,000	1.190	24,500	1.161	41,500	1.190	14,800
NO. YEARS	27	2040	1.267	35,000	1.319	27,200	1.267	45,000	1.319	16,400

Percent Turns Calculated From Base Year AADTs:

JKTURNS	FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	27,600			20,610			35,660			12,400		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	12,400	35,660	20,610	27,600	12,400	35,660	20,610	27,600	12,400	35,660	20,610	27,600
	18%	52%	30%	36%	16%	47%	34%	46%	20%	43%	25%	33%
2020 2-WAY ADT	29,500			22,100			38,000			13,300		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	13,300	38,000	22,100	29,500	13,300	38,000	22,100	29,500	13,300	38,000	22,100	29,500
	18%	52%	30%	37%	16%	47%	34%	45%	20%	42%	25%	33%
2030 2-WAY ADT	32,000			24,500			41,500			14,800		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	14,800	41,500	24,500	32,000	14,800	41,500	24,500	32,000	14,800	41,500	24,500	32,000
	18%	51%	30%	36%	17%	47%	34%	45%	21%	42%	25%	33%
2040 2-WAY ADT	35,000			27,200			45,000			16,400		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	16,400	45,000	27,200	35,000	16,400	45,000	27,200	35,000	16,400	45,000	27,200	35,000
	19%	51%	31%	36%	17%	47%	35%	45%	21%	42%	25%	33%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	1,616			1,057			1,684			1,001			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	65	703	0	78	850	128	0	769	83	1	1	1	2,679
% TURNS:	8%	92%	0%	7%	80%	12%	0%	90%	10%	33%	33%	33%	
P.M.	2-Way Pk Hr Vol:	1,733			1,463			1,816			1,268			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	75	781	0	152	1,095	215	0	724	95	1	1	1	3,140
% TURNS:	9%	91%	0%	10%	75%	15%	0%	88%	12%	33%	33%	33%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	8%	92%	0%	7%	80%	12%	0%	90%	10%	33%	33%	33%
	2020	9%	88%	3%	10%	74%	16%	3%	86%	11%	34%	32%	33%
	2030	10%	87%	4%	11%	73%	16%	4%	85%	11%	34%	32%	33%
	2040	10%	85%	5%	12%	70%	18%	6%	83%	12%	35%	32%	33%
P.M.													
	2013	9%	91%	0%	10%	75%	15%	0%	88%	12%	33%	33%	33%
	2020	10%	87%	3%	13%	69%	18%	3%	84%	12%	34%	32%	33%
	2030	10%	86%	4%	14%	68%	19%	4%	83%	13%	34%	32%	33%
	2040	10%	84%	5%	15%	65%	20%	6%	81%	13%	35%	32%	33%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: WB SR 90 at SW 22 Ave.
PREPARED BY: NC
FILE: BUILD-FORCED AND BALANCED

DATE: 12/30/2014
NOTES:

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ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	27,600	20,610	35,660	12,400
24 HR EST. AADT	2020	29,500	22,100	38,000	13,300
24 HR EST. AADT	2030	32,000	24,500	41,500	14,800
24 HR EST. AADT	2040	35,000	27,200	45,000	16,400

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	47.5%	49.4%	99.9%	99.9%	50.6%	45.1%	0.1%	0.1%
2020	Approach D30 Factor	47.5%	49.4%	99.9%	99.9%	50.6%	45.1%	0.1%	0.1%
2030	Approach D30 Factor	47.5%	49.4%	99.9%	99.9%	50.6%	45.1%	0.1%	0.1%
2040	Approach D30 Factor	47.5%	49.4%	99.9%	99.9%	50.6%	45.1%	0.1%	0.1%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	70	900	0	200	900	280	0	800	100	0	0	0
2030	EST. TURNS												
2040	EST. TURNS	80	1,070	0	240	1300	340	0	950	120	0	0	0
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	80	850	0	200	1500	280	0	770	100	0	0	0
2030	EST. TURNS												
2040	EST. TURNS	100	1,010	0	240	1840	350	0	920	120	0	0	0

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		1181	1299	2480	1853	-3	1850	1624	1586	3210	1	1119	1120
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		1262	1398	2660	1987	3	1990	1730	1690	3420	1	1199	1200
2020	TURN SUMMARY	970	1000	1970	1380	0	1380	900	1180	2080	0	1070	1070
CONTROL LINK VOLUMES		1369	1511	2880	2203	7	2210	1890	1850	3740	1	1329	1330
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		1497	1653	3150	2446	4	2450	2049	2001	4050	1	1479	1480
2040	TURN SUMMARY	1150	1190	2340	1880	0	1880	1070	1410	2480	0	1500	1500
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		1227	1253	2480	1854	-4	1850	1447	1763	3210	1	1119	1120
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		1311	1349	2660	1988	2	1990	1542	1878	3420	1	1199	1200
2020	TURN SUMMARY	930	970	1900	1980	0	1980	870	1130	2000	0	1680	1680
CONTROL LINK VOLUMES		1423	1457	2880	2203	7	2210	1684	2056	3740	1	1329	1330
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		1556	1594	3150	2446	4	2450	1827	2223	4050	1	1479	1480
2040	TURN SUMMARY	1110	1160	2270	2430	0	2430	1040	1360	2400	0	2060	2060

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD-FORCED AND BALANCED
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	WB SR 90 at SW 17 Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	8,850	21,590	7,850	20,610
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**0.9%**	**CGR**	**1.0%**	**CGR**	**0.9%**	**CGR**	**1.0%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
		2013		8,850		21,590		7,850		20,610
NO. YEARS	7	2020	1.063	9,500	1.074	23,200	1.063	8,500	1.074	22,100
NO. YEARS	17	2030	1.161	10,500	1.190	25,700	1.161	9,000	1.190	24,500
NO. YEARS	27	2040	1.267	11,000	1.319	28,500	1.267	10,000	1.319	27,200

Percent Turns Calculated From Base Year AADTs:

JKTURNS	FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	8,850			21,590			7,850			20,610		
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
20,610	7,850	21,590	8,850	20,610	7,850	21,590	8,850	20,610	7,850	21,590	8,850
41%	16%	43%	24%	55%	21%	42%	17%	40%	21%	56%	23%
2020 2-WAY ADT	9,500			23,200			8,500			22,100	
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
22,100	8,500	23,200	9,500	22,100	8,500	23,200	9,500	22,100	8,500	23,200	9,500
41%	16%	43%	24%	55%	21%	42%	17%	40%	21%	56%	23%
2030 2-WAY ADT	10,500			25,700			9,000			24,500	
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
24,500	9,000	25,700	10,500	24,500	9,000	25,700	10,500	24,500	9,000	25,700	10,500
41%	15%	43%	24%	56%	20%	42%	17%	40%	20%	57%	23%
2040 2-WAY ADT	11,000			28,500			10,000			27,200	
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
27,200	10,000	28,500	11,000	27,200	10,000	28,500	11,000	27,200	10,000	28,500	11,000
41%	15%	43%	23%	56%	21%	43%	16%	41%	20%	58%	22%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	1,831			1,060			1,802			1,025			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	118	922	0	129	808	122	0	661	96	1	1	1	2,859
% TURNS:	11%	89%	0%	12%	76%	12%	0%	87%	13%	33%	33%	33%	
P.M.	2-Way Pk Hr Vol:	1,713			1,496			1,729			1,506			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	157	869	0	97	1,237	161	0	589	109	1	1	1	3,222
% TURNS:	15%	85%	0%	6%	83%	11%	0%	84%	16%	33%	33%	33%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	11%	89%	0%	12%	76%	12%	0%	87%	13%	33%	33%	33%
	2020	14%	81%	4%	13%	74%	12%	4%	80%	15%	32%	36%	32%
	2030	15%	79%	5%	14%	74%	13%	5%	79%	16%	32%	36%	32%
	2040	16%	76%	7%	14%	73%	13%	7%	76%	17%	31%	37%	31%
P.M.													
	2013	15%	85%	0%	6%	83%	11%	0%	84%	16%	33%	33%	33%
	2020	18%	78%	4%	8%	80%	12%	4%	78%	18%	32%	36%	32%
	2030	19%	76%	5%	9%	79%	12%	5%	76%	19%	32%	36%	32%
	2040	20%	73%	7%	9%	78%	12%	7%	73%	20%	31%	37%	31%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: WB SR 90 at SW 17 Ave.
PREPARED BY: NC
FILE: BUILD-FORCED AND BALANCED

DATE: 12/30/2014
NOTES:

0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	8,850	21,590	7,850	20,610
24 HR EST. AADT	2020	9,500	23,200	8,500	22,100
24 HR EST. AADT	2030	10,500	25,700	9,000	24,500
24 HR EST. AADT	2040	11,000	28,500	10,000	27,200

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	56.8%	59.9%	99.9%	99.9%	42.0%	40.4%	0.1%	0.1%
2020	Approach D30 Factor	56.8%	59.9%	99.9%	99.9%	42.0%	40.4%	0.1%	0.1%
2030	Approach D30 Factor	56.8%	59.9%	99.9%	99.9%	42.0%	40.4%	0.1%	0.1%
2040	Approach D30 Factor	56.8%	59.9%	99.9%	99.9%	42.0%	40.4%	0.1%	0.1%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	180	1,100	0	150	900	140	0	800	180	0	0	0
2030	EST. TURNS												
2040	EST. TURNS	220	1,310	0	180	1280	170	0	950	220	0	0	0
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	130	980	0	120	1700	220	0	630	120	0	0	0
2030	EST. TURNS												
2040	EST. TURNS	150	1,170	0	140	2090	270	0	750	140	0	0	0

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		452	348	800	1941	-1	1940	297	413	710	2	1848	1850
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		486	374	860	2086	4	2090	321	449	770	2	1988	1990
2020	TURN SUMMARY	1280	950	2230	1190	0	1190	980	1240	2220	0	1260	1260
CONTROL LINK VOLUMES		537	413	950	2311	-1	2310	340	470	810	2	2208	2210
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		562	428	990	2563	7	2570	378	522	900	2	2448	2450
2040	TURN SUMMARY	1530	1130	2660	1630	0	1630	1170	1480	2650	0	1720	1720
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		477	323	800	1942	-2	1940	285	425	710	2	1848	1850
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		512	348	860	2087	3	2090	309	461	770	2	1988	1990
2020	TURN SUMMARY	1110	750	1860	2040	0	2040	750	1200	1950	0	1950	1950
CONTROL LINK VOLUMES		566	384	950	2311	-1	2310	327	483	810	2	2208	2210
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		593	397	990	2563	7	2570	363	537	900	2	2448	2450
2040	TURN SUMMARY	1320	890	2210	2500	0	2500	890	1440	2330	0	2380	2380

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD-FORCED AND BALANCED
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	WB SR 90 at SW 12 Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	7,090	20,000	8,910	21,590
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**0.9%**	**CGR**	**1.0%**	**CGR**	**0.9%**	**CGR**	**1.0%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
			1		**1**		**1**		**1**	
		2013		7,090		20,000		8,910		21,590
NO. YEARS	7	2020	1.063	7,500	1.074	21,500	1.063	9,500	1.074	23,200
NO. YEARS	17	2030	1.161	8,000	1.190	23,800	1.161	10,500	1.190	25,700
NO. YEARS	27	2040	1.267	9,000	1.319	26,400	1.267	11,500	1.319	28,500

Percent Turns Calculated From Base Year AADTs:

JKTURNS	FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	7,090			20,000			8,910			21,590		
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
21,590	8,910	20,000	7,090	21,590	8,910	20,000	7,090	21,590	8,910	20,000	7,090
43%	18%	40%	19%	57%	24%	41%	15%	44%	25%	56%	20%
2020 2-WAY ADT	7,500			21,500			9,500			23,200	
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
23,200	9,500	21,500	7,500	23,200	9,500	21,500	7,500	23,200	9,500	21,500	7,500
43%	18%	40%	19%	58%	24%	41%	14%	44%	25%	56%	19%
2030 2-WAY ADT	8,000			23,800			10,500			25,700	
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
25,700	10,500	23,800	8,000	25,700	10,500	23,800	8,000	25,700	10,500	23,800	8,000
43%	18%	40%	18%	58%	24%	41%	14%	45%	25%	56%	19%
2040 2-WAY ADT	9,000			26,400			11,500			28,500	
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
28,500	11,500	26,400	9,000	28,500	11,500	26,400	9,000	28,500	11,500	26,400	9,000
43%	17%	40%	18%	58%	23%	41%	14%	45%	25%	56%	19%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	1,095			908			1,132			1,043			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	114	380	0	71	752	75	0	520	147	10	10	10	2,089
% TURNS:	23%	77%	0%	8%	84%	8%	0%	78%	22%	33%	33%	33%	
P.M.	2-Way Pk Hr Vol:	1,244			1,614			1,334			1,700			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	108	534	0	95	1,389	120	0	497	173	10	10	10	2,946
% TURNS:	17%	83%	0%	6%	87%	7%	0%	74%	26%	33%	33%	33%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	23%	77%	0%	8%	84%	8%	0%	78%	22%	33%	33%	33%
	2020	25%	71%	4%	9%	81%	10%	4%	72%	24%	32%	36%	32%
	2030	26%	69%	5%	9%	81%	10%	5%	70%	25%	32%	36%	32%
	2040	26%	67%	7%	10%	79%	11%	7%	67%	26%	32%	37%	31%
P.M.													
	2013	17%	83%	0%	6%	87%	7%	0%	74%	26%	33%	33%	33%
	2020	19%	77%	4%	7%	84%	9%	4%	68%	28%	32%	36%	32%
	2030	20%	75%	5%	7%	83%	10%	5%	67%	28%	32%	36%	32%
	2040	21%	72%	7%	8%	82%	10%	7%	64%	29%	32%	37%	31%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: WB SR 90 at SW 12 Ave.
PREPARED BY: NC
FILE: BUILD-FORCED AND BALANCED

DATE: 12/30/2014
NOTES:

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ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	7,090	20,000	8,910	21,590
24 HR EST. AADT	2020	7,500	21,500	9,500	23,200
24 HR EST. AADT	2030	8,000	23,800	10,500	25,700
24 HR EST. AADT	2040	9,000	26,400	11,500	28,500

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	45.1%	51.6%	99.8%	99.8%	58.9%	50.2%	0.2%	0.2%
2020	Approach D30 Factor	45.1%	51.6%	99.8%	99.8%	58.9%	50.2%	0.2%	0.2%
2030	Approach D30 Factor	45.1%	51.6%	99.8%	99.8%	58.9%	50.2%	0.2%	0.2%
2040	Approach D30 Factor	45.1%	51.6%	99.8%	99.8%	58.9%	50.2%	0.2%	0.2%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	120	400	0	90	800	100	0	550	160	0	0	0
2030	EST. TURNS												
2040	EST. TURNS	140	480	0	110	1150	120	0	660	190	0	0	0
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	120	570	0	130	1840	180	0	550	200	0	0	0
2030	EST. TURNS												
2040	EST. TURNS	150	680	0	160	2260	220	0	660	240	0	0	0

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		288	352	640	1796	4	1800	472	328	800	4	1936	1940
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		305	375	680	1931	9	1940	504	356	860	4	2086	2090
2020	TURN SUMMARY	520	640	1160	990	0	990	710	500	1210	0	1080	1080
CONTROL LINK VOLUMES		325	395	720	2138	2	2140	557	393	950	5	2305	2310
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		365	445	810	2371	9	2380	610	430	1040	5	2565	2570
2040	TURN SUMMARY	620	770	1390	1380	0	1380	850	600	1450	0	1480	1480
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		329	311	640	1796	4	1800	403	397	800	4	1936	1940
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		348	332	680	1931	9	1940	429	431	860	4	2086	2090
2020	TURN SUMMARY	690	680	1370	2150	0	2150	750	750	1500	0	2160	2160
CONTROL LINK VOLUMES		372	348	720	2138	2	2140	475	475	950	5	2305	2310
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		418	392	810	2371	9	2380	520	520	1040	5	2565	2570
2040	TURN SUMMARY	830	820	1650	2640	0	2640	900	900	1800	0	2650	2650

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD-FORCED AND BALANCED
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	WB SR 90 at SR 90/SW 8 Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	7,090	21,680	2,950	20,000
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**0.9%**	**CGR**	**1.0%**	**CGR**	**0.9%**	**CGR**	**1.0%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
			1		**1**		**1**		**1**	
		2013		7,090		21,680		2,950		20,000
NO. YEARS	7	2020	1.063	7,500	1.074	23,300	1.063	3,000	1.074	21,500
NO. YEARS	17	2030	1.161	8,000	1.190	25,800	1.161	3,500	1.190	23,800
NO. YEARS	27	2040	1.267	9,000	1.319	28,600	1.267	3,500	1.319	26,400

Percent Turns Calculated From Base Year AADTs:

JKTURNS	FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	7,090			21,680			2,950			20,000		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	20,000	2,950	21,680	7,090	20,000	2,950	21,680	7,090	20,000	2,950	21,680	7,090
	45%	7%	49%	24%	67%	10%	44%	15%	41%	9%	68%	22%
2020 2-WAY ADT	7,500			23,300			3,000			21,500		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	21,500	3,000	23,300	7,500	21,500	3,000	23,300	7,500	21,500	3,000	23,300	7,500
	45%	6%	49%	23%	67%	9%	45%	14%	41%	9%	69%	22%
2030 2-WAY ADT	8,000			25,800			3,500			23,800		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	23,800	3,500	25,800	8,000	23,800	3,500	25,800	8,000	23,800	3,500	25,800	8,000
	45%	7%	49%	23%	67%	10%	45%	14%	41%	9%	69%	21%
2040 2-WAY ADT	9,000			28,600			3,500			26,400		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	26,400	3,500	28,600	9,000	26,400	3,500	28,600	9,000	26,400	3,500	28,600	9,000
	45%	6%	49%	23%	68%	9%	45%	14%	41%	9%	70%	22%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	702			682			664			746			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	88	256	0	62	563	47	0	286	65	10	10	10	1,397
% TURNS:	26%	74%	0%	9%	84%	7%	0%	81%	19%	33%	33%	33%	
P.M.	2-Way Pk Hr Vol:	505			1,398			532			1,449			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	66	173	0	63	1,261	64	0	193	92	10	10	10	1,942
% TURNS:	28%	72%	0%	5%	91%	5%	0%	68%	32%	33%	33%	33%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	26%	74%	0%	9%	84%	7%	0%	81%	19%	33%	33%	33%
	2020	28%	68%	5%	11%	82%	7%	4%	75%	21%	31%	37%	32%
	2030	28%	66%	6%	11%	82%	7%	6%	73%	21%	30%	38%	32%
	2040	29%	63%	8%	12%	81%	7%	7%	70%	22%	29%	39%	31%
P.M.													
	2013	28%	72%	0%	5%	91%	5%	0%	68%	32%	33%	33%	33%
	2020	29%	66%	5%	6%	88%	5%	4%	62%	33%	31%	37%	32%
	2030	30%	64%	6%	7%	88%	5%	6%	61%	33%	30%	38%	32%
	2040	31%	61%	8%	8%	87%	5%	7%	59%	34%	29%	39%	31%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: WB SR 90 at SR 90/SW 8 Ave.
PREPARED BY: NC
FILE: BUILD-FORCED AND BALANCED

DATE: 12/30/2014
NOTES:

0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	7,090	21,680	2,950	20,000
24 HR EST. AADT	2020	7,500	23,300	3,000	21,500
24 HR EST. AADT	2030	8,000	25,800	3,500	23,800
24 HR EST. AADT	2040	9,000	28,600	3,500	26,400

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	49.0%	47.3%	99.8%	99.8%	52.9%	53.6%	0.2%	0.2%
2020	Approach D30 Factor	49.0%	47.3%	99.8%	99.8%	52.9%	53.6%	0.2%	0.2%
2030	Approach D30 Factor	49.0%	47.3%	99.8%	99.8%	52.9%	53.6%	0.2%	0.2%
2040	Approach D30 Factor	49.0%	47.3%	99.8%	99.8%	52.9%	53.6%	0.2%	0.2%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	110	270	0	80	720	100	0	300	70	0	0	0
2030	EST. TURNS												
2040	EST. TURNS	130	320	0	100	1050	150	0	360	80	0	0	0
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	70	180	0	90	1780	90	0	210	100	0	0	0
2030	EST. TURNS												
2040	EST. TURNS	90	220	0	110	2190	110	0	240	120	0	0	0

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		313	327	640	1947	3	1950	140	130	270	4	1796	1800
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		331	349	680	2093	7	2100	143	127	270	4	1936	1940
2020	TURN SUMMARY	380	380	760	900	0	900	370	370	740	0	900	900
CONTROL LINK VOLUMES		353	367	720	2317	3	2320	167	153	320	4	2136	2140
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		397	413	810	2569	1	2570	167	153	320	5	2375	2380
2040	TURN SUMMARY	450	460	910	1300	0	1300	440	470	910	0	1260	1260
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		302	338	640	1947	3	1950	142	128	270	4	1796	1800
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		319	361	680	2093	7	2100	145	125	270	4	1936	1940
2020	TURN SUMMARY	250	300	550	1960	0	1960	310	270	580	0	1950	1950
CONTROL LINK VOLUMES		341	379	720	2317	3	2320	169	151	320	4	2136	2140
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		383	427	810	2569	1	2570	169	151	320	5	2375	2380
2040	TURN SUMMARY	310	350	660	2410	0	2410	360	330	690	0	2400	2400

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD-FORCED AND BALANCED
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	WB SR 90 at SW 4 Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	13,480	15,610	1,060	20,000
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**0.9%**	**CGR**	**1.9%**	**CGR**	**0.9%**	**CGR**	**1.9%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
						1		**1**		**1**
		2013		13,480		15,610		1,060		20,000
NO. YEARS	7	2020	1.063	14,500	1.139	17,800	1.063	1,000	1.139	22,800
NO. YEARS	17	2030	1.161	15,500	1.372	21,400	1.161	1,000	1.372	27,400
NO. YEARS	27	2040	1.267	17,000	1.653	25,800	1.267	1,500	1.653	33,100

Percent Turns Calculated From Base Year AADTs:

JKTURNS	FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	13,480			15,610			1,060			20,000		
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
20,000	1,060	15,610	13,480	20,000	1,060	15,610	13,480	20,000	1,060	15,610	13,480
55%	3%	43%	39%	58%	3%	32%	27%	41%	4%	52%	45%
2020 2-WAY ADT	14,500			17,800			1,000			22,800	
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
22,800	1,000	17,800	14,500	22,800	1,000	17,800	14,500	22,800	1,000	17,800	14,500
55%	2%	43%	38%	60%	3%	32%	26%	41%	3%	53%	44%
2030 2-WAY ADT	15,500			21,400			1,000			27,400	
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
27,400	1,000	21,400	15,500	27,400	1,000	21,400	15,500	27,400	1,000	21,400	15,500
55%	2%	43%	35%	62%	2%	33%	24%	43%	3%	56%	41%
2040 2-WAY ADT	17,000			25,800			1,500			33,100	
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
33,100	1,500	25,800	17,000	33,100	1,500	25,800	17,000	33,100	1,500	25,800	17,000
55%	2%	43%	33%	64%	3%	34%	22%	44%	3%	58%	38%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	1,253			790			1,308			775			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	281	952	0	0	454	316	10	10	10	10	10	10	2,063
% TURNS:	23%	77%	0%	0%	59%	41%	33%	33%	33%	33%	33%	33%	
P.M.	2-Way Pk Hr Vol:	1,207			1,023			1,008			1,262			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	478	709	0	0	744	259	10	10	10	10	10	10	2,250
% TURNS:	40%	60%	0%	0%	74%	26%	33%	33%	33%	33%	33%	33%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	23%	77%	0%	0%	59%	41%	33%	33%	33%	33%	33%	33%
	2020	26%	70%	4%	4%	59%	37%	33%	33%	34%	30%	35%	34%
	2030	27%	68%	5%	4%	59%	36%	33%	32%	34%	29%	36%	34%
	2040	28%	65%	7%	5%	60%	35%	33%	32%	35%	28%	37%	34%
P.M.													
	2013	40%	60%	0%	0%	74%	26%	33%	33%	33%	33%	33%	33%
	2020	42%	54%	4%	4%	73%	24%	33%	33%	34%	30%	35%	34%
	2030	42%	53%	5%	4%	73%	23%	33%	32%	34%	29%	36%	34%
	2040	43%	50%	7%	5%	73%	22%	33%	32%	35%	28%	37%	34%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: WB SR 90 at SW 4 Ave.
PREPARED BY: NC
FILE: BUILD-FORCED AND BALANCED

DATE: 12/30/2014
NOTES:

0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	13,480	15,610	1,060	20,000
24 HR EST. AADT	2020	14,500	17,800	1,000	22,800
24 HR EST. AADT	2030	15,500	21,400	1,000	27,400
24 HR EST. AADT	2040	17,000	25,800	1,500	33,100

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	99.0%	99.0%	99.8%	99.8%	1.0%	1.0%	0.2%	0.2%
2020	Approach D30 Factor	99.0%	99.0%	99.8%	99.8%	1.0%	1.0%	0.2%	0.2%
2030	Approach D30 Factor	99.0%	99.0%	99.8%	99.8%	1.0%	1.0%	0.2%	0.2%
2040	Approach D30 Factor	99.0%	99.0%	99.8%	99.8%	1.0%	1.0%	0.2%	0.2%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	350	1,100	0	0	600	270	0	0	0	0	0	0
2030	EST. TURNS												
2040	EST. TURNS	420	1,310	0	0	880	390	0	0	0	0	0	0
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	350	740	0	0	1430	290	0	0	0	0	0	0
2030	EST. TURNS												
2040	EST. TURNS	420	880	0	0	2080	430	0	0	0	0	0	0

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		1201	9	1210	1402	-2	1400	1	99	100	4	1796	1800
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		1292	18	1310	1599	1	1600	1	89	90	4	2046	2050
2020	TURN SUMMARY	1450	0	1450	870	0	870	0	1370	1370	0	950	950
CONTROL LINK VOLUMES		1381	19	1400	1922	8	1930	1	89	90	5	2465	2470
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		1515	15	1530	2317	3	2320	1	139	140	6	2974	2980
2040	TURN SUMMARY	1730	0	1730	1270	0	1270	0	1700	1700	0	1300	1300
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		1201	9	1210	1402	-2	1400	1	99	100	4	1796	1800
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		1292	18	1310	1599	1	1600	1	89	90	4	2046	2050
2020	TURN SUMMARY	1090	0	1090	1720	0	1720	0	1030	1030	0	1780	1780
CONTROL LINK VOLUMES		1381	19	1400	1922	8	1930	1	89	90	5	2465	2470
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		1515	15	1530	2317	3	2320	1	139	140	6	2974	2980
2040	TURN SUMMARY	1300	0	1300	2510	0	2510	0	1310	1310	0	2500	2500

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD-FORCED AND BALANCED
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	WB SR 90 at SW 3 Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	2,500	13,120	2,350	15,610
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**0.9%**	**CGR**	**1.9%**	**CGR**	**0.9%**	**CGR**	**1.9%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
			1		**1**		**1**		**1**	
		2013		2,500		13,120		2,350		15,610
NO. YEARS	7	2020	1.063	2,500	1.139	14,900	1.063	2,500	1.139	17,800
NO. YEARS	17	2030	1.161	3,000	1.372	18,000	1.161	2,500	1.372	21,400
NO. YEARS	27	2040	1.267	3,000	1.653	21,700	1.267	3,000	1.653	25,800

Percent Turns Calculated From Base Year AADTs:

JKTURNS	FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT		2,500			13,120			2,350			15,610	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	15,610	2,350	13,120	2,500	15,610	2,350	13,120	2,500	15,610	2,350	13,120	2,500
	50%	8%	42%	12%	76%	11%	42%	8%	50%	13%	73%	14%
2020 2-WAY ADT		2,500			14,900			2,500			17,800	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	17,800	2,500	14,900	2,500	17,800	2,500	14,900	2,500	17,800	2,500	14,900	2,500
	51%	7%	42%	11%	78%	11%	42%	7%	51%	13%	75%	13%
2030 2-WAY ADT		3,000			18,000			2,500			21,400	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	21,400	2,500	18,000	3,000	21,400	2,500	18,000	3,000	21,400	2,500	18,000	3,000
	51%	6%	43%	11%	80%	9%	42%	7%	50%	11%	77%	13%
2040 2-WAY ADT		3,000			21,700			3,000			25,800	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	25,800	3,000	21,700	3,000	25,800	3,000	21,700	3,000	25,800	3,000	21,700	3,000
	51%	6%	43%	9%	81%	9%	43%	6%	51%	11%	78%	11%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	553			1,267			590			1,256			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	100	100	100	81	762	224	0	72	94	100	100	100	1,833
% TURNS:	33%	33%	33%	8%	71%	21%	0%	43%	57%	33%	33%	33%	
P.M.	2-Way Pk Hr Vol:	720			1,622			744			1,514			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	100	100	100	164	992	266	0	156	122	100	100	100	2,300
% TURNS:	33%	33%	33%	12%	70%	19%	0%	56%	44%	33%	33%	33%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	33%	33%	33%	8%	71%	21%	0%	43%	57%	33%	33%	33%
	2020	35%	31%	34%	8%	72%	20%	4%	40%	56%	31%	37%	31%
	2030	36%	30%	35%	8%	72%	20%	5%	39%	56%	30%	39%	31%
	2040	36%	29%	35%	8%	73%	19%	7%	37%	56%	30%	41%	30%
P.M.													
	2013	33%	33%	33%	12%	70%	19%	0%	56%	44%	33%	33%	33%
	2020	35%	31%	34%	11%	71%	18%	4%	51%	45%	31%	37%	31%
	2030	36%	30%	35%	11%	71%	18%	5%	50%	45%	30%	39%	31%
	2040	36%	29%	35%	11%	72%	17%	7%	48%	45%	30%	41%	30%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: WB SR 90 at SW 3 Ave.
PREPARED BY: NC
FILE: BUILD-FORCED AND BALANCED

DATE: 12/30/2014
NOTES:

0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	2,500	13,120	2,350	15,610
24 HR EST. AADT	2020	2,500	14,900	2,500	17,800
24 HR EST. AADT	2030	3,000	18,000	2,500	21,400
24 HR EST. AADT	2040	3,000	21,700	3,000	25,800

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	54.2%	41.7%	99.8%	99.8%	28.1%	37.4%	0.2%	0.2%
2020	Approach D30 Factor	54.2%	41.7%	99.8%	99.8%	28.1%	37.4%	0.2%	0.2%
2030	Approach D30 Factor	54.2%	41.7%	99.8%	99.8%	28.1%	37.4%	0.2%	0.2%
2040	Approach D30 Factor	54.2%	41.7%	99.8%	99.8%	28.1%	37.4%	0.2%	0.2%

A.M. DESIGN HR. TURNS		NORTH LEG RIGHT	NORTH LEG THRU	NORTH LEG LEFT	EAST LEG RIGHT	EAST LEG THRU	EAST LEG LEFT	SOUTH LEG RIGHT	SOUTH LEG THRU	SOUTH LEG LEFT	WEST LEG RIGHT	WEST LEG THRU	WEST LEG LEFT
2013	EST. TURNS												
2020	EST. TURNS	0	0	0	130	810	150	0	250	100	0	0	0
2030	EST. TURNS												
2040	EST. TURNS	0	0	0	180	1180	180	0	290	120	0	0	0
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	0	0	0	360	1730	250	0	400	140	0	0	0
2030	EST. TURNS												
2040	EST. TURNS	0	0	0	530	2510	320	0	520	170	0	0	0

LINK VOLUME CHECK

DESIGN HOUR A.M.:		NORTH LEG FROM	NORTH LEG TO	NORTH LEG LINK	EAST LEG FROM	EAST LEG TO	EAST LEG LINK	SOUTH LEG FROM	SOUTH LEG TO	SOUTH LEG LINK	WEST LEG FROM	WEST LEG TO	WEST LEG LINK
CONTROL LINK VOLUMES		122	108	230	1178	2	1180	60	150	210	3	1397	1400
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		122	108	230	1338	2	1340	63	167	230	3	1597	1600
2020	TURN SUMMARY	0	380	380	1090	0	1090	350	150	500	0	910	910
CONTROL LINK VOLUMES		146	124	270	1617	3	1620	63	167	230	4	1926	1930
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		146	124	270	1949	1	1950	76	194	270	5	2315	2320
2040	TURN SUMMARY	0	470	470	1540	0	1540	410	180	590	0	1300	1300

DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		94	136	230	1178	2	1180	79	131	210	3	1397	1400
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		94	136	230	1338	2	1340	84	146	230	3	1597	1600
2020	TURN SUMMARY	0	760	760	2340	0	2340	540	250	790	0	1870	1870
CONTROL LINK VOLUMES		113	157	270	1617	3	1620	84	146	230	4	1926	1930
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		113	157	270	1949	1	1950	101	169	270	5	2315	2320
2040	TURN SUMMARY	0	1050	1050	3360	0	3360	690	320	1010	0	2680	2680

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD-FORCED AND BALANCED
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	WB SR 90 at SW 2 Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	17,720	29,850	18,590	13,120
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**0.9%**	**CGR**	**1.9%**	**CGR**	**0.9%**	**CGR**	**1.9%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
			1		**1**		**1**		**1**	
		2013		17,720		29,850		18,590		13,120
NO. YEARS	7	2020	1.063	19,000	1.139	34,000	1.063	20,000	1.139	14,900
NO. YEARS	17	2030	1.161	20,500	1.372	41,000	1.161	21,500	1.372	18,000
NO. YEARS	27	2040	1.267	22,500	1.653	49,400	1.267	23,500	1.653	21,700

Percent Turns Calculated From Base Year AADTs:

JKTURNS	FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	17,720			29,850			18,590			13,120		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	13,120	18,590	29,850	17,720	13,120	18,590	29,850	17,720	13,120	18,590	29,850	17,720
	21%	30%	48%	36%	27%	38%	49%	29%	22%	28%	45%	27%
2020 2-WAY ADT	19,000			34,000			20,000			14,900		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	14,900	20,000	34,000	19,000	14,900	20,000	34,000	19,000	14,900	20,000	34,000	19,000
	22%	29%	49%	35%	28%	37%	50%	28%	22%	27%	47%	26%
2030 2-WAY ADT	20,500			41,000			21,500			18,000		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	18,000	21,500	41,000	20,500	18,000	21,500	41,000	20,500	18,000	21,500	41,000	20,500
	22%	27%	51%	34%	30%	36%	52%	26%	23%	26%	49%	25%
2040 2-WAY ADT	22,500			49,400			23,500			21,700		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	21,700	23,500	49,400	22,500	21,700	23,500	49,400	22,500	21,700	23,500	49,400	22,500
	23%	25%	52%	33%	32%	35%	53%	24%	23%	25%	52%	24%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	1,038			858			1,195			995			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	85	214	0	106	655	96	0	632	252	1	1	1	2,043
% TURNS:	28%	72%	0%	12%	76%	11%	0%	71%	29%	33%	33%	33%	
P.M.	2-Way Pk Hr Vol:	986			1,319			1,062			1,583			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	179	264	0	84	1,148	86	0	458	253	1	1	1	2,475
% TURNS:	40%	60%	0%	6%	87%	7%	0%	64%	36%	33%	33%	33%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	28%	72%	0%	12%	76%	11%	0%	71%	29%	33%	33%	33%
	2020	28%	67%	5%	15%	72%	14%	5%	67%	28%	33%	35%	33%
	2030	28%	66%	6%	15%	71%	14%	6%	66%	28%	32%	35%	32%
	2040	28%	64%	9%	16%	69%	15%	9%	64%	28%	32%	36%	32%
P.M.													
	2013	40%	60%	0%	6%	87%	7%	0%	64%	36%	33%	33%	33%
	2020	39%	57%	5%	9%	81%	10%	5%	61%	34%	33%	35%	33%
	2030	38%	55%	6%	10%	80%	10%	6%	60%	34%	32%	35%	32%
	2040	37%	54%	9%	11%	78%	11%	9%	58%	34%	32%	36%	32%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: WB SR 90 at SW 2 Ave.
PREPARED BY: NC
FILE: BUILD-FORCED AND BALANCED

DATE: 12/30/2014
NOTES:

0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	17,720	29,850	18,590	13,120
24 HR EST. AADT	2020	19,000	34,000	20,000	14,900
24 HR EST. AADT	2030	20,500	41,000	21,500	18,000
24 HR EST. AADT	2040	22,500	49,400	23,500	21,700

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	28.8%	44.9%	99.9%	99.9%	74.0%	66.9%	0.1%	0.1%
2020	Approach D30 Factor	28.8%	44.9%	99.9%	99.9%	74.0%	66.9%	0.1%	0.1%
2030	Approach D30 Factor	28.8%	44.9%	99.9%	99.9%	74.0%	66.9%	0.1%	0.1%
2040	Approach D30 Factor	28.8%	44.9%	99.9%	99.9%	74.0%	66.9%	0.1%	0.1%

A.M. DESIGN HR. TURNS		NORTH LEG RIGHT	NORTH LEG THRU	NORTH LEG LEFT	EAST LEG RIGHT	EAST LEG THRU	EAST LEG LEFT	SOUTH LEG RIGHT	SOUTH LEG THRU	SOUTH LEG LEFT	WEST LEG RIGHT	WEST LEG THRU	WEST LEG LEFT
2013	EST. TURNS												
2020	EST. TURNS	150	240	0	130	1140	120	0	950	350	0	0	0
2030	EST. TURNS												
2040	EST. TURNS	180	270	0	190	1700	170	0	1130	420	0	0	0
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	150	430	0	120	2620	130	0	950	380	0	0	0
2030	EST. TURNS												
2040	EST. TURNS	180	510	0	180	3800	190	0	1130	450	0	0	0

LINK VOLUME CHECK

		NORTH LEG FROM	NORTH LEG TO	NORTH LEG LINK	EAST LEG FROM	EAST LEG TO	EAST LEG LINK	SOUTH LEG FROM	SOUTH LEG TO	SOUTH LEG LINK	WEST LEG FROM	WEST LEG TO	WEST LEG LINK
DESIGN HOUR A.M.:													
CONTROL LINK VOLUMES		459	1131	1590	2683	7	2690	1238	432	1670	1	1179	1180
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		493	1217	1710	3056	4	3060	1332	468	1800	1	1339	1340
2020	TURN SUMMARY	390	1080	1470	1390	0	1390	1300	360	1660	0	1640	1640
CONTROL LINK VOLUMES		531	1319	1850	3686	4	3690	1431	509	1940	2	1618	1620
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		583	1447	2030	4441	9	4450	1565	555	2120	2	1948	1950
2040	TURN SUMMARY	450	1320	1770	2060	0	2060	1550	440	1990	0	2300	2300
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		717	873	1590	2684	6	2690	1120	550	1670	1	1179	1180
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		768	942	1710	3058	2	3060	1205	595	1800	1	1339	1340
2020	TURN SUMMARY	580	1070	1650	2870	0	2870	1330	560	1890	0	3150	3150
CONTROL LINK VOLUMES		829	1021	1850	3687	3	3690	1295	645	1940	2	1618	1620
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		910	1120	2030	4443	7	4450	1416	704	2120	2	1948	1950
2040	TURN SUMMARY	690	1310	2000	4170	0	4170	1580	700	2280	0	4430	4430

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD-FORCED AND BALANCED
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	WB SR 90 at SW 1 Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	3,240	29,850	4,790	29,850
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**0.9%**	**CGR**	**1.9%**	**CGR**	**0.9%**	**CGR**	**1.9%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

				1		**1**		**1**		**1**
		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
		2013		3,240		29,850		4,790		29,850
NO. YEARS	7	2020	1.063	3,500	1.139	34,000	1.063	5,000	1.139	34,000
NO. YEARS	17	2030	1.161	4,000	1.372	41,000	1.161	5,500	1.372	41,000
NO. YEARS	27	2040	1.267	4,000	1.653	49,400	1.267	6,000	1.653	49,400

Percent Turns Calculated From Base Year AADTs:

JKTURNS	FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT		3,240			29,850			4,790			29,850	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	29,850	4,790	29,850	3,240	29,850	4,790	29,850	3,240	29,850	4,790	29,850	3,240
	46%	7%	46%	9%	79%	13%	47%	5%	47%	13%	79%	9%
2020 2-WAY ADT		3,500			34,000			5,000			34,000	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	34,000	5,000	34,000	3,500	34,000	5,000	34,000	3,500	34,000	5,000	34,000	3,500
	47%	7%	47%	8%	80%	12%	48%	5%	48%	12%	80%	8%
2030 2-WAY ADT		4,000			41,000			5,500			41,000	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	41,000	5,500	41,000	4,000	41,000	5,500	41,000	4,000	41,000	5,500	41,000	4,000
	47%	6%	47%	8%	81%	11%	48%	5%	48%	11%	81%	8%
2040 2-WAY ADT		4,000			49,400			6,000			49,400	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	49,400	6,000	49,400	4,000	49,400	6,000	49,400	4,000	49,400	6,000	49,400	4,000
	47%	6%	47%	7%	83%	10%	48%	4%	48%	10%	83%	7%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	917			911			741			1,091			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	304	611	0	0	783	126	1	1	1	1	1	1	1,830
% TURNS:	33%	67%	0%	0%	86%	14%	33%	33%	33%	33%	33%	33%	
P.M.	2-Way Pk Hr Vol:	934			1,383			853			1,468			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	286	646	0	0	1,178	203	1	1	1	1	1	1	2,319
% TURNS:	31%	69%	0%	0%	85%	15%	33%	33%	33%	33%	33%	33%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		SB			WB			NB			EB	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
A.M.												
2013	33%	67%	0%	0%	86%	14%	33%	33%	33%	33%	33%	33%
2020	35%	61%	5%	1%	86%	14%	35%	30%	35%	31%	38%	31%
2030	35%	59%	6%	1%	86%	13%	35%	30%	35%	31%	39%	30%
2040	36%	57%	8%	1%	86%	13%	36%	28%	36%	29%	42%	29%
P.M.												
2013	31%	69%	0%	0%	85%	15%	33%	33%	33%	33%	33%	33%
2020	32%	63%	5%	1%	85%	14%	35%	30%	35%	31%	38%	31%
2030	33%	61%	6%	1%	85%	14%	35%	30%	35%	31%	39%	30%
2040	33%	59%	8%	1%	85%	14%	36%	28%	36%	29%	42%	29%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: WB SR 90 at SW 1 Ave.
PREPARED BY: NC
FILE: BUILD-FORCED AND BALANCED

DATE: 12/30/2014
NOTES:

0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	3,240	29,850	4,790	29,850
24 HR EST. AADT	2020	3,500	34,000	5,000	34,000
24 HR EST. AADT	2030	4,000	41,000	5,500	41,000
24 HR EST. AADT	2040	4,000	49,400	6,000	49,400

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	99.8%	99.8%	99.8%	99.8%	0.4%	0.4%	0.2%	0.2%
2020	Approach D30 Factor	99.8%	99.8%	99.8%	99.8%	0.4%	0.4%	0.2%	0.2%
2030	Approach D30 Factor	99.8%	99.8%	99.8%	99.8%	0.4%	0.4%	0.2%	0.2%
2040	Approach D30 Factor	99.8%	99.8%	99.8%	99.8%	0.4%	0.4%	0.2%	0.2%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	400	970	0	0	1140	240	0	0	0	0	0	0
2030	EST. TURNS												
2040	EST. TURNS	480	1,150	0	0	1500	350	0	0	0	0	0	0
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	390	1,050	0	0	2350	430	0	0	0	0	0	0
2030	EST. TURNS												
2040	EST. TURNS	460	1,250	0	0	3320	620	0	0	0	0	0	0

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		291	-1	290	2681	9	2690	2	428	430	5	2685	2690
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		314	6	320	3054	6	3060	2	448	450	6	3054	3060
2020	TURN SUMMARY	1370	0	1370	1380	0	1380	0	1210	1210	0	1540	1540
CONTROL LINK VOLUMES		359	1	360	3683	7	3690	2	498	500	7	3683	3690
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		359	1	360	4437	13	4450	2	538	540	9	4441	4450
2040	TURN SUMMARY	1630	0	1630	1850	0	1850	0	1500	1500	0	1980	1980
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		291	-1	290	2681	9	2690	2	428	430	5	2685	2690
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		314	6	320	3054	6	3060	2	448	450	6	3054	3060
2020	TURN SUMMARY	1440	0	1440	2780	0	2780	0	1480	1480	0	2740	2740
CONTROL LINK VOLUMES		359	1	360	3683	7	3690	2	498	500	7	3683	3690
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		359	1	360	4437	13	4450	2	538	540	9	4441	4450
2040	TURN SUMMARY	1710	0	1710	3940	0	3940	0	1870	1870	0	3780	3780

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD-FORCED AND BALANCED
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	WB SR 90 at S. Miami Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	5,380	24,540	11,080	29,850
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**0.9%**	**CGR**	**1.9%**	**CGR**	**0.9%**	**CGR**	**1.9%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

				1		**1**		**1**		**1**
		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
		2013		5,380		24,540		11,080		29,850
NO. YEARS	7	2020	1.063	5,500	1.139	28,000	1.063	12,000	1.139	34,000
NO. YEARS	17	2030	1.161	6,000	1.372	33,700	1.161	13,000	1.372	41,000
NO. YEARS	27	2040	1.267	7,000	1.653	40,600	1.267	14,000	1.653	49,400

Percent Turns Calculated From Base Year AADTs:

JKTURNS	FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	5,380			24,540			11,080			29,850		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	29,850	11,080	24,540	5,380	29,850	11,080	24,540	5,380	29,850	11,080	24,540	5,380
	46%	17%	37%	12%	64%	24%	41%	9%	50%	27%	60%	13%
2020 2-WAY ADT	5,500			28,000			12,000			34,000		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	34,000	12,000	28,000	5,500	34,000	12,000	28,000	5,500	34,000	12,000	28,000	5,500
	46%	16%	38%	11%	66%	23%	41%	8%	50%	26%	62%	12%
2030 2-WAY ADT	6,000			33,700			13,000			41,000		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	41,000	13,000	33,700	6,000	41,000	13,000	33,700	6,000	41,000	13,000	33,700	6,000
	47%	15%	38%	10%	68%	22%	42%	7%	51%	25%	64%	11%
2040 2-WAY ADT	7,000			40,600			14,000			49,400		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	49,400	14,000	40,600	7,000	49,400	14,000	40,600	7,000	49,400	14,000	40,600	7,000
	48%	13%	39%	10%	70%	20%	42%	7%	51%	23%	66%	11%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	609			736			816			947			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	1	1	1	74	660	0	0	531	283	1	1	1	1,554
% TURNS:	33%	33%	33%	10%	90%	0%	0%	65%	35%	33%	33%	33%	
P.M.	2-Way Pk Hr Vol:	626			1,126			933			1,437			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	1	1	1	113	1,011	0	0	509	422	1	1	1	2,061
% TURNS:	33%	33%	33%	10%	90%	0%	0%	55%	45%	33%	33%	33%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	33%	33%	33%	10%	90%	0%	0%	65%	35%	33%	33%	33%
	2020	35%	32%	34%	10%	88%	2%	4%	60%	36%	33%	36%	31%
	2030	35%	31%	34%	10%	87%	3%	5%	58%	37%	32%	37%	31%
	2040	36%	30%	34%	10%	87%	3%	7%	56%	37%	32%	39%	30%
P.M.													
	2013	33%	33%	33%	10%	90%	0%	0%	55%	45%	33%	33%	33%
	2020	35%	32%	34%	10%	88%	2%	4%	50%	46%	33%	36%	31%
	2030	35%	31%	34%	10%	87%	3%	5%	49%	46%	32%	37%	31%
	2040	36%	30%	34%	10%	87%	3%	7%	47%	46%	32%	39%	30%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: WB SR 90 at S. Miami Ave.
PREPARED BY: NC
FILE: BUILD-FORCED AND BALANCED

DATE: 12/30/2014
NOTES:

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ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	5,380	24,540	11,080	29,850
24 HR EST. AADT	2020	5,500	28,000	12,000	34,000
24 HR EST. AADT	2030	6,000	33,700	13,000	41,000
24 HR EST. AADT	2040	7,000	40,600	14,000	49,400

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	0.5%	0.5%	99.8%	99.8%	99.8%	99.8%	0.2%	0.2%
2020	Approach D30 Factor	0.5%	0.5%	99.8%	99.8%	99.8%	99.8%	0.2%	0.2%
2030	Approach D30 Factor	0.5%	0.5%	99.8%	99.8%	99.8%	99.8%	0.2%	0.2%
2040	Approach D30 Factor	0.5%	0.5%	99.8%	99.8%	99.8%	99.8%	0.2%	0.2%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	0	0	0	210	890	0	0	710	420	0	0	0
2030	EST. TURNS												
2040	EST. TURNS	0	0	0	300	1180	0	0	850	520	0	0	0
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	0	0	0	450	1850	0	0	1150	750	0	0	0
2030	EST. TURNS												
2040	EST. TURNS	0	0	0	650	2680	0	0	1370	890	0	0	0

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		2	478	480	2204	6	2210	995	5	1000	5	2685	2690
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		2	498	500	2515	5	2520	1077	3	1080	6	3054	3060
2020	TURN SUMMARY	0	920	920	1100	0	1100	1130	0	1130	0	1310	1310
CONTROL LINK VOLUMES		3	537	540	3027	3	3030	1167	3	1170	7	3683	3690
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		3	627	630	3647	3	3650	1257	3	1260	9	4441	4450
2040	TURN SUMMARY	0	1150	1150	1480	0	1480	1370	0	1370	0	1700	1700
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		2	478	480	2204	6	2210	995	5	1000	5	2685	2690
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		2	498	500	2515	5	2520	1078	2	1080	6	3054	3060
2020	TURN SUMMARY	0	1600	1600	2300	0	2300	1900	0	1900	0	2600	2600
CONTROL LINK VOLUMES		3	537	540	3027	3	3030	1167	3	1170	7	3683	3690
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		3	627	630	3647	3	3650	1257	3	1260	9	4441	4450
2040	TURN SUMMARY	0	2020	2020	3330	0	3330	2260	0	2260	0	3570	3570

Note: Boxed number indicates manual adjustment.

TMTOOL INPUT SHEET

Project Description:

SECTION NO:	Miami-Dade	PREPARED BY:	NC
FM NO.:		FILE:	BUILD-FORCED AND BALANCED
PROJECT LIMITS:	SR 90	DATE:	12/30/2014
DESIGN YEAR:	2040		
INTERSECTION:	WB SR 90 at Brickell Ave.		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
Actual AADT:	2010				
Actual AADT:	2011				
Actual AADT:	2012				
Actual AADT:	2013	46,080	10,830	53,340	24,540
SERPM Volume:	2035				

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 to 2035 Model GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zonal Data GR =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Growth Rate:	**0.9%**	**CGR**	**1.9%**	**CGR**	**0.9%**	**CGR**	**1.9%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
		2013		46,080		10,830		53,340		24,540
NO. YEARS	7	2020	1.063	49,000	1.139	12,300	1.063	56,500	1.139	28,000
NO. YEARS	17	2030	1.161	53,500	1.372	14,900	1.161	62,000	1.372	33,700
NO. YEARS	27	2040	1.267	58,500	1.653	17,900	1.267	67,500	1.653	40,600

Percent Turns Calculated From Base Year AADTs:

JKTURNS		FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG	
2013 2-WAY ADT		46,080			10,830			53,340			24,540	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	24,540	53,340	10,830	46,080	24,540	53,340	10,830	46,080	24,540	53,340	10,830	46,080
	28%	60%	12%	37%	20%	43%	13%	57%	30%	48%	10%	42%
2020 2-WAY ADT		49,000			12,300			56,500			28,000	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	28,000	56,500	12,300	49,000	28,000	56,500	12,300	49,000	28,000	56,500	12,300	49,000
	29%	58%	13%	37%	21%	42%	14%	55%	31%	48%	10%	42%
2030 2-WAY ADT		53,500			14,900			62,000			33,700	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	33,700	62,000	14,900	53,500	33,700	62,000	14,900	53,500	33,700	62,000	14,900	53,500
	30%	56%	13%	36%	23%	42%	15%	52%	33%	48%	11%	41%
2040 2-WAY ADT		58,500			17,900			67,500			40,600	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	40,600	67,500	17,900	58,500	40,600	67,500	17,900	58,500	40,600	67,500	17,900	58,500
	32%	54%	14%	35%	24%	41%	15%	50%	35%	47%	12%	41%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	2,873			550			3,087			578			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:00 - 8:00	166	1,149	205	44	40	4	256	1,308	369	1	1	1	3,544
% TURNS:	11%	76%	13%	50%	45%	5%	13%	68%	19%	33%	33%	33%	
P.M.	2-Way Pk Hr Vol:	2,962			433			3,069			1,118			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:15 - 6:15	366	1,277	23	100	231	67	11	1,195	518	1	1	1	3,791
% TURNS:	22%	77%	1%	25%	58%	17%	1%	69%	30%	33%	33%	33%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		RIGHT	SB THRU	LEFT	RIGHT	WB THRU	LEFT	RIGHT	NB THRU	LEFT	RIGHT	EB THRU	LEFT
A.M.													
	2013	11%	76%	13%	50%	45%	5%	13%	68%	19%	33%	33%	33%
	2020	13%	74%	13%	49%	43%	8%	13%	66%	20%	35%	31%	34%
	2030	13%	73%	13%	48%	43%	9%	13%	66%	21%	35%	31%	34%
	2040	14%	72%	14%	48%	42%	11%	14%	65%	22%	36%	30%	35%
P.M.													
	2013	22%	77%	1%	25%	58%	17%	1%	69%	30%	33%	33%	33%
	2020	23%	75%	3%	26%	54%	19%	2%	68%	30%	35%	31%	34%
	2030	23%	74%	3%	26%	54%	20%	2%	67%	30%	35%	31%	34%
	2040	24%	73%	4%	27%	52%	21%	3%	66%	31%	36%	30%	35%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: Miami-Dade
FM NO.: 0
PROJECT LIMITS: SR 90
DESIGN YEAR: 2040
INTERSECTION: WB SR 90 at Brickell Ave.
PREPARED BY: NC
FILE: BUILD-FORCED AND BALANCED

DATE: 12/30/2014
NOTES:

0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	46,080	10,830	53,340	24,540
24 HR EST. AADT	2020	49,000	12,300	56,500	28,000
24 HR EST. AADT	2030	53,500	14,900	62,000	33,700
24 HR EST. AADT	2040	58,500	17,900	67,500	40,600

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2020	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2030	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
2040	Approach K30 factor	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	52.9%	56.2%	99.8%	99.8%	62.6%	56.2%	0.2%	0.2%
2020	Approach D30 Factor	52.9%	56.2%	99.8%	99.8%	62.6%	56.2%	0.2%	0.2%
2030	Approach D30 Factor	52.9%	56.2%	99.8%	99.8%	62.6%	56.2%	0.2%	0.2%
2040	Approach D30 Factor	52.9%	56.2%	99.8%	99.8%	62.6%	56.2%	0.2%	0.2%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS												
2020	EST. TURNS	550	1,250	220	50	50	10	270	1,700	500	0	0	0
2030	EST. TURNS												
2040	EST. TURNS	680	1,480	260	70	70	10	320	2200	600	0	0	0
P.M. DESIGN HR. TURNS													
2013	EST. TURNS												
2020	EST. TURNS	1,000	1,580	20	110	380	200	0	1500	770	0	0	0
2030	EST. TURNS												
2040	EST. TURNS	1,500	1,900	30	170	550	290	0	1800	980	0	0	0

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		2194	1956	4150	973	-3	970	3006	1794	4800	4	2206	2210
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		2333	2077	4410	1105	5	1110	3184	1906	5090	5	2515	2520
2020	TURN SUMMARY	2020	1750	3770	110	490	600	2470	1260	3730	0	1100	1100
CONTROL LINK VOLUMES		2547	2273	4820	1338	2	1340	3494	2086	5580	6	3024	3030
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		2786	2484	5270	1608	2	1610	3804	2276	6080	7	3643	3650
2040	TURN SUMMARY	2420	2270	4690	150	580	730	3120	1490	4610	0	1350	1350
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		2333	1817	4150	973	-3	970	2697	2103	4800	4	2206	2210
2013	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		2480	1930	4410	1105	5	1110	2856	2234	5090	5	2515	2520
2020	TURN SUMMARY	2600	1610	4210	690	20	710	2270	1780	4050	0	2150	2150
CONTROL LINK VOLUMES		2708	2112	4820	1338	2	1340	3135	2445	5580	6	3024	3030
2030	TURN SUMMARY	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL LINK VOLUMES		2961	2309	5270	1608	2	1610	3413	2667	6080	7	3643	3650
2040	TURN SUMMARY	3430	1970	5400	1010	30	1040	2780	2190	4970	0	3030	3030

Note: Boxed number indicates manual adjustment.

Appendix D

PART 1: MIAMI-DADE COUNTY ADOPTED LOS STANDARDS

SUMMARY
MIAMI-DADE COUNTY
TRAFFIC CIRCULATION LEVEL OF SERVICE STANDARDS

Peak Period* LOS Standards
Non-SIS Roadways

Location	Transit Availability		
	No Transit Service	20 Min. Headway Transit Service Within 1/2 Mile	Extraordinary Transit Service (Commuter Rail, Metrorail, People Mover, Bus Rapid Transit, Express Bus, or Enhanced Bus Service)
Outside UDB	LOS C-State Minor Arterials LOS C-County Roads and State Principal Arterials		
Between UIA and UDB	LOS D (90% of Capacity); or LOS E (100% Capacity) on SUMAs	LOS E (100% of Capacity)	120% of Capacity
Inside UIA	LOS E (100% of Capacity)	120% of Capacity	150% of Capacity

SIS Roadways

SIS Facility	Location				
	Outside UDB	Inside UDB	Roadways Parallel to Exclusive Transit Facilities	Inside Transportation Concurrency Management Areas	Constrained or Backlogged Roadways
Limited Access Facilities	C	D [E]	D [E]	D [E]	Manage
Controlled Access Facilities	C	D	E	E	Manage

NOTES: LOS inside of [brackets] applies to general use lanes only when exclusive thru lanes exist.
SIS= Strategic Intermodal System
UIA= Urban Infill Area--Area east of, and including NW/SW 77 Avenue and SR 826 (Palmetto Expressway), and excluding the area north of SR 826 and west of I-95.
UDB=Urban Development Boundary
SUMA=State Urban Minor Arterial

*Peak-period means the average of the two highest consecutive hours of traffic volume during a weekday.

its minimum LOS standards for Florida Strategic Intermodal System (SIS) highway corridors in Miami-Dade County:

(a) Outside the UDB

1. Limited access State highways shall operate at LOS C or better;
2. Controlled access State highways shall operate at LOS C or better; and
3. Constrained or backlogged limited and controlled access state highways operating below LOS C, must be managed to not cause significant degradation.

(a) Inside the UDB

1. Limited access State highways shall operate at LOS D or better, except where exclusive through lanes exist, roadways may operate at LOS E.
2. Controlled access State highways shall operate at LOS D or better, except where such roadways are parallel to exclusive transit facilities or are located inside designated transportation concurrency management areas (TCMA's), roadways may operate at LOS E.
3. Constrained or backlogged limited and controlled access State highways operating below the foregoing minimums must be managed to not cause significant deterioration.

TC-1C. The County shall continue to maintain and enhance as necessary, a comprehensive traffic counting system for annually monitoring the level of service on, at a minimum, the County roadway system.

TC-1D. Issuance of all development orders for new development or significant expansions of existing development shall be contingent upon compliance with the Level of Service standards contained in Policy TC-1B, except as otherwise provided in the "Concurrency Management Program" section of the Capital Improvements Element.

TC-1E. The County shall, to the maximum extent feasible, improve the operating efficiency of the existing thoroughfare system and reduce peak hour congestion by encouraging the application of low-cost transportation system management techniques including, but not limited to, improved signal timing, and intersection signing, marking, channelization, and on-street parking restrictions.

NOTES: Constrained SIS facilities are roadways that FDOT has determined will not be expanded by the addition of two or more through lanes because of physical, environmental or policy constraints.

Backlogged SIS facilities are roadways operating below the minimum LOS standards, not constrained, and not programmed for addition of lanes in the first three years of FDOT's adopted work program or the five-year CIE.

For roadways outside the UDB significant degradation means an average annual daily traffic increase in two-way traffic volume of 5 percent, or a 5 percent reduction in operating speed for the peak direction in the 100th highest hour. For roadways inside the UDB, roadways parallel to exclusive transit facilities or roadways in transportation concurrency management areas, significant degradation means an average annual daily traffic increase in two-way traffic volume of 10 percent, or a 10 percent reduction in operating speed for the peak direction in the 100th highest hour.

its minimum LOS standards for Florida Strategic Intermodal System (SIS) highway corridors in Miami-Dade County:

(a) Outside the UDB

1. Limited access State highways shall operate at LOS C or better;
2. Controlled access State highways shall operate at LOS C or better; and
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1. Limited access State highways shall operate at LOS D or better, except where exclusive through lanes exist, roadways may operate at LOS E.
2. Controlled access State highways shall operate at LOS D or better, except where such roadways are parallel to exclusive transit facilities or are located inside designated transportation concurrency management areas (TCMA's), roadways may operate at LOS E.
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Appendix D

PART 2: SYNCHRO OUTPUT REPORTS

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	5	50	50	500	1700	270	220	1250	550
Number				7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				171.0	166.0	171.0	166.0	166.0	171.0	166.0	166.0	166.0
Lanes				0	2	0	2	3	0	1	2	1
Cap, veh/h				8	89	83	626	2944	463	264	1948	828
Arrive On Green				0.06	0.06	0.06	0.14	0.47	0.47	0.08	0.59	0.59
Sat Flow, veh/h				143	1511	1411	3067	4203	661	1581	3320	1411
Grp Volume(v), veh/h				58	0	53	526	1410	663	232	1316	579
Grp Sat Flow(s),veh/h/ln				1653	0	1411	1534	1660	1544	1581	1660	1411
Q Serve(g_s), s				3.6	0.0	3.9	17.7	33.3	33.8	6.1	28.7	30.4
Cycle Q Clear(g_c), s				3.6	0.0	3.9	17.7	33.3	33.8	6.1	28.7	30.4
Prop In Lane				0.09		1.00	1.00		0.43	1.00		1.00
Lane Grp Cap(c), veh/h				97	0	83	626	2326	1081	264	1948	828
V/C Ratio(X)				0.60	0.00	0.64	0.84	0.61	0.61	0.88	0.68	0.70
Avail Cap(c_a), veh/h				471	0	402	1162	2326	1081	420	1948	828
HCM Platoon Ratio				1.00	1.00	1.00	0.67	0.67	0.67	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.09	0.09	0.09	1.00	1.00	1.00
Uniform Delay (d), s/veh				48.5	0.0	48.6	43.9	17.2	17.4	19.2	14.9	15.3
Incr Delay (d2), s/veh				5.8	0.0	8.0	0.3	0.1	0.2	12.2	1.9	4.9
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				1.7	0.0	1.6	7.2	14.2	13.5	4.4	11.7	11.1
Lane Grp Delay (d), s/veh				54.3	0.0	56.6	44.2	17.3	17.6	31.4	16.8	20.2
Lane Grp LOS				D		E	D	B	B	C	B	C
Approach Vol, veh/h					111			2599			2127	
Approach Delay, s/veh					55.4			22.8			19.3	
Approach LOS					E			C			B	
Timer												
Assigned Phs					4		1	6		5	2	
Phs Duration (G+Y+Rc), s					12.9		24.6	80.2		12.5	68.2	
Change Period (Y+Rc), s					6.7		3.0	6.2		4.0	6.2	
Max Green Setting (Gmax), s					30.1		40.0	74.0		19.0	54.0	
Max Q Clear Time (g_c+I1), s					5.9		19.7	35.8		8.1	32.4	
Green Ext Time (p_c), s					0.6		1.9	35.8		0.5	20.8	
Intersection Summary												
HCM 2010 Ctrl Delay			22.0									
HCM 2010 LOS			C									
Notes												

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	0	890	210	420	710	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.2		4.2	4.2				
Lane Util. Factor					0.91		0.91	0.91				
Frt					0.97		1.00	1.00				
Flt Protected					1.00		0.95	1.00				
Satd. Flow (prot)					4403		1435	3011				
Flt Permitted					1.00		0.95	1.00				
Satd. Flow (perm)					4403		1435	3011				
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	0	937	221	442	747	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	165	4	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	1158	0	220	800	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type					NA		Perm	NA				
Protected Phases					2			4				
Permitted Phases							4					
Actuated Green, G (s)					200.8		30.8	30.8				
Effective Green, g (s)					200.8		30.8	30.8				
Actuated g/C Ratio					0.84		0.13	0.13				
Clearance Time (s)					4.2		4.2	4.2				
Vehicle Extension (s)					3.0		3.0	3.0				
Lane Grp Cap (vph)					3683		184	386				
v/s Ratio Prot					c0.26							
v/s Ratio Perm							0.15	0.27				
v/c Ratio					0.31		1.20	2.07				
Uniform Delay, d1					4.3		104.6	104.6				
Progression Factor					1.00		0.65	0.80				
Incremental Delay, d2					0.2		114.6	487.3				
Delay (s)					4.6		182.1	571.4				
Level of Service					A		F	F				
Approach Delay (s)		0.0			4.6			445.3			0.0	
Approach LOS		A			A			F			A	

Intersection Summary			
HCM 2000 Control Delay	227.9	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	240.0	Sum of lost time (s)	8.4
Intersection Capacity Utilization	120.9%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis
2240: SW 1 Ave & SW 7 St

3 Lanes Alternative 4
Timing Plan: 2020 AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	240	1140	0	0	0	0	0	970	400
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					5.8						4.6	4.6
Lane Util. Factor					0.91						0.91	0.91
Frt					1.00						0.99	0.85
Flt Protected					0.99						1.00	1.00
Satd. Flow (prot)					4493						3004	1284
Flt Permitted					0.99						1.00	1.00
Satd. Flow (perm)					4493						3004	1284
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	253	1200	0	0	0	0	0	1021	421
RTOR Reduction (vph)	0	0	0	0	26	0	0	0	0	0	2	17
Lane Group Flow (vph)	0	0	0	0	1427	0	0	0	0	0	1061	362
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type				Perm	NA						NA	Perm
Protected Phases					2						8	
Permitted Phases				2								8
Actuated Green, G (s)					57.9						51.7	51.7
Effective Green, g (s)					57.9						51.7	51.7
Actuated g/C Ratio					0.48						0.43	0.43
Clearance Time (s)					5.8						4.6	4.6
Vehicle Extension (s)					3.0						3.0	3.0
Lane Grp Cap (vph)					2167						1294	553
v/s Ratio Prot											c0.35	
v/s Ratio Perm					0.32							0.28
v/c Ratio					0.66						0.82	0.65
Uniform Delay, d1					23.6						30.0	27.1
Progression Factor					1.13						1.00	1.00
Incremental Delay, d2					1.3						4.2	2.8
Delay (s)					28.0						34.2	29.9
Level of Service					C						C	C
Approach Delay (s)		0.0			28.0			0.0			33.1	
Approach LOS		A			C			A			C	

Intersection Summary			
HCM 2000 Control Delay	30.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	10.4
Intersection Capacity Utilization	73.1%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	120	1140	130	350	950	0	0	240	150
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				171.0	166.0	171.0	166.0	166.0	0.0	0.0	166.0	171.0
Lanes				0	3	0	1	2	0	0	2	0
Cap, veh/h				168	1705	201	508	1644	0	0	537	323
Arrive On Green				0.14	0.14	0.14	0.39	0.99	0.00	0.00	0.28	0.28
Sat Flow, veh/h				395	4011	472	1581	3320	0	0	1943	1171
Grp Volume(v), veh/h				523	482	458	368	1000	0	0	215	196
Grp Sat Flow(s),veh/h/ln				1640	1660	1577	1581	1660	0	0	1660	1454
Q Serve(g_s), s				36.8	33.1	33.1	20.4	0.9	0.0	0.0	12.9	13.6
Cycle Q Clear(g_c), s				36.8	33.1	33.1	20.4	0.9	0.0	0.0	12.9	13.6
Prop In Lane				0.24		0.30	1.00		0.00	0.00		0.81
Lane Grp Cap(c), veh/h				697	706	670	508	1644	0	0	459	402
V/C Ratio(X)				0.75	0.68	0.68	0.72	0.61	0.00	0.00	0.47	0.49
Avail Cap(c_a), veh/h				697	706	670	636	1644	0	0	459	402
HCM Platoon Ratio				0.33	0.33	0.33	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.70	0.70	0.70	0.13	0.13	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				45.5	43.9	43.9	17.1	0.3	0.0	0.0	36.1	36.3
Incr Delay (d2), s/veh				5.2	3.7	3.9	0.4	0.2	0.0	0.0	3.4	4.2
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				17.3	15.6	14.9	6.2	0.2	0.0	0.0	5.9	5.5
Lane Grp Delay (d), s/veh				50.6	47.6	47.8	17.5	0.5	0.0	0.0	39.5	40.5
Lane Grp LOS				D	D	D	B	A			D	D
Approach Vol, veh/h					1463			1368			411	
Approach Delay, s/veh					48.8			5.1			40.0	
Approach LOS					D			A			D	

Timer												
Assigned Phs					2		7	4			8	
Phs Duration (G+Y+Rc), s					56.0		26.3	64.0			37.7	
Change Period (Y+Rc), s					5.0		3.0	4.6			4.6	
Max Green Setting (Gmax), s					51.0		33.0	59.4			23.4	
Max Q Clear Time (g_c+I1), s					38.8		22.4	2.9			15.6	
Green Ext Time (p_c), s					7.3		0.9	14.5			5.2	

Intersection Summary		
HCM 2010 Ctrl Delay		29.2
HCM 2010 LOS		C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	100	810	130	100	250	0	0	0	0
Number				5	2	12	7	4	14			
Initial Q (Qb), veh				0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00			
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow veh/h/ln				171.0	166.0	171.0	166.0	166.0	0.0			
Lanes				0	3	0	1	1	0			
Cap, veh/h				60	1648	264	60	466	0			
Arrive On Green				0.65	0.65	0.65	0.09	0.09	0.00			
Sat Flow, veh/h				0	2542	408	1581	1660	0			
Grp Volume(v), veh/h				105	506	484	105	263	0			
Grp Sat Flow(s),veh/h/ln				0	1511	1439	1581	1660	0			
Q Serve(g_s), s				0.0	21.3	21.4	0.0	18.2	0.0			
Cycle Q Clear(g_c), s				77.8	21.3	21.4	33.7	18.2	0.0			
Prop In Lane				1.00		0.28	1.00		0.00			
Lane Grp Cap(c), veh/h				60	979	933	60	466	0			
V/C Ratio(X)				1.75	0.52	0.52	1.75	0.56	0.00			
Avail Cap(c_a), veh/h				60	979	933	60	466	0			
HCM Platoon Ratio				1.00	1.00	1.00	0.33	0.33	1.00			
Upstream Filter(I)				1.00	1.00	1.00	0.09	0.09	0.00			
Uniform Delay (d), s/veh				60.0	11.2	11.2	71.3	47.4	0.0			
Incr Delay (d2), s/veh				397.0	1.9	2.1	343.7	0.4	0.0			
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0			
%ile Back of Q (50%), veh/ln				8.5	8.1	7.8	7.7	8.3	0.0			
Lane Grp Delay (d), s/veh				457.0	13.1	13.2	415.0	47.9	0.0			
Lane Grp LOS				F	B	B	F	D				
Approach Vol, veh/h					1095			368				
Approach Delay, s/veh					55.7			152.6				
Approach LOS					E			F				

Timer	
Assigned Phs	2 4
Phs Duration (G+Y+Rc), s	82.0 38.0
Change Period (Y+Rc), s	4.2 4.3
Max Green Setting (Gmax), s	77.8 33.7
Max Q Clear Time (g_c+I1), s	79.8 35.7
Green Ext Time (p_c), s	0.0 0.0

Intersection Summary	
HCM 2010 Ctrl Delay	80.1
HCM 2010 LOS	F

Notes

Movement	WBL	WBT	SBT	SBR	SWL	SWR
Lane Configurations						
Volume (vph)	270	600	300	10	800	350
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.5	6.5	7.0		7.0	7.0
Lane Util. Factor	0.91	0.91	1.00		0.97	0.91
Frt	1.00	1.00	1.00		0.99	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1449	3045	1669		3084	1297
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	1449	3045	1669		3084	1297
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	284	632	316	11	842	368
RTOR Reduction (vph)	65	65	1	0	0	0
Lane Group Flow (vph)	191	595	326	0	879	331
Turn Type	Perm	NA	NA		NA	Perm
Protected Phases		2	9		8	
Permitted Phases	2					8
Actuated Green, G (s)	41.5	41.5	18.6		39.4	39.4
Effective Green, g (s)	41.5	41.5	18.6		39.4	39.4
Actuated g/C Ratio	0.35	0.35	0.16		0.33	0.33
Clearance Time (s)	6.5	6.5	7.0		7.0	7.0
Vehicle Extension (s)	1.0	1.0	3.0		3.0	3.0
Lane Grp Cap (vph)	501	1053	258		1012	425
v/s Ratio Prot			c0.20		c0.29	
v/s Ratio Perm	0.13	0.20				0.26
v/c Ratio	0.38	0.56	1.26		0.87	0.78
Uniform Delay, d1	29.6	31.9	50.7		37.9	36.4
Progression Factor	0.29	0.43	1.00		1.00	1.00
Incremental Delay, d2	2.1	2.1	146.0		8.0	8.7
Delay (s)	10.6	15.9	196.7		45.9	45.1
Level of Service	B	B	F		D	D
Approach Delay (s)		14.4	196.7		45.7	
Approach LOS		B	F		D	

Intersection Summary			
HCM 2000 Control Delay	54.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	20.5
Intersection Capacity Utilization	83.2%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	100	720	80	70	300	0	0	270	110
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	186.3	190.0	190.0	186.3	0.0	0.0	193.7	190.0
Lanes				0	3	0	0	1	0	0	1	0
Cap, veh/h				300	2311	262	102	387	0	0	478	195
Arrive On Green				0.53	0.53	0.51	0.12	0.12	0.00	0.00	0.36	0.36
Sat Flow, veh/h				571	4401	500	156	1061	0	0	1308	534
Grp Volume(v), veh/h				337	311	298	390	0	0	0	0	400
Grp Sat Flow(s),veh/h/ln				1834	1863	1775	1217	0	0	0	0	1843
Q Serve(g_s), s				10.2	9.1	9.2	14.5	0.0	0.0	0.0	0.0	16.8
Cycle Q Clear(g_c), s				10.2	9.1	9.2	31.3	0.0	0.0	0.0	0.0	16.8
Prop In Lane				0.31		0.28	0.19		0.00	0.00		0.29
Lane Grp Cap(c), veh/h				963	978	932	489	0	0	0	0	673
V/C Ratio(X)				0.35	0.32	0.32	0.80	0.00	0.00	0.00	0.00	0.59
Avail Cap(c_a), veh/h				963	978	932	562	0	0	0	0	758
HCM Platoon Ratio				1.00	1.00	1.00	0.33	0.33	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.71	0.71	0.71	0.89	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				13.2	12.9	13.0	41.3	0.0	0.0	0.0	0.0	24.6
Incr Delay (d2), s/veh				0.7	0.6	0.6	5.9	0.0	0.0	0.0	0.0	0.8
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				4.6	4.1	4.0	10.8	0.0	0.0	0.0	0.0	7.7
Lane Grp Delay (d), s/veh				13.9	13.5	13.7	47.2	0.0	0.0	0.0	0.0	25.4
Lane Grp LOS				B	B	B	D					C
Approach Vol, veh/h					947			390			400	
Approach Delay, s/veh					13.7			47.2			25.4	
Approach LOS					B			D			C	

Timer	
Assigned Phs	2 4 8
Phs Duration (G+Y+Rc), s	55.0 40.6 40.6
Change Period (Y+Rc), s	5.8 5.7 5.7
Max Green Setting (Gmax), s	49.2 39.3 39.3
Max Q Clear Time (g_c+I1), s	12.2 33.3 18.8
Green Ext Time (p_c), s	3.2 1.5 2.6

Intersection Summary	
HCM 2010 Ctrl Delay	23.9
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	100	800	90	160	550	0	0	400	120
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99
Adj Sat Flow veh/h/ln				190.0	184.5	190.0	190.0	184.5	0.0	0.0	177.1	190.0
Lanes				0	3	0	0	2	0	0	2	0
Cap, veh/h				182	1556	180	350	1422	0	0	1439	426
Arrive On Green				0.35	0.35	0.34	1.00	1.00	0.00	0.00	0.55	0.54
Sat Flow, veh/h				514	4396	509	532	2089	0	0	2616	775
Grp Volume(v), veh/h				372	343	327	374	373	0	0	284	263
Grp Sat Flow(s),veh/h/ln				1819	1845	1755	1273	1845	0	0	1771	1620
Q Serve(g_s), s				16.6	14.7	14.9	0.1	0.0	0.0	0.0	8.6	8.8
Cycle Q Clear(g_c), s				16.6	14.7	14.9	55.0	0.0	0.0	0.0	8.6	8.8
Prop In Lane				0.28		0.29	0.59		0.00	0.00		0.48
Lane Grp Cap(c), veh/h				644	653	621	83	1015	0	0	974	891
V/C Ratio(X)				0.58	0.52	0.53	4.52	0.37	0.00	0.00	0.29	0.30
Avail Cap(c_a), veh/h				644	653	621	83	1015	0	0	974	891
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	0.83	0.83	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				26.2	25.6	25.8	26.1	0.0	0.0	0.0	12.1	12.2
Incr Delay (d2), s/veh				3.7	3.0	3.2	1607.0	0.9	0.0	0.0	0.8	0.8
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				8.1	7.3	7.0	39.1	0.2	0.0	0.0	3.8	3.5
Lane Grp Delay (d), s/veh				30.0	28.6	29.0	1633.0	0.9	0.0	0.0	12.8	13.1
Lane Grp LOS				C	C	C	F	A			B	B
Approach Vol, veh/h					1042			747			547	
Approach Delay, s/veh					29.2			817.0			12.9	
Approach LOS					C			F			B	
Timer												
Assigned Phs					2		7	4			8	
Phs Duration (G+Y+Rc), s					40.0		0.0	60.0			60.0	
Change Period (Y+Rc), s					5.6		5.0	6.0			6.0	
Max Green Setting (Gmax), s					34.4		7.0	54.0			42.0	
Max Q Clear Time (g_c+I1), s					18.6		0.0	57.0			10.8	
Green Ext Time (p_c), s					4.1		0.0	0.0			7.2	
Intersection Summary												
HCM 2010 Ctrl Delay			277.3									
HCM 2010 LOS			F									
Notes												

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	50	1140	0	0	0	0	0	40	20
Number				5	2	12				3	8	18
Initial Q (Qb), veh				0	0	0				0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00				1.00		1.00
Parking Bus Adj				1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	182.7	0.0				0.0	190.0	190.0
Lanes				0	3	0				0	1	0
Cap, veh/h				72	2560	0				0	179	90
Arrive On Green				0.25	0.25	0.00				0.00	0.15	0.15
Sat Flow, veh/h				0	3325	0				0	1196	598
Grp Volume(v), veh/h				53	1200	0				0	0	63
Grp Sat Flow(s),veh/h/ln				0	1663	0				0	0	1794
Q Serve(g_s), s				0.0	30.6	0.0				0.0	0.0	3.1
Cycle Q Clear(g_c), s				77.0	30.6	0.0				0.0	0.0	3.1
Prop In Lane				1.00		0.00				0.00		0.33
Lane Grp Cap(c), veh/h				72	2560	0				0	0	269
V/C Ratio(X)				0.74	0.47	0.00				0.00	0.00	0.23
Avail Cap(c_a), veh/h				72	2560	0				0	0	269
HCM Platoon Ratio				0.33	0.33	1.00				1.00	1.00	1.00
Upstream Filter(I)				0.73	0.73	0.00				0.00	0.00	1.00
Uniform Delay (d), s/veh				75.8	20.0	0.0				0.0	0.0	37.4
Incr Delay (d2), s/veh				38.5	0.5	0.0				0.0	0.0	2.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0				0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				2.2	13.8	0.0				0.0	0.0	1.6
Lane Grp Delay (d), s/veh				114.3	20.4	0.0				0.0	0.0	39.5
Lane Grp LOS				F	C							D
Approach Vol, veh/h					1253						63	
Approach Delay, s/veh					24.4						39.5	
Approach LOS					C						D	

Timer	
Assigned Phs	2
Phs Duration (G+Y+Rc), s	81.0
Change Period (Y+Rc), s	5.0
Max Green Setting (Gmax), s	76.0
Max Q Clear Time (g_c+I1), s	79.0
Green Ext Time (p_c), s	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	25.1
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	140	900	150	180	800	0	0	1100	180
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	184.5	190.0	184.5	184.5	0.0	0.0	184.5	190.0
Lanes				0	3	0	1	2	0	0	2	0
Cap, veh/h				194	1336	229	285	2221	0	0	1483	241
Arrive On Green				0.11	0.11	0.10	0.16	1.00	0.00	0.00	0.48	0.48
Sat Flow, veh/h				594	4085	701	1757	3689	0	0	3097	503
Grp Volume(v), veh/h				449	415	388	189	842	0	0	688	659
Grp Sat Flow(s),veh/h/ln				1815	1845	1721	1757	1845	0	0	1845	1756
Q Serve(g_s), s				24.0	21.7	21.7	5.1	0.0	0.0	0.0	31.0	31.3
Cycle Q Clear(g_c), s				24.0	21.7	21.7	5.1	0.0	0.0	0.0	31.0	31.3
Prop In Lane				0.33		0.41	1.00		0.00	0.00		0.29
Lane Grp Cap(c), veh/h				593	603	563	285	2221	0	0	883	841
V/C Ratio(X)				0.76	0.69	0.69	0.66	0.38	0.00	0.00	0.78	0.78
Avail Cap(c_a), veh/h				593	603	563	297	2221	0	0	883	841
HCM Platoon Ratio				0.33	0.33	0.33	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.95	0.95	0.95	0.09	0.09	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				40.7	39.7	39.8	17.2	0.0	0.0	0.0	21.7	21.7
Incr Delay (d2), s/veh				8.3	6.0	6.4	0.4	0.0	0.0	0.0	6.7	7.2
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				13.3	11.9	11.2	4.3	0.0	0.0	0.0	15.6	15.1
Lane Grp Delay (d), s/veh				49.1	45.7	46.2	17.5	0.0	0.0	0.0	28.4	29.0
Lane Grp LOS				D	D	D	B	A			C	C
Approach Vol, veh/h					1252			1031			1347	
Approach Delay, s/veh					47.1			3.3			28.7	
Approach LOS					D			A			C	

Timer												
Assigned Phs					2		7	4			8	
Phs Duration (G+Y+Rc), s					36.0		11.3	64.0			52.7	
Change Period (Y+Rc), s					4.3		4.2	4.8			4.8	
Max Green Setting (Gmax), s					31.7		7.8	59.2			47.2	
Max Q Clear Time (g_c+I1), s					26.0		7.1	2.0			33.3	
Green Ext Time (p_c), s					0.9		0.0	2.7			2.6	

Intersection Summary		
HCM 2010 Ctrl Delay		27.8
HCM 2010 LOS		C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	60	1290	30	60	60	0	0	125	60
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	186.3	190.0	190.0	186.3	0.0	0.0	186.3	190.0
Lanes				0	3	0	0	1	0	0	1	0
Cap, veh/h				154	3532	86	140	120	0	0	241	115
Arrive On Green				0.22	0.22	0.22	0.07	0.07	0.00	0.00	0.20	0.19
Sat Flow, veh/h				226	5202	126	366	593	0	0	1193	569
Grp Volume(v), veh/h				515	472	466	126	0	0	0	0	195
Grp Sat Flow(s),veh/h/ln				1851	1863	1840	959	0	0	0	0	1762
Q Serve(g_s), s				19.3	17.4	17.4	4.4	0.0	0.0	0.0	0.0	8.1
Cycle Q Clear(g_c), s				19.3	17.4	17.4	12.5	0.0	0.0	0.0	0.0	8.1
Prop In Lane				0.12		0.07	0.50		0.00	0.00		0.32
Lane Grp Cap(c), veh/h				1257	1265	1250	260	0	0	0	0	355
V/C Ratio(X)				0.41	0.37	0.37	0.48	0.00	0.00	0.00	0.00	0.55
Avail Cap(c_a), veh/h				1257	1265	1250	593	0	0	0	0	761
HCM Platoon Ratio				0.33	0.33	0.33	0.33	0.33	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.49	0.49	0.49	0.93	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				17.6	16.9	16.9	36.7	0.0	0.0	0.0	0.0	29.3
Incr Delay (d2), s/veh				0.5	0.4	0.4	1.0	0.0	0.0	0.0	0.0	1.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				10.1	9.1	9.0	2.8	0.0	0.0	0.0	0.0	3.6
Lane Grp Delay (d), s/veh				18.1	17.3	17.3	37.7	0.0	0.0	0.0	0.0	30.3
Lane Grp LOS				B	B	B	D					C
Approach Vol, veh/h					1453			126			195	
Approach Delay, s/veh					17.6			37.7			30.3	
Approach LOS					B			D			C	

Timer			
Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	60.0	21.3	21.3
Change Period (Y+Rc), s	5.8	5.9	5.9
Max Green Setting (Gmax), s	54.2	34.1	34.1
Max Q Clear Time (g_c+I1), s	21.3	14.5	10.1
Green Ext Time (p_c), s	5.5	0.9	0.9

Intersection Summary	
HCM 2010 Ctrl Delay	20.4
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	300	900	200	100	800	0	0	900	70
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	186.3	190.0	186.3	186.3	0.0	0.0	186.3	190.0
Lanes				0	3	0	1	2	0	0	2	0
Cap, veh/h				418	1349	307	292	1776	0	0	1162	91
Arrive On Green				0.38	0.38	0.37	0.19	0.95	0.00	0.00	0.34	0.33
Sat Flow, veh/h				1087	3508	798	1774	3725	0	0	3412	267
Grp Volume(v), veh/h				526	493	456	105	842	0	0	517	504
Grp Sat Flow(s),veh/h/ln				1808	1863	1722	1774	1863	0	0	1863	1816
Q Serve(g_s), s				20.4	17.9	17.9	2.7	1.5	0.0	0.0	20.5	20.5
Cycle Q Clear(g_c), s				20.4	17.9	17.9	2.7	1.5	0.0	0.0	20.5	20.5
Prop In Lane				0.60		0.46	1.00		0.00	0.00		0.15
Lane Grp Cap(c), veh/h				695	716	662	292	1776	0	0	634	618
V/C Ratio(X)				0.76	0.69	0.69	0.36	0.47	0.00	0.00	0.82	0.82
Avail Cap(c_a), veh/h				1126	1160	1073	292	1776	0	0	634	618
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	0.09	0.09	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				21.6	20.8	21.0	15.5	1.0	0.0	0.0	24.3	24.4
Incr Delay (d2), s/veh				7.5	5.3	5.8	0.3	0.0	0.0	0.0	11.0	11.3
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				10.2	9.0	8.4	1.1	0.4	0.0	0.0	11.3	11.1
Lane Grp Delay (d), s/veh				29.1	26.1	26.8	15.8	1.0	0.0	0.0	35.3	35.7
Lane Grp LOS				C	C	C	B	A			D	D
Approach Vol, veh/h					1474			947			1021	
Approach Delay, s/veh					27.4			2.7			35.5	
Approach LOS					C			A			D	
Timer												
Assigned Phs					2		7	4			8	
Phs Duration (G+Y+Rc), s					36.8		11.0	44.0			33.0	
Change Period (Y+Rc), s					6.7		3.0	6.5			6.5	
Max Green Setting (Gmax), s					49.3		8.0	37.5			26.5	
Max Q Clear Time (g_c+I1), s					22.4		4.7	3.5			22.5	
Green Ext Time (p_c), s					7.7		0.1	11.5			2.9	
Intersection Summary												
HCM 2010 Ctrl Delay			23.0									
HCM 2010 LOS			C									
Notes												

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Volume (vph)	0	0	0	490	580	0	180	260	0	0	320	390
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	10	12	11	10	12	12	13	12
Total Lost time (s)				6.7	6.7		3.0	6.5			6.5	
Lane Util. Factor				0.91	0.91		1.00	0.95			0.95	
Frt				1.00	1.00		1.00	1.00			0.92	
Flt Protected				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (prot)				1610	3123		1711	3303			3356	
Flt Permitted				0.95	0.99		0.17	1.00			1.00	
Satd. Flow (perm)				1610	3123		298	3303			3356	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	516	611	0	189	274	0	0	337	411
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	175	0
Lane Group Flow (vph)	0	0	0	294	833	0	189	274	0	0	573	0
Turn Type				Perm	NA		pm+pt	NA			NA	
Protected Phases					2		7	4			8	
Permitted Phases				2			4					
Actuated Green, G (s)				44.0	44.0		42.8	42.8			27.5	
Effective Green, g (s)				44.0	44.0		42.8	42.8			27.5	
Actuated g/C Ratio				0.44	0.44		0.43	0.43			0.28	
Clearance Time (s)				6.7	6.7		3.0	6.5			6.5	
Vehicle Extension (s)				2.5	2.5		3.0	2.0			2.5	
Lane Grp Cap (vph)				708	1374		301	1413			922	
v/s Ratio Prot							c0.08	0.08			0.17	
v/s Ratio Perm				0.18	0.27		c0.19					
v/c Ratio				0.42	0.61		0.63	0.19			0.62	
Uniform Delay, d1				19.2	21.4		20.4	17.8			31.7	
Progression Factor				0.37	0.43		1.00	1.00			1.00	
Incremental Delay, d2				1.4	1.6		4.1	0.3			3.2	
Delay (s)				8.4	10.9		24.4	18.1			34.9	
Level of Service				A	B		C	B			C	
Approach Delay (s)		0.0			10.2			20.7			34.9	
Approach LOS		A			B			C			C	

Intersection Summary			
HCM 2000 Control Delay	20.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	16.2
Intersection Capacity Utilization	65.9%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	150	0	40	540	150	600	0	1600	0	0	2090	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	9	12	9	11	11	11	12	10	12	12	10	12
Total Lost time (s)	3.9		3.9	3.9	3.9	3.9		3.6			4.0	
Lane Util. Factor	1.00		1.00	0.97	1.00	1.00		0.91			0.86	
Frt	1.00		0.85	1.00	1.00	0.85		1.00			1.00	
Flt Protected	0.95		1.00	0.95	1.00	1.00		1.00			1.00	
Satd. Flow (prot)	1593		1425	3319	1801	1531		4746			5968	
Flt Permitted	0.66		1.00	0.95	1.00	1.00		1.00			1.00	
Satd. Flow (perm)	1101		1425	3319	1801	1531		4746			5968	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	158	0	42	568	158	632	0	1684	0	0	2200	32
RTOR Reduction (vph)	0	0	38	0	0	46	0	0	0	0	1	0
Lane Group Flow (vph)	158	0	4	568	158	586	0	1684	0	0	2231	0
Turn Type	custom		custom	Split	NA	Perm		NA			NA	
Protected Phases			8	4	4			6			2	
Permitted Phases	8					4						
Actuated Green, G (s)	9.1		9.1	32.1	32.1	32.1		64.4			64.0	
Effective Green, g (s)	10.1		10.1	33.1	33.1	33.1		65.4			65.0	
Actuated g/C Ratio	0.08		0.08	0.28	0.28	0.28		0.55			0.54	
Clearance Time (s)	4.9		4.9	4.9	4.9	4.9		4.6			5.0	
Vehicle Extension (s)	2.5		2.5	2.5	2.5	2.5		2.5			2.5	
Lane Grp Cap (vph)	92		119	915	496	422		2586			3232	
v/s Ratio Prot			0.00	0.17	0.09			0.35			c0.37	
v/s Ratio Perm	c0.14					c0.38						
v/c Ratio	1.72		0.03	0.62	0.32	1.39		0.65			0.69	
Uniform Delay, d1	55.0		50.5	38.0	34.5	43.5		19.3			20.1	
Progression Factor	1.00		1.00	1.00	1.00	1.00		0.84			1.00	
Incremental Delay, d2	364.3		0.5	3.2	1.7	189.4		0.1			1.2	
Delay (s)	419.3		50.9	41.1	36.2	232.8		16.3			21.4	
Level of Service	F		D	D	D	F		B			C	
Approach Delay (s)		341.9			129.8			16.3			21.4	
Approach LOS		F			F			B			C	

Intersection Summary			
HCM 2000 Control Delay	58.4	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.00		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	11.8
Intersection Capacity Utilization	86.4%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	1270	60	0	1180	20	190	1660	360	210	2100	220
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	0.0	186.3	190.0	0.0	186.3	190.0	186.3	186.3	190.0	186.3	186.3	186.3
Lanes	0	2	0	0	2	0	1	3	0	1	2	1
Cap, veh/h	0	1480	70	0	1531	26	202	1712	366	203	1428	607
Arrive On Green	0.00	0.42	0.41	0.00	0.42	0.41	0.08	0.38	0.38	0.05	0.26	0.26
Sat Flow, veh/h	0	3530	166	0	3653	62	1774	4466	954	1774	3725	1583
Grp Volume(v), veh/h	0	704	696	0	633	630	200	1453	673	221	2211	232
Grp Sat Flow(s),veh/h/ln	0	1863	1833	0	1863	1852	1774	1863	1694	1774	1863	1583
Q Serve(g_s), s	0.0	42.4	42.6	0.0	35.9	35.9	9.3	46.0	46.0	9.5	46.0	14.5
Cycle Q Clear(g_c), s	0.0	42.4	42.6	0.0	35.9	35.9	9.3	46.0	46.0	9.5	46.0	14.5
Prop In Lane	0.00		0.09	0.00		0.03	1.00		0.56	1.00		1.00
Lane Grp Cap(c), veh/h	0	781	769	0	781	776	202	1428	650	203	1428	607
V/C Ratio(X)	0.00	0.90	0.91	0.00	0.81	0.81	0.99	1.02	1.04	1.09	1.55	0.38
Avail Cap(c_a), veh/h	0	781	769	0	781	776	202	1428	650	203	1428	607
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.69	0.69	0.69
Uniform Delay (d), s/veh	0.0	32.6	32.7	0.0	30.7	30.7	33.4	37.0	37.3	35.1	44.6	32.9
Incr Delay (d2), s/veh	0.0	15.7	16.2	0.0	8.9	9.0	60.0	28.2	45.1	78.5	249.1	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.0	23.2	23.0	0.0	18.6	18.6	9.6	27.0	27.7	10.9	71.9	6.2
Lane Grp Delay (d), s/veh	0.0	48.2	48.8	0.0	39.6	39.7	93.3	65.2	82.4	113.6	293.7	34.1
Lane Grp LOS		D	D		D	D	F	F	F	F	F	C
Approach Vol, veh/h		1400			1263			2326			2664	
Approach Delay, s/veh		48.5			39.7			72.6			256.2	
Approach LOS		D			D			E			F	

Timer								
Assigned Phs		6			2		7	4		3	8	
Phs Duration (G+Y+Rc), s		56.0			56.0		13.0	51.0		13.0	51.0	
Change Period (Y+Rc), s		6.7			6.7		3.0	6.0		3.0	6.0	
Max Green Setting (Gmax), s		49.3			49.3		10.0	45.0		10.0	45.0	
Max Q Clear Time (g_c+I1), s		44.6			37.9		11.3	48.0		11.5	48.0	
Green Ext Time (p_c), s		3.7			7.6		0.0	0.0		0.0	0.0	

Intersection Summary	
HCM 2010 Ctrl Delay	126.7
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	60	1600	40	0	0	0	0	50	80	40	60	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	186.3	190.0	190.0	186.3	0.0
Lanes	0	3	0				0	1	0	0	1	0
Cap, veh/h	138	3918	101				0	87	137	90	111	0
Arrive On Green	0.74	0.75	0.74				0.00	0.13	0.13	0.13	0.13	0.00
Sat Flow, veh/h	184	5237	135				0	650	1031	263	834	0
Grp Volume(v), veh/h	635	581	574				0	0	137	105	0	0
Grp Sat Flow(s),veh/h/ln	1854	1863	1839				0	0	1681	1097	0	0
Q Serve(g_s), s	12.0	10.4	10.4				0.0	0.0	7.0	2.5	0.0	0.0
Cycle Q Clear(g_c), s	12.0	10.4	10.4				0.0	0.0	7.0	9.6	0.0	0.0
Prop In Lane	0.10		0.07				0.00		0.61	0.40		0.00
Lane Grp Cap(c), veh/h	1387	1394	1376				0	0	224	202	0	0
V/C Ratio(X)	0.46	0.42	0.42				0.00	0.00	0.61	0.52	0.00	0.00
Avail Cap(c_a), veh/h	1387	1394	1376				0	0	387	353	0	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	4.4	4.2	4.2				0.0	0.0	37.3	38.0	0.0	0.0
Incr Delay (d2), s/veh	1.1	0.9	0.9				0.0	0.0	2.7	2.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	4.7	4.1	4.0				0.0	0.0	3.1	2.5	0.0	0.0
Lane Grp Delay (d), s/veh	5.5	5.1	5.1				0.0	0.0	40.0	40.0	0.0	0.0
Lane Grp LOS	A	A	A						D	D		
Approach Vol, veh/h		1789						137			105	
Approach Delay, s/veh		5.3						40.0			40.0	
Approach LOS		A						D			D	

Timer			
Assigned Phs	6	4	8
Phs Duration (G+Y+Rc), s	73.0	18.1	18.1
Change Period (Y+Rc), s	5.8	6.0	6.0
Max Green Setting (Gmax), s	67.2	21.0	21.0
Max Q Clear Time (g_c+I1), s	14.0	9.0	11.6
Green Ext Time (p_c), s	11.4	0.7	0.6

Intersection Summary	
HCM 2010 Ctrl Delay	9.4
HCM 2010 LOS	A

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	100	1670	80	0	0	0	0	870	180	150	1070	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	186.3	190.0	186.3	186.3	0.0
Lanes	0	3	0				0	2	0	1	2	0
Cap, veh/h	130	2320	114				0	907	187	212	1571	0
Arrive On Green	0.15	0.15	0.15				0.00	0.30	0.29	0.16	0.84	0.00
Sat Flow, veh/h	280	5004	246				0	2998	618	1774	3725	0
Grp Volume(v), veh/h	692	634	621				0	569	536	158	1126	0
Grp Sat Flow(s),veh/h/ln	1849	1863	1819				0	1863	1754	1774	1863	0
Q Serve(g_s), s	36.3	32.6	32.7				0.0	30.4	30.4	6.0	12.0	0.0
Cycle Q Clear(g_c), s	36.3	32.6	32.7				0.0	30.4	30.4	6.0	12.0	0.0
Prop In Lane	0.15		0.14				0.00		0.35	1.00		0.00
Lane Grp Cap(c), veh/h	857	864	843				0	564	531	212	1571	0
V/C Ratio(X)	0.81	0.73	0.74				0.00	1.01	1.01	0.74	0.72	0.00
Avail Cap(c_a), veh/h	857	864	843				0	564	531	213	1571	0
HCM Platoon Ratio	0.33	0.33	0.33				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	0.88	0.88	0.88				0.00	1.00	1.00	0.09	0.09	0.00
Uniform Delay (d), s/veh	38.2	36.6	36.6				0.0	35.0	35.1	23.1	5.5	0.0
Incr Delay (d2), s/veh	7.1	4.8	5.0				0.0	40.2	41.6	1.3	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	19.9	17.6	17.2				0.0	20.4	19.4	3.8	2.4	0.0
Lane Grp Delay (d), s/veh	45.3	41.4	41.6				0.0	75.1	76.8	24.4	5.7	0.0
Lane Grp LOS	D	D	D					F	F	C	A	
Approach Vol, veh/h		1947						1105			1284	
Approach Delay, s/veh		42.9						75.9			8.0	
Approach LOS		D						E			A	

Timer					
Assigned Phs		6		4		3	8
Phs Duration (G+Y+Rc), s		53.0		35.4		11.9	47.3
Change Period (Y+Rc), s		6.5		6.0		4.0	6.0
Max Green Setting (Gmax), s		46.5		29.0		8.0	41.3
Max Q Clear Time (g_c+I1), s		38.3		32.4		8.0	14.0
Green Ext Time (p_c), s		4.7		0.0		0.0	10.8

Intersection Summary	
HCM 2010 Ctrl Delay	41.0
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	70	1930	0	0	40	0
Number	1	6			3	18
Initial Q (Qb), veh	0	0			0	0
Ped-Bike Adj(A_pbT)	1.00				1.00	1.00
Parking Bus Adj	1.00	1.00			1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3			186.3	0.0
Lanes	0	3			1	0
Cap, veh/h	98	3220			0	0
Arrive On Green	0.31	0.31			0.00	0.00
Sat Flow, veh/h	0	3390			0	
Grp Volume(v), veh/h	74	2032			0.0	
Grp Sat Flow(s),veh/h/ln	0	1695				
Q Serve(g_s), s	0.0	37.8				
Cycle Q Clear(g_c), s	70.0	37.8				
Prop In Lane	1.00					
Lane Grp Cap(c), veh/h	98	3220				
V/C Ratio(X)	0.76	0.63				
Avail Cap(c_a), veh/h	98	3220				
HCM Platoon Ratio	0.33	0.33				
Upstream Filter(I)	0.42	0.42				
Uniform Delay (d), s/veh	60.3	14.2				
Incr Delay (d2), s/veh	20.2	0.4				
Initial Q Delay(d3),s/veh	0.0	0.0				
%ile Back of Q (50%), veh/ln	0.5	14.7				
Lane Grp Delay (d), s/veh	80.5	14.6				
Lane Grp LOS	F	B				
Approach Vol, veh/h		2106				
Approach Delay, s/veh		17.0				
Approach LOS		B				

Timer	
Assigned Phs	6
Phs Duration (G+Y+Rc), s	73.7
Change Period (Y+Rc), s	4.7
Max Green Setting (Gmax), s	69.0
Max Q Clear Time (g_c+I1), s	72.0
Green Ext Time (p_c), s	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	17.0
HCM 2010 LOS	B

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	70	1960	30	0	0	0	0	80	100	50	90	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	193.7	190.0	190.0	193.7	0.0
Lanes	0	3	0				0	1	0	0	1	0
Cap, veh/h	119	3547	57				0	204	255	147	246	0
Arrive On Green	0.22	0.22	0.22				0.00	0.26	0.25	0.09	0.09	0.00
Sat Flow, veh/h	178	5301	85				0	784	980	379	945	0
Grp Volume(v), veh/h	769	702	698				0	0	189	148	0	0
Grp Sat Flow(s),veh/h/ln	1854	1863	1848				0	0	1764	1324	0	0
Q Serve(g_s), s	37.4	33.5	33.6				0.0	0.0	8.9	4.5	0.0	0.0
Cycle Q Clear(g_c), s	37.4	33.5	33.6				0.0	0.0	8.9	13.4	0.0	0.0
Prop In Lane	0.10		0.05				0.00		0.56	0.36		0.00
Lane Grp Cap(c), veh/h	1240	1246	1236				0	0	459	393	0	0
V/C Ratio(X)	0.62	0.56	0.56				0.00	0.00	0.41	0.38	0.00	0.00
Avail Cap(c_a), veh/h	1240	1246	1236				0	0	459	393	0	0
HCM Platoon Ratio	0.33	0.33	0.33				1.00	1.00	1.00	0.33	0.33	1.00
Upstream Filter(I)	0.88	0.88	0.88				0.00	0.00	1.00	0.70	0.00	0.00
Uniform Delay (d), s/veh	27.5	26.0	26.0				0.0	0.0	30.9	39.8	0.0	0.0
Incr Delay (d2), s/veh	2.1	1.6	1.6				0.0	0.0	2.7	1.9	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	19.9	17.8	17.7				0.0	0.0	4.3	4.0	0.0	0.0
Lane Grp Delay (d), s/veh	29.5	27.6	27.6				0.0	0.0	33.6	41.8	0.0	0.0
Lane Grp LOS	C	C	C						C	D		
Approach Vol, veh/h		2169						189			148	
Approach Delay, s/veh		28.3						33.6			41.8	
Approach LOS		C						C			D	
Timer												
Assigned Phs		6						4			8	
Phs Duration (G+Y+Rc), s		70.7						29.3			29.3	
Change Period (Y+Rc), s		4.8						4.3			4.3	
Max Green Setting (Gmax), s		65.9						25.0			25.0	
Max Q Clear Time (g_c+I1), s		39.4						10.9			15.4	
Green Ext Time (p_c), s		10.0						0.9			0.7	
Intersection Summary												
HCM 2010 Ctrl Delay			29.5									
HCM 2010 LOS			C									
Notes												

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	200	1780	80	0	0	0	0	740	300	250	1040	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	186.3	190.0	186.3	186.3	0.0
Lanes	0	3	0				0	2	0	1	2	0
Cap, veh/h	227	2159	99				0	812	329	289	1758	0
Arrive On Green	0.45	0.45	0.44				0.00	0.32	0.31	0.08	0.32	0.00
Sat Flow, veh/h	505	4799	220				0	2523	1022	1774	3725	0
Grp Volume(v), veh/h	768	706	695				0	575	520	263	1095	0
Grp Sat Flow(s),veh/h/ln	1838	1863	1824				0	1863	1682	1774	1863	0
Q Serve(g_s), s	39.5	33.6	33.9				0.0	30.3	30.4	10.4	25.0	0.0
Cycle Q Clear(g_c), s	39.5	33.6	33.9				0.0	30.3	30.4	10.4	25.0	0.0
Prop In Lane	0.27		0.12				0.00		0.61	1.00		0.00
Lane Grp Cap(c), veh/h	827	838	821				0	600	542	289	1758	0
V/C Ratio(X)	0.93	0.84	0.85				0.00	0.96	0.96	0.91	0.62	0.00
Avail Cap(c_a), veh/h	827	838	821				0	600	542	289	1758	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	0.67	0.67	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	0.40	0.40	0.00
Uniform Delay (d), s/veh	26.0	24.4	24.5				0.0	33.2	33.6	27.8	26.6	0.0
Incr Delay (d2), s/veh	18.1	10.1	10.5				0.0	26.7	28.8	15.7	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	21.7	17.4	17.3				0.0	18.5	17.1	8.2	12.1	0.0
Lane Grp Delay (d), s/veh	44.1	34.4	35.0				0.0	59.9	62.3	43.5	26.9	0.0
Lane Grp LOS	D	C	D					E	E	D	C	
Approach Vol, veh/h		2169						1095			1358	
Approach Delay, s/veh		38.0						61.1			30.1	
Approach LOS		D						E			C	

Timer					
Assigned Phs		6		4	3	8
Phs Duration (G+Y+Rc), s		49.0		36.0	15.0	51.0
Change Period (Y+Rc), s		5.0		4.8	3.0	4.8
Max Green Setting (Gmax), s		44.0		31.2	12.0	46.2
Max Q Clear Time (g_c+I1), s		41.5		32.4	12.4	27.0
Green Ext Time (p_c), s		2.1		0.0	0.0	11.3

Intersection Summary	
HCM 2010 Ctrl Delay	41.2
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	210	2140	110	0	0	0	0	490	110	150	360	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	186.3	190.0	190.0	186.3	0.0
Lanes	0	3	0				0	2	0	0	2	0
Cap, veh/h	245	2666	140				0	1089	244	247	981	0
Arrive On Green	0.55	0.55	0.54				0.00	0.37	0.36	0.24	0.25	0.00
Sat Flow, veh/h	443	4825	254				0	2949	660	476	1720	0
Grp Volume(v), veh/h	918	840	832				0	325	307	269	268	0
Grp Sat Flow(s),veh/h/ln	1841	1863	1818				0	1863	1746	1272	1863	0
Q Serve(g_s), s	43.8	36.1	37.1				0.0	13.1	13.3	0.1	11.8	0.0
Cycle Q Clear(g_c), s	43.8	36.1	37.1				0.0	13.1	13.3	36.3	11.8	0.0
Prop In Lane	0.24		0.14				0.00		0.38	0.96		0.00
Lane Grp Cap(c), veh/h	1017	1029	1005				0	687	645	73	687	0
V/C Ratio(X)	0.90	0.82	0.83				0.00	0.47	0.48	3.66	0.39	0.00
Avail Cap(c_a), veh/h	1048	1061	1035				0	687	645	73	687	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	0.67	0.67	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	0.96	0.96	0.00
Uniform Delay (d), s/veh	19.6	17.9	18.2				0.0	23.7	23.9	54.6	27.8	0.0
Incr Delay (d2), s/veh	12.7	7.1	7.8				0.0	2.3	2.5	1229.3	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	22.2	17.7	17.9				0.0	6.5	6.3	25.0	5.9	0.0
Lane Grp Delay (d), s/veh	32.4	25.1	26.0				0.0	26.0	26.4	1283.9	28.1	0.0
Lane Grp LOS	C	C	C					C	C	F	C	
Approach Vol, veh/h		2590						632			537	
Approach Delay, s/veh		28.0						26.2			656.0	
Approach LOS		C						C			F	

Timer					
Assigned Phs		6		4		3	8
Phs Duration (G+Y+Rc), s		58.4		40.0		0.0	40.0
Change Period (Y+Rc), s		5.0		4.7		4.0	4.7
Max Green Setting (Gmax), s		55.0		23.3		8.0	35.3
Max Q Clear Time (g_c+I1), s		45.8		15.3		0.0	38.3
Green Ext Time (p_c), s		7.5		3.7		0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	117.4
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	2120	40	0	0	0	0	0	30	100	70	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	10	12	12	12	12	12	11	12	12	11	12
Total Lost time (s)		5.0							4.0	4.3	4.3	
Lane Util. Factor		0.91							1.00	1.00	1.00	
Frt		1.00							0.86	1.00	1.00	
Flt Protected		1.00							1.00	0.95	1.00	
Satd. Flow (prot)		4733							1611	1770	1801	
Flt Permitted		1.00							1.00	0.95	1.00	
Satd. Flow (perm)		4733							1611	1770	1801	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	2232	42	0	0	0	0	0	32	105	74	0
RTOR Reduction (vph)	0	1	0	0	0	0	0	0	20	20	0	0
Lane Group Flow (vph)	0	2273	0	0	0	0	0	0	12	85	74	0
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	0%	2%	2%	2%	2%	0%
Turn Type		NA							custom	Perm	NA	
Protected Phases		6									8	
Permitted Phases									4	8		
Actuated Green, G (s)		80.6							10.4	10.1	10.1	
Effective Green, g (s)		80.6							10.4	10.1	10.1	
Actuated g/C Ratio		0.81							0.10	0.10	0.10	
Clearance Time (s)		5.0							4.0	4.3	4.3	
Vehicle Extension (s)		3.0							3.0	3.0	3.0	
Lane Grp Cap (vph)		3814							167	178	181	
v/s Ratio Prot		c0.48									0.04	
v/s Ratio Perm									0.01	c0.05		
v/c Ratio		0.60							0.07	0.48	0.41	
Uniform Delay, d1		3.6							40.5	42.5	42.2	
Progression Factor		2.54							1.00	1.00	1.00	
Incremental Delay, d2		0.2							0.2	2.0	1.5	
Delay (s)		9.4							40.6	44.5	43.7	
Level of Service		A							D	D	D	
Approach Delay (s)		9.4			0.0			40.6			44.1	
Approach LOS		A			A			D			D	

Intersection Summary			
HCM 2000 Control Delay	12.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	9.3
Intersection Capacity Utilization	59.4%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	160	1940	60	0	0	0	0	200	60	190	160	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	186.3	190.0	190.0	186.3	0.0
Lanes	0	3	0				0	1	0	0	1	0
Cap, veh/h	209	2719	86				0	471	141	217	167	0
Arrive On Green	0.18	0.18	0.18				0.00	0.34	0.34	0.11	0.11	0.00
Sat Flow, veh/h	385	4998	158				0	1379	412	472	488	0
Grp Volume(v), veh/h	805	738	730				0	0	274	368	0	0
Grp Sat Flow(s),veh/h/ln	1844	1863	1835				0	0	1790	960	0	0
Q Serve(g_s), s	41.9	37.4	37.6				0.0	0.0	11.9	0.1	0.0	0.0
Cycle Q Clear(g_c), s	41.9	37.4	37.6				0.0	0.0	11.9	34.2	0.0	0.0
Prop In Lane	0.21		0.09				0.00		0.23	0.54		0.00
Lane Grp Cap(c), veh/h	1003	1013	998				0	0	612	384	0	0
V/C Ratio(X)	0.80	0.73	0.73				0.00	0.00	0.45	0.96	0.00	0.00
Avail Cap(c_a), veh/h	1003	1013	998				0	0	612	384	0	0
HCM Platoon Ratio	0.33	0.33	0.33				1.00	1.00	1.00	0.33	0.33	1.00
Upstream Filter(I)	0.78	0.78	0.78				0.00	0.00	1.00	0.78	0.00	0.00
Uniform Delay (d), s/veh	35.9	34.0	34.1				0.0	0.0	25.6	49.8	0.0	0.0
Incr Delay (d2), s/veh	5.4	3.6	3.7				0.0	0.0	2.4	31.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	22.5	19.9	19.7				0.0	0.0	5.7	3.4	0.0	0.0
Lane Grp Delay (d), s/veh	41.3	37.7	37.8				0.0	0.0	27.9	81.2	0.0	0.0
Lane Grp LOS	D	D	D						C	F		
Approach Vol, veh/h		2273						274			368	
Approach Delay, s/veh		39.0						27.9			81.2	
Approach LOS		D						C			F	

Timer					
Assigned Phs		6		4	3	8
Phs Duration (G+Y+Rc), s		60.0		40.0	0.0	40.0
Change Period (Y+Rc), s		5.6		5.8	3.0	5.8
Max Green Setting (Gmax), s		54.4		19.2	12.0	34.2
Max Q Clear Time (g_c+I1), s		43.9		13.9	0.0	36.2
Green Ext Time (p_c), s		6.5		1.2	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	43.3
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	130	2000	10	0	0	0	0	90	350	0	0	0
Number	1	6	16				7	4	14			
Initial Q (Qb), veh	0	0	0				0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00			
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00			
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	186.3	190.0			
Lanes	0	3	0				0	1	0			
Cap, veh/h	60	1966	10				0	117	454			
Arrive On Green	0.58	0.58	0.58				0.00	0.35	0.35			
Sat Flow, veh/h	0	3369	18				0	335	1298			
Grp Volume(v), veh/h	137	1059	1057				0	0	463			
Grp Sat Flow(s),veh/h/ln	0	1695	1692				0	0	1634			
Q Serve(g_s), s	0.0	70.0	70.0				0.0	0.0	30.9			
Cycle Q Clear(g_c), s	70.0	70.0	70.0				0.0	0.0	30.9			
Prop In Lane	1.00		0.01				0.00		0.79			
Lane Grp Cap(c), veh/h	60	989	987				0	0	572			
V/C Ratio(X)	2.28	1.07	1.07				0.00	0.00	0.81			
Avail Cap(c_a), veh/h	60	989	987				0	0	572			
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	1.00				0.00	0.00	1.00			
Uniform Delay (d), s/veh	60.0	25.0	25.0				0.0	0.0	35.4			
Incr Delay (d2), s/veh	626.7	49.5	49.7				0.0	0.0	11.8			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0			
%ile Back of Q (50%), veh/ln	12.3	41.9	41.9				0.0	0.0	14.6			
Lane Grp Delay (d), s/veh	686.7	74.5	74.7				0.0	0.0	47.2			
Lane Grp LOS	F	F	F						D			
Approach Vol, veh/h		2253						463				
Approach Delay, s/veh		111.8						47.2				
Approach LOS		F						D				

Timer	
Assigned Phs	6
Phs Duration (G+Y+Rc), s	74.0
Change Period (Y+Rc), s	4.0
Max Green Setting (Gmax), s	70.0
Max Q Clear Time (g_c+I1), s	72.0
Green Ext Time (p_c), s	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	100.8
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	2080	100	0	0	0	0	0	0	890	610	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.7	6.7							6.0	6.0	
Lane Util. Factor		0.91	1.00							0.86	0.86	
Frt		1.00	0.85							1.00	1.00	
Flt Protected		1.00	1.00							0.95	0.99	
Satd. Flow (prot)		4424	1425							2739	2855	
Flt Permitted		1.00	1.00							0.95	0.99	
Satd. Flow (perm)		4424	1425							2739	2855	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	2189	105	0	0	0	0	0	0	937	642	0
RTOR Reduction (vph)	0	0	22	0	0	0	0	0	0	21	21	0
Lane Group Flow (vph)	0	2189	83	0	0	0	0	0	0	757	780	0
Parking (#/hr)		0										
Turn Type		NA	Perm							Perm	NA	
Protected Phases		6									8	
Permitted Phases			6							8		
Actuated Green, G (s)		62.6	62.6							44.7	44.7	
Effective Green, g (s)		62.6	62.6							44.7	44.7	
Actuated g/C Ratio		0.52	0.52							0.37	0.37	
Clearance Time (s)		6.7	6.7							6.0	6.0	
Vehicle Extension (s)		2.0	2.0							2.0	2.0	
Lane Grp Cap (vph)		2307	743							1020	1063	
v/s Ratio Prot		c0.49										
v/s Ratio Perm			0.06							c0.28	0.27	
v/c Ratio		0.95	0.11							0.74	0.73	
Uniform Delay, d1		27.2	14.6							32.6	32.5	
Progression Factor		0.84	0.43							0.71	0.72	
Incremental Delay, d2		6.9	0.2							1.6	1.4	
Delay (s)		29.7	6.5							25.0	24.7	
Level of Service		C	A							C	C	
Approach Delay (s)		28.6			0.0			0.0			24.9	
Approach LOS		C			A			A			C	

Intersection Summary			
HCM 2000 Control Delay	27.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.7
Intersection Capacity Utilization	79.0%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	160	1720	0	0	0	0	0	180	1390	150	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5						4.7	4.7	4.7		
Lane Util. Factor		0.91						0.95	0.95	1.00		
Frt		1.00						0.88	0.85	1.00		
Flt Protected		1.00						1.00	1.00	0.95		
Satd. Flow (prot)		4557						1407	1354	1593		
Flt Permitted		1.00						1.00	1.00	0.95		
Satd. Flow (perm)		4557						1407	1354	1593		
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	168	1811	0	0	0	0	0	189	1463	158	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	57	57	0	0	0
Lane Group Flow (vph)	0	1979	0	0	0	0	0	790	748	158	0	0
Turn Type	Perm	NA						NA	Perm	custom		
Protected Phases		6						4		3		
Permitted Phases	6								4	3		
Actuated Green, G (s)		46.5						43.7	43.7	15.9		
Effective Green, g (s)		46.5						43.7	43.7	15.9		
Actuated g/C Ratio		0.39						0.36	0.36	0.13		
Clearance Time (s)		4.5						4.7	4.7	4.7		
Vehicle Extension (s)		2.5						3.0	3.0	2.5		
Lane Grp Cap (vph)		1765						512	493	211		
v/s Ratio Prot								c0.56		c0.10		
v/s Ratio Perm		0.43							0.55			
v/c Ratio		1.12						1.54	1.52	0.75		
Uniform Delay, d1		36.8						38.1	38.1	50.1		
Progression Factor		0.78						1.00	1.00	0.82		
Incremental Delay, d2		59.1						253.8	242.8	12.6		
Delay (s)		87.6						291.9	281.0	53.6		
Level of Service		F						F	F	D		
Approach Delay (s)		87.6			0.0			286.6			53.6	
Approach LOS		F			A			F			D	

Intersection Summary			
HCM 2000 Control Delay	172.9	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.24		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	13.9
Intersection Capacity Utilization	126.2%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	480	2390	300	0	0	0	0	950	110	130	230	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	171.0	166.0	171.0				0.0	166.0	171.0	171.0	166.0	0.0
Lanes	0	3	0				0	2	0	0	2	0
Cap, veh/h	368	1968	246				0	1064	123	76	1172	0
Arrive On Green	0.18	0.18	0.18				0.00	0.36	0.36	0.36	0.36	0.00
Sat Flow, veh/h	694	3707	463				0	2922	339	44	1511	0
Grp Volume(v), veh/h	1183	1077	1077				0	568	548	190	189	0
Grp Sat Flow(s),veh/h/ln	1626	1660	1578				0	1660	1600	1602	1660	0
Q Serve(g_s), s	63.7	63.7	63.7				0.0	39.7	39.7	0.1	9.8	0.0
Cycle Q Clear(g_c), s	63.7	63.7	63.7				0.0	39.7	39.7	43.7	9.8	0.0
Prop In Lane	0.43		0.29				0.00		0.21	1.00		0.00
Lane Grp Cap(c), veh/h	863	881	838				0	605	583	60	605	0
V/C Ratio(X)	1.37	1.22	1.29				0.00	0.94	0.94	3.16	0.31	0.00
Avail Cap(c_a), veh/h	863	881	838				0	605	583	60	605	0
HCM Platoon Ratio	0.33	0.33	0.33				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.09				0.00	1.00	1.00	0.88	0.88	0.00
Uniform Delay (d), s/veh	49.5	49.5	49.5				0.0	36.9	36.9	60.0	27.4	0.0
Incr Delay (d2), s/veh	167.8	100.9	129.2				0.0	24.4	25.1	1008.5	1.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	68.6	53.7	57.6				0.0	20.8	20.2	16.8	4.4	0.0
Lane Grp Delay (d), s/veh	217.3	150.3	178.7				0.0	61.3	62.0	1068.5	28.6	0.0
Lane Grp LOS	F	F	F					E	E	F	C	
Approach Vol, veh/h		3337						1116			379	
Approach Delay, s/veh		183.2						61.6			548.5	
Approach LOS		F						E			F	

Timer					
Assigned Phs		6		4	3	8
Phs Duration (G+Y+Rc), s		70.0		50.0	0.0	50.0
Change Period (Y+Rc), s		6.3		6.3	3.0	6.3
Max Green Setting (Gmax), s		63.7		31.7	9.0	43.7
Max Q Clear Time (g_c+I1), s		65.7		41.7	0.0	45.7
Green Ext Time (p_c), s		0.0		0.0	0.0	0.0

Intersection Summary		
HCM 2010 Ctrl Delay		183.8
HCM 2010 LOS		F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	2260	580	0	0	0	0	0	0	530	600	0
Number	1	6	16							3	8	18
Initial Q (Qb), veh	0	0	0							0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00							1.00		1.00
Parking Bus Adj	1.00	1.00	1.00							1.00	1.00	1.00
Adj Sat Flow veh/h/ln	0.0	166.0	171.0							171.0	166.0	0.0
Lanes	0	3	0							0	2	0
Cap, veh/h	0	2613	615							60	383	0
Arrive On Green	0.00	0.22	0.22							0.08	0.08	0.00
Sat Flow, veh/h	0	3900	918							0	1511	0
Grp Volume(v), veh/h	0	1993	997							558	632	0
Grp Sat Flow(s),veh/h/ln	0	1660	1498							0	1511	0
Q Serve(g_s), s	0.0	70.0	79.7							0.0	30.4	0.0
Cycle Q Clear(g_c), s	0.0	70.0	79.7							30.4	30.4	0.0
Prop In Lane	0.00		0.61							1.00		0.00
Lane Grp Cap(c), veh/h	0	2225	1004							60	383	0
V/C Ratio(X)	0.00	0.90	0.99							9.30	1.65	0.00
Avail Cap(c_a), veh/h	0	2225	1004							60	383	0
HCM Platoon Ratio	1.00	0.33	0.33							0.33	0.33	1.00
Upstream Filter(I)	0.00	0.09	0.09							0.47	0.47	0.00
Uniform Delay (d), s/veh	0.0	42.7	46.5							70.2	55.0	0.0
Incr Delay (d2), s/veh	0.0	0.6	7.1							3750.6	298.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0							0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.0	31.9	34.5							64.5	44.3	0.0
Lane Grp Delay (d), s/veh	0.0	43.3	53.5							3820.8	353.5	0.0
Lane Grp LOS		D	D							F	F	
Approach Vol, veh/h		2990									1190	
Approach Delay, s/veh		46.7									1979.3	
Approach LOS		D									F	

Timer	
Assigned Phs	6
Phs Duration (G+Y+Rc), s	85.0
Change Period (Y+Rc), s	4.6
Max Green Setting (Gmax), s	80.4
Max Q Clear Time (g_c+I1), s	81.7
Green Ext Time (p_c), s	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	596.9
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	390	2520	0	0	0	0	0	720	120	0	0	0
Number	1	6	16				7	4	14			
Initial Q (Qb), veh	0	0	0				0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00			
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00			
Adj Sat Flow veh/h/ln	171.0	166.0	0.0				0.0	166.0	171.0			
Lanes	0	3	0				0	3	0			
Cap, veh/h	64	2076	0				0	965	159			
Arrive On Green	0.23	0.23	0.00				0.00	0.23	0.23			
Sat Flow, veh/h	0	3022	0				0	4172	687			
Grp Volume(v), veh/h	411	2653	0				0	602	282			
Grp Sat Flow(s),veh/h/ln	0	1511	0				0	1660	1539			
Q Serve(g_s), s	0.0	77.4	0.0				0.0	19.2	19.4			
Cycle Q Clear(g_c), s	77.4	77.4	0.0				0.0	19.2	19.4			
Prop In Lane	1.00		0.00				0.00		0.45			
Lane Grp Cap(c), veh/h	64	2076	0				0	768	356			
V/C Ratio(X)	6.43	1.28	0.00				0.00	0.78	0.79			
Avail Cap(c_a), veh/h	64	2076	0				0	984	456			
HCM Platoon Ratio	0.33	0.33	1.00				1.00	1.00	1.00			
Upstream Filter(I)	0.09	0.09	0.00				0.00	1.00	1.00			
Uniform Delay (d), s/veh	82.3	43.6	0.0				0.0	40.7	40.8			
Incr Delay (d2), s/veh	2447.1	125.5	0.0				0.0	3.2	7.2			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0			
%ile Back of Q (50%), veh/ln	45.4	68.3	0.0				0.0	8.5	8.3			
Lane Grp Delay (d), s/veh	2529.4	169.1	0.0				0.0	43.9	48.0			
Lane Grp LOS	F	F						D	D			
Approach Vol, veh/h		3064						884				
Approach Delay, s/veh		485.7						45.2				
Approach LOS		F						D				

Timer	
Assigned Phs	6
Phs Duration (G+Y+Rc), s	82.0
Change Period (Y+Rc), s	4.6
Max Green Setting (Gmax), s	77.4
Max Q Clear Time (g_c+I1), s	79.4
Green Ext Time (p_c), s	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	387.0
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1060	870	520	270	0	720	0	920	250	380	880	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.7	6.7		6.7		6.7		6.2	6.2	4.0	6.2	
Lane Util. Factor	0.97	0.95		1.00		1.00		0.95	1.00	0.97	0.95	
Frt	1.00	0.94		1.00		0.85		1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00		0.95		1.00		1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3060	2977		1577		1411		3154	1411	3060	3154	
Flt Permitted	0.95	1.00		0.10		1.00		1.00	1.00	0.95	1.00	
Satd. Flow (perm)	3060	2977		173		1411		3154	1411	3060	3154	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	1116	916	547	284	0	758	0	968	263	400	926	0
RTOR Reduction (vph)	0	63	0	0	0	104	0	0	146	0	0	0
Lane Group Flow (vph)	1116	1400	0	284	0	654	0	968	117	400	926	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Split	NA		D.Pm		custom		NA	Perm	Prot	NA	
Protected Phases	8	8						6		5	2	
Permitted Phases				8		4			6			
Actuated Green, G (s)	38.3	38.3		38.3		28.3		39.8	39.8	10.0	53.8	
Effective Green, g (s)	38.3	38.3		38.3		28.3		39.8	39.8	10.0	53.8	
Actuated g/C Ratio	0.27	0.27		0.27		0.20		0.28	0.28	0.07	0.38	
Clearance Time (s)	6.7	6.7		6.7		6.7		6.2	6.2	4.0	6.2	
Vehicle Extension (s)	3.0	3.0		3.0		3.0		3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	837	814		47		285		896	401	218	1212	
v/s Ratio Prot	0.36	0.47						c0.31		c0.13	0.29	
v/s Ratio Perm				c1.64		c0.46			0.08			
v/c Ratio	1.33	1.72		6.04		2.30		1.08	0.29	1.83	0.76	
Uniform Delay, d1	50.9	50.9		50.9		55.9		50.1	39.1	65.0	37.6	
Progression Factor	1.00	1.00		1.00		1.00		1.00	1.00	0.72	1.37	
Incremental Delay, d2	158.2	329.0		2314.1		594.1		54.2	1.8	388.5	3.4	
Delay (s)	209.0	379.9		2365.0		649.9		104.3	40.9	435.4	55.1	
Level of Service	F	F		F		F		F	D	F	E	
Approach Delay (s)		305.9			1117.4			90.8			169.8	
Approach LOS		F			F			F			F	

Intersection Summary			
HCM 2000 Control Delay	370.7	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	3.06		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	23.6
Intersection Capacity Utilization	127.7%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	200	380	110	770	1500	0	20	1580	1000
Number				7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				171.0	166.0	171.0	166.0	166.0	171.0	166.0	166.0	166.0
Lanes				0	2	0	2	3	0	1	2	1
Cap, veh/h				178	355	107	758	3374	0	201	1481	629
Arrive On Green				0.20	0.20	0.20	0.49	1.00	0.00	0.02	0.45	0.45
Sat Flow, veh/h				883	1766	533	3067	4981	0	1581	3320	1411
Grp Volume(v), veh/h				386	0	341	811	1579	0	21	1663	1053
Grp Sat Flow(s),veh/h/ln				1616	0	1566	1534	1660	0	1581	1660	1411
Q Serve(g_s), s				30.1	0.0	30.1	37.0	0.0	0.0	1.1	66.8	66.8
Cycle Q Clear(g_c), s				30.1	0.0	30.1	37.0	0.0	0.0	1.1	66.8	66.8
Prop In Lane				0.55		0.34	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h				325	0	315	758	3374	0	201	1481	629
V/C Ratio(X)				1.19	0.00	1.08	1.07	0.47	0.00	0.10	1.12	1.67
Avail Cap(c_a), veh/h				325	0	315	758	3374	0	271	1481	629
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.09	0.09	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh				59.9	0.0	59.9	37.9	0.0	0.0	22.0	41.5	41.5
Incr Delay (d2), s/veh				111.5	0.0	74.9	34.7	0.0	0.0	0.2	64.9	310.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				22.8	0.0	18.9	16.5	0.0	0.0	0.4	41.5	78.1
Lane Grp Delay (d), s/veh				171.3	0.0	134.8	72.6	0.0	0.0	22.2	106.4	351.5
Lane Grp LOS				F		F	F	A		C	F	F
Approach Vol, veh/h					727			2390			2737	
Approach Delay, s/veh					154.2			24.7			200.0	
Approach LOS					F			C			F	

Timer												
Assigned Phs					4		1	6		5	2	
Phs Duration (G+Y+Rc), s					36.8		40.0	107.7		5.3	73.0	
Change Period (Y+Rc), s					6.7		3.0	6.2		3.0	6.2	
Max Green Setting (Gmax), s					30.1		37.0	95.0		9.0	66.8	
Max Q Clear Time (g_c+I1), s					32.1		39.0	2.0		3.1	68.8	
Green Ext Time (p_c), s					0.0		0.0	84.3		0.0	0.0	

Intersection Summary	
HCM 2010 Ctrl Delay	122.7
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	0	1850	450	750	1150	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.2		4.2	4.2				
Lane Util. Factor					0.91		0.91	0.91				
Frt					0.97		1.00	1.00				
Flt Protected					1.00		0.95	0.99				
Satd. Flow (prot)					4399		1435	3006				
Flt Permitted					1.00		0.95	0.99				
Satd. Flow (perm)					4399		1435	3006				
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	0	1947	474	789	1211	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	32	4	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	2421	0	615	1349	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type					NA		Perm	NA				
Protected Phases					2			4				
Permitted Phases							4					
Actuated Green, G (s)					200.8		45.8	45.8				
Effective Green, g (s)					200.8		45.8	45.8				
Actuated g/C Ratio					0.79		0.18	0.18				
Clearance Time (s)					4.2		4.2	4.2				
Vehicle Extension (s)					3.0		3.0	3.0				
Lane Grp Cap (vph)					3463		257	539				
v/s Ratio Prot					c0.55							
v/s Ratio Perm							0.43	0.45				
v/c Ratio					0.70		2.39	2.50				
Uniform Delay, d1					12.8		104.6	104.6				
Progression Factor					1.00		1.00	1.00				
Incremental Delay, d2					1.2		638.7	681.7				
Delay (s)					14.0		743.3	786.3				
Level of Service					B		F	F				
Approach Delay (s)		0.0			14.0			772.4			0.0	
Approach LOS		A			B			F			A	

Intersection Summary			
HCM 2000 Control Delay	357.1	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.03		
Actuated Cycle Length (s)	255.0	Sum of lost time (s)	8.4
Intersection Capacity Utilization	159.8%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	430	2350	0	0	0	0	0	1050	390
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					5.8						4.6	4.6
Lane Util. Factor					0.91						0.91	0.91
Frt					1.00						0.99	0.85
Flt Protected					0.99						1.00	1.00
Satd. Flow (prot)					4498						3005	1284
Flt Permitted					0.99						1.00	1.00
Satd. Flow (perm)					4498						3005	1284
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	453	2474	0	0	0	0	0	1105	411
RTOR Reduction (vph)	0	0	0	0	19	0	0	0	0	0	0	12
Lane Group Flow (vph)	0	0	0	0	2908	0	0	0	0	0	1146	358
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type				Perm	NA						NA	Perm
Protected Phases					2						8	
Permitted Phases				2								8
Actuated Green, G (s)					58.7						60.9	60.9
Effective Green, g (s)					58.7						60.9	60.9
Actuated g/C Ratio					0.45						0.47	0.47
Clearance Time (s)					5.8						4.6	4.6
Vehicle Extension (s)					3.0						3.0	3.0
Lane Grp Cap (vph)					2031						1407	601
v/s Ratio Prot											c0.38	
v/s Ratio Perm					0.65							0.28
v/c Ratio					1.43						0.81	0.60
Uniform Delay, d1					35.6						29.7	25.5
Progression Factor					1.00						1.00	1.00
Incremental Delay, d2					197.2						3.7	1.6
Delay (s)					232.8						33.4	27.1
Level of Service					F						C	C
Approach Delay (s)		0.0			232.8			0.0			31.9	
Approach LOS		A			F			A			C	

Intersection Summary			
HCM 2000 Control Delay	164.3	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.12		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	10.4
Intersection Capacity Utilization	105.7%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	130	2620	120	380	950	0	0	430	150
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				171.0	166.0	171.0	166.0	166.0	0.0	0.0	166.0	171.0
Lanes				0	3	0	1	2	0	0	2	0
Cap, veh/h				110	2360	110	338	1338	0	0	497	172
Arrive On Green				0.17	0.17	0.17	0.34	0.81	0.00	0.00	0.21	0.21
Sat Flow, veh/h				211	4512	210	1581	3320	0	0	2360	816
Grp Volume(v), veh/h				1071	975	975	400	1000	0	0	318	293
Grp Sat Flow(s),veh/h/ln				1650	1660	1623	1581	1660	0	0	1660	1516
Q Serve(g_s), s				68.0	68.0	68.0	22.0	19.1	0.0	0.0	24.3	24.6
Cycle Q Clear(g_c), s				68.0	68.0	68.0	22.0	19.1	0.0	0.0	24.3	24.6
Prop In Lane				0.13		0.13	1.00		0.00	0.00		0.54
Lane Grp Cap(c), veh/h				863	868	849	338	1338	0	0	350	320
V/C Ratio(X)				1.24	1.12	1.15	1.18	0.75	0.00	0.00	0.91	0.92
Avail Cap(c_a), veh/h				863	868	849	338	1338	0	0	350	320
HCM Platoon Ratio				0.33	0.33	0.33	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.09	0.09	0.09	0.09	0.09	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				53.8	53.8	53.8	28.0	9.4	0.0	0.0	50.1	50.2
Incr Delay (d2), s/veh				109.6	56.8	68.1	85.1	0.4	0.0	0.0	29.5	33.3
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				56.7	44.3	46.0	18.9	3.9	0.0	0.0	13.3	12.7
Lane Grp Delay (d), s/veh				163.4	110.6	121.9	113.0	9.7	0.0	0.0	79.6	83.5
Lane Grp LOS				F	F	F	F	A			E	F
Approach Vol, veh/h					3021			1400			611	
Approach Delay, s/veh					133.0			39.2			81.4	
Approach LOS					F			D			F	

Timer				
Assigned Phs	2	7	4	8
Phs Duration (G+Y+Rc), s	73.0	25.0	57.0	32.0
Change Period (Y+Rc), s	5.0	3.0	4.6	4.6
Max Green Setting (Gmax), s	68.0	22.0	52.4	27.4
Max Q Clear Time (g_c+I1), s	70.0	24.0	21.1	26.6
Green Ext Time (p_c), s	0.0	0.0	14.4	0.7

Intersection Summary	
HCM 2010 Ctrl Delay	100.6
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	250	1730	360	140	400	0	0	0	0
Number				5	2	12	7	4	14			
Initial Q (Qb), veh				0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00			
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow veh/h/ln				171.0	166.0	171.0	166.0	166.0	0.0			
Lanes				0	3	0	1	1	0			
Cap, veh/h				55	1645	336	55	430	0			
Arrive On Green				0.68	0.68	0.68	0.09	0.09	0.00			
Sat Flow, veh/h				0	2435	498	1581	1660	0			
Grp Volume(v), veh/h				263	1118	1082	147	421	0			
Grp Sat Flow(s),veh/h/ln				0	1511	1423	1581	1660	0			
Q Serve(g_s), s				0.0	87.8	87.8	0.0	32.9	0.0			
Cycle Q Clear(g_c), s				87.8	87.8	87.8	33.7	32.9	0.0			
Prop In Lane				1.00		0.35	1.00		0.00			
Lane Grp Cap(c), veh/h				55	1020	961	55	430	0			
V/C Ratio(X)				4.75	1.10	1.13	2.65	0.98	0.00			
Avail Cap(c_a), veh/h				55	1020	961	55	430	0			
HCM Platoon Ratio				1.00	1.00	1.00	0.33	0.33	1.00			
Upstream Filter(I)				1.00	1.00	1.00	0.09	0.09	0.00			
Uniform Delay (d), s/veh				65.0	21.1	21.1	76.3	59.1	0.0			
Incr Delay (d2), s/veh				1727.1	57.9	70.3	749.0	8.9	0.0			
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0			
%ile Back of Q (50%), veh/ln				28.4	47.6	48.1	13.5	16.0	0.0			
Lane Grp Delay (d), s/veh				1792.1	79.0	91.4	825.3	67.9	0.0			
Lane Grp LOS				F	F	F	F	E				
Approach Vol, veh/h					2463			568				
Approach Delay, s/veh					267.4			264.0				
Approach LOS					F			F				

Timer	
Assigned Phs	2 4
Phs Duration (G+Y+Rc), s	92.0 38.0
Change Period (Y+Rc), s	4.2 4.3
Max Green Setting (Gmax), s	87.8 33.7
Max Q Clear Time (g_c+I1), s	89.8 35.7
Green Ext Time (p_c), s	0.0 0.0

Intersection Summary	
HCM 2010 Ctrl Delay	266.8
HCM 2010 LOS	F

Notes

Movement	WBL	WBT	SBT	SBR	SWL	SWR
Lane Configurations						
Volume (vph)	290	1430	190	40	550	310
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.5	6.5	7.0		7.0	7.0
Lane Util. Factor	0.91	0.91	1.00		0.97	0.91
Frt	1.00	1.00	0.98		0.99	0.85
Flt Protected	0.95	1.00	1.00		0.96	1.00
Satd. Flow (prot)	1449	3048	1637		3074	1297
Flt Permitted	0.95	1.00	1.00		0.96	1.00
Satd. Flow (perm)	1449	3048	1637		3074	1297
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	305	1505	200	42	579	326
RTOR Reduction (vph)	46	46	5	0	0	0
Lane Group Flow (vph)	228	1490	237	0	625	280
Turn Type	Perm	NA	NA		NA	Perm
Protected Phases		2	9		8	
Permitted Phases	2					8
Actuated Green, G (s)	65.5	65.5	13.0		31.0	31.0
Effective Green, g (s)	65.5	65.5	13.0		31.0	31.0
Actuated g/C Ratio	0.50	0.50	0.10		0.24	0.24
Clearance Time (s)	6.5	6.5	7.0		7.0	7.0
Vehicle Extension (s)	1.0	1.0	3.0		3.0	3.0
Lane Grp Cap (vph)	730	1535	163		733	309
v/s Ratio Prot			c0.14		0.20	
v/s Ratio Perm	0.16	0.49				c0.22
v/c Ratio	0.31	0.97	1.45		0.85	0.91
Uniform Delay, d1	19.0	31.3	58.5		47.3	48.1
Progression Factor	0.19	0.50	1.00		1.00	1.00
Incremental Delay, d2	0.7	12.0	234.0		9.5	28.3
Delay (s)	4.2	27.6	292.5		56.8	76.4
Level of Service	A	C	F		E	E
Approach Delay (s)		24.0	292.5		62.8	
Approach LOS		C	F		E	

Intersection Summary			
HCM 2000 Control Delay	57.9	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.01		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	20.5
Intersection Capacity Utilization	91.9%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	90	1780	90	100	210	0	0	180	70
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	186.3	190.0	190.0	186.3	0.0	0.0	193.7	190.0
Lanes				0	3	0	0	1	0	0	1	0
Cap, veh/h				145	3037	158	135	254	0	0	405	159
Arrive On Green				0.60	0.60	0.60	0.61	0.61	0.00	0.00	0.31	0.31
Sat Flow, veh/h				239	5028	262	307	833	0	0	1326	519
Grp Volume(v), veh/h				734	672	658	326	0	0	0	0	263
Grp Sat Flow(s),veh/h/ln				1851	1863	1816	1139	0	0	0	0	1846
Q Serve(g_s), s				30.3	26.0	26.2	19.2	0.0	0.0	0.0	0.0	13.4
Cycle Q Clear(g_c), s				30.3	26.0	26.2	32.6	0.0	0.0	0.0	0.0	13.4
Prop In Lane				0.13		0.14	0.32		0.00	0.00		0.28
Lane Grp Cap(c), veh/h				1118	1125	1097	389	0	0	0	0	564
V/C Ratio(X)				0.66	0.60	0.60	0.84	0.00	0.00	0.00	0.00	0.47
Avail Cap(c_a), veh/h				1118	1125	1097	439	0	0	0	0	624
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.18	0.18	0.18	0.94	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				15.1	14.2	14.3	24.7	0.0	0.0	0.0	0.0	32.7
Incr Delay (d2), s/veh				0.6	0.4	0.4	11.1	0.0	0.0	0.0	0.0	0.4
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				13.6	11.7	11.5	8.9	0.0	0.0	0.0	0.0	6.4
Lane Grp Delay (d), s/veh				15.7	14.7	14.8	35.8	0.0	0.0	0.0	0.0	33.1
Lane Grp LOS				B	B	B	D					C
Approach Vol, veh/h					2064			326			263	
Approach Delay, s/veh					15.1			35.8			33.1	
Approach LOS					B			D			C	

Timer												
Assigned Phs					2			4			8	
Phs Duration (G+Y+Rc), s					75.0			41.2			41.2	
Change Period (Y+Rc), s					5.8			5.7			5.7	
Max Green Setting (Gmax), s					69.2			39.3			39.3	
Max Q Clear Time (g_c+I1), s					32.3			34.6			15.4	
Green Ext Time (p_c), s					10.0			0.9			1.9	

Intersection Summary												
HCM 2010 Ctrl Delay			19.4									
HCM 2010 LOS			B									

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	180	1840	130	200	550	0	0	570	120
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99
Adj Sat Flow veh/h/ln				190.0	184.5	190.0	190.0	184.5	0.0	0.0	177.1	190.0
Lanes				0	3	0	0	2	0	0	2	0
Cap, veh/h				180	1968	142	311	1231	0	0	1415	296
Arrive On Green				0.42	0.42	0.41	0.33	0.34	0.00	0.00	0.50	0.49
Sat Flow, veh/h				428	4685	339	504	1709	0	0	2830	593
Grp Volume(v), veh/h				804	738	721	395	395	0	0	375	351
Grp Sat Flow(s),veh/h/ln				1823	1845	1785	1121	1845	0	0	1771	1652
Q Serve(g_s), s				50.4	46.4	47.2	0.1	19.9	0.0	0.0	16.1	16.3
Cycle Q Clear(g_c), s				50.4	46.4	47.2	60.0	19.9	0.0	0.0	16.1	16.3
Prop In Lane				0.24		0.19	0.95		0.00	0.00		0.36
Lane Grp Cap(c), veh/h				766	775	750	60	922	0	0	885	826
V/C Ratio(X)				1.05	0.95	0.96	6.57	0.43	0.00	0.00	0.42	0.43
Avail Cap(c_a), veh/h				766	775	750	60	922	0	0	885	826
HCM Platoon Ratio				1.00	1.00	1.00	0.67	0.67	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	0.93	0.93	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				34.8	33.6	34.0	68.5	26.6	0.0	0.0	19.0	19.2
Incr Delay (d2), s/veh				46.5	22.6	24.8	2539.3	1.4	0.0	0.0	1.5	1.6
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				32.9	26.2	26.2	42.4	9.9	0.0	0.0	7.3	6.9
Lane Grp Delay (d), s/veh				81.3	56.2	58.7	2607.7	27.9	0.0	0.0	20.5	20.8
Lane Grp LOS				F	E	E	F	C			C	C
Approach Vol, veh/h					2263			790			726	
Approach Delay, s/veh					65.9			1317.8			20.6	
Approach LOS					E			F			C	

Timer												
Assigned Phs					2		7	4			8	
Phs Duration (G+Y+Rc), s					55.0		0.0	65.0			65.0	
Change Period (Y+Rc), s					5.6		5.0	6.0			6.0	
Max Green Setting (Gmax), s					49.4		13.0	59.0			41.0	
Max Q Clear Time (g_c+I1), s					52.4		0.0	62.0			18.3	
Green Ext Time (p_c), s					0.0		0.0	0.0			9.3	

Intersection Summary		
HCM 2010 Ctrl Delay		318.9
HCM 2010 LOS		F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	80	1940	0	0	0	0	0	50	30
Number				5	2	12				3	8	18
Initial Q (Qb), veh				0	0	0				0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00				1.00		1.00
Parking Bus Adj				1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	182.7	0.0				0.0	190.0	190.0
Lanes				0	3	0				0	1	0
Cap, veh/h				60	2494	0				0	204	123
Arrive On Green				0.25	0.25	0.00				0.00	0.18	0.18
Sat Flow, veh/h				0	3325	0				0	1111	671
Grp Volume(v), veh/h				84	2042	0				0	0	85
Grp Sat Flow(s),veh/h/ln				0	1663	0				0	0	1782
Q Serve(g_s), s				0.0	69.6	0.0				0.0	0.0	4.9
Cycle Q Clear(g_c), s				90.0	69.6	0.0				0.0	0.0	4.9
Prop In Lane				1.00		0.00				0.00		0.38
Lane Grp Cap(c), veh/h				60	2494	0				0	0	327
V/C Ratio(X)				1.40	0.82	0.00				0.00	0.00	0.26
Avail Cap(c_a), veh/h				60	2494	0				0	0	327
HCM Platoon Ratio				0.33	0.33	1.00				1.00	1.00	1.00
Upstream Filter(I)				0.09	0.09	0.00				0.00	0.00	1.00
Uniform Delay (d), s/veh				90.2	37.5	0.0				0.0	0.0	42.0
Incr Delay (d2), s/veh				189.0	0.3	0.0				0.0	0.0	1.9
Initial Q Delay(d3),s/veh				0.0	0.0	0.0				0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				5.1	31.3	0.0				0.0	0.0	2.4
Lane Grp Delay (d), s/veh				279.1	37.7	0.0				0.0	0.0	43.9
Lane Grp LOS				F	D							D
Approach Vol, veh/h					2126						85	
Approach Delay, s/veh					47.3						43.9	
Approach LOS					D						D	

Timer	
Assigned Phs	2	8
Phs Duration (G+Y+Rc), s	94.0	26.0
Change Period (Y+Rc), s	5.0	4.0
Max Green Setting (Gmax), s	89.0	22.0
Max Q Clear Time (g_c+I1), s	92.0	6.9
Green Ext Time (p_c), s	0.0	0.2

Intersection Summary	
HCM 2010 Ctrl Delay	47.2
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	220	1700	120	120	630	0	0	980	130
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	184.5	190.0	184.5	184.5	0.0	0.0	184.5	190.0
Lanes				0	3	0	1	2	0	0	2	0
Cap, veh/h				262	2157	155	211	1728	0	0	1171	155
Arrive On Green				0.16	0.16	0.15	0.13	0.94	0.00	0.00	0.37	0.37
Sat Flow, veh/h				553	4566	329	1757	3689	0	0	3191	423
Grp Volume(v), veh/h				762	701	684	126	663	0	0	596	573
Grp Sat Flow(s),veh/h/ln				1817	1845	1787	1757	1845	0	0	1845	1770
Q Serve(g_s), s				49.3	44.0	44.4	5.1	2.1	0.0	0.0	36.3	36.4
Cycle Q Clear(g_c), s				49.3	44.0	44.4	5.1	2.1	0.0	0.0	36.3	36.4
Prop In Lane				0.30		0.18	1.00		0.00	0.00		0.24
Lane Grp Cap(c), veh/h				859	872	844	211	1728	0	0	677	649
V/C Ratio(X)				0.89	0.80	0.81	0.60	0.38	0.00	0.00	0.88	0.88
Avail Cap(c_a), veh/h				859	872	844	223	1728	0	0	677	649
HCM Platoon Ratio				0.33	0.33	0.33	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.78	0.78	0.78	0.22	0.22	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				47.5	45.3	45.5	25.0	2.1	0.0	0.0	35.5	35.6
Incr Delay (d2), s/veh				10.6	6.2	6.6	0.5	0.1	0.0	0.0	15.3	15.9
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				27.0	23.7	23.2	3.6	0.7	0.0	0.0	19.6	19.1
Lane Grp Delay (d), s/veh				58.1	51.5	52.1	25.6	2.2	0.0	0.0	50.8	51.5
Lane Grp LOS				E	D	D	C	A			D	D
Approach Vol, veh/h					2147			789			1169	
Approach Delay, s/veh					54.0			6.0			51.1	
Approach LOS					D			A			D	

Timer												
Assigned Phs					2		7	4			8	
Phs Duration (G+Y+Rc), s					60.0		11.2	60.0			48.8	
Change Period (Y+Rc), s					4.3		4.2	4.8			4.8	
Max Green Setting (Gmax), s					55.7		7.8	55.2			43.2	
Max Q Clear Time (g_c+I1), s					51.3		7.1	4.1			38.4	
Green Ext Time (p_c), s					1.5		0.0	2.1			1.4	

Intersection Summary		
HCM 2010 Ctrl Delay		44.0
HCM 2010 LOS		D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	100	1810	40	80	70	0	0	110	50
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	186.3	190.0	190.0	186.3	0.0	0.0	186.3	190.0
Lanes				0	3	0	0	1	0	0	1	0
Cap, veh/h				188	3633	82	146	114	0	0	250	114
Arrive On Green				0.23	0.23	0.23	0.07	0.07	0.00	0.00	0.21	0.20
Sat Flow, veh/h				267	5170	117	456	550	0	0	1212	554
Grp Volume(v), veh/h				727	666	659	158	0	0	0	0	169
Grp Sat Flow(s),veh/h/ln				1849	1863	1842	1007	0	0	0	0	1765
Q Serve(g_s), s				37.1	33.3	33.4	9.3	0.0	0.0	0.0	0.0	9.0
Cycle Q Clear(g_c), s				37.1	33.3	33.4	18.3	0.0	0.0	0.0	0.0	9.0
Prop In Lane				0.14		0.06	0.53		0.00	0.00		0.31
Lane Grp Cap(c), veh/h				1300	1309	1295	259	0	0	0	0	365
V/C Ratio(X)				0.56	0.51	0.51	0.61	0.00	0.00	0.00	0.00	0.46
Avail Cap(c_a), veh/h				1300	1309	1295	435	0	0	0	0	579
HCM Platoon Ratio				0.33	0.33	0.33	0.33	0.33	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.25	0.25	0.25	0.96	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				26.5	25.0	25.0	50.0	0.0	0.0	0.0	0.0	37.4
Incr Delay (d2), s/veh				0.4	0.4	0.4	1.7	0.0	0.0	0.0	0.0	0.7
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				18.8	16.9	16.8	4.6	0.0	0.0	0.0	0.0	4.1
Lane Grp Delay (d), s/veh				26.9	25.4	25.4	51.7	0.0	0.0	0.0	0.0	38.1
Lane Grp LOS				C	C	C	D					D
Approach Vol, veh/h					2052			158			169	
Approach Delay, s/veh					25.9			51.7			38.1	
Approach LOS					C			D			D	

Timer			
Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	80.0	27.0	27.0
Change Period (Y+Rc), s	5.8	5.9	5.9
Max Green Setting (Gmax), s	74.2	34.1	34.1
Max Q Clear Time (g_c+I1), s	39.1	20.3	11.0
Green Ext Time (p_c), s	9.8	0.8	1.0

Intersection Summary	
HCM 2010 Ctrl Delay	28.5
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	280	1500	200	100	770	0	0	850	80
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	186.3	190.0	186.3	186.3	0.0	0.0	186.3	190.0
Lanes				0	3	0	1	2	0	0	2	0
Cap, veh/h				340	1950	266	226	1613	0	0	1130	106
Arrive On Green				0.47	0.47	0.46	0.13	0.87	0.00	0.00	0.34	0.33
Sat Flow, veh/h				726	4159	567	1774	3725	0	0	3355	315
Grp Volume(v), veh/h				742	687	656	105	811	0	0	497	482
Grp Sat Flow(s),veh/h/ln				1826	1863	1763	1774	1863	0	0	1863	1807
Q Serve(g_s), s				41.6	35.4	36.1	4.2	5.9	0.0	0.0	27.6	27.6
Cycle Q Clear(g_c), s				41.6	35.4	36.1	4.2	5.9	0.0	0.0	27.6	27.6
Prop In Lane				0.40		0.32	1.00		0.00	0.00		0.17
Lane Grp Cap(c), veh/h				857	874	827	226	1613	0	0	627	609
V/C Ratio(X)				0.87	0.79	0.79	0.46	0.50	0.00	0.00	0.79	0.79
Avail Cap(c_a), veh/h				948	966	915	226	1613	0	0	627	609
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	0.32	0.32	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				27.2	25.5	25.8	24.2	4.7	0.0	0.0	34.3	34.4
Incr Delay (d2), s/veh				11.5	7.0	7.7	2.2	0.1	0.0	0.0	9.9	10.2
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				21.3	17.9	17.5	1.8	1.6	0.0	0.0	14.7	14.3
Lane Grp Delay (d), s/veh				38.6	32.6	33.6	26.4	4.8	0.0	0.0	44.2	44.5
Lane Grp LOS				D	C	C	C	A			D	D
Approach Vol, veh/h					2085			916			979	
Approach Delay, s/veh					35.0			7.3			44.3	
Approach LOS					D			A			D	

Timer												
Assigned Phs					2		7	4			8	
Phs Duration (G+Y+Rc), s					59.3		11.0	55.0			44.0	
Change Period (Y+Rc), s					6.7		3.0	6.5			6.5	
Max Green Setting (Gmax), s					58.3		8.0	48.5			37.5	
Max Q Clear Time (g_c+I1), s					43.6		6.2	7.9			29.6	
Green Ext Time (p_c), s					9.0		0.0	11.3			5.0	

Intersection Summary	
HCM 2010 Ctrl Delay	30.9
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Volume (vph)	0	0	0	910	770	100	130	240	0	0	340	320
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	10	12	11	10	12	12	13	12
Total Lost time (s)				6.7	6.7		6.5	6.5			4.0	
Lane Util. Factor				0.91	0.91		1.00	0.95			0.95	
Frt				1.00	0.99		1.00	1.00			0.93	
Flt Protected				0.95	0.98		0.95	1.00			1.00	
Satd. Flow (prot)				1610	3079		1711	3303			3391	
Flt Permitted				0.95	0.98		0.28	1.00			1.00	
Satd. Flow (perm)				1610	3079		502	3303			3391	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	958	811	105	137	253	0	0	358	337
RTOR Reduction (vph)	0	0	0	0	5	0	0	0	0	0	69	0
Lane Group Flow (vph)	0	0	0	546	1323	0	137	253	0	0	626	0
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					2			4			8	
Permitted Phases				2			4					
Actuated Green, G (s)				58.3	58.3		48.5	48.5			51.0	
Effective Green, g (s)				58.3	58.3		48.5	48.5			51.0	
Actuated g/C Ratio				0.49	0.49		0.40	0.40			0.42	
Clearance Time (s)				6.7	6.7		6.5	6.5			4.0	
Vehicle Extension (s)				2.5	2.5		2.0	2.0			2.5	
Lane Grp Cap (vph)				782	1495		202	1334			1441	
v/s Ratio Prot								0.08			0.18	
v/s Ratio Perm				0.34	0.43		c0.27					
v/c Ratio				0.70	0.88		0.68	0.19			0.43	
Uniform Delay, d1				24.0	27.8		29.3	23.1			24.3	
Progression Factor				0.26	0.30		1.00	1.00			1.00	
Incremental Delay, d2				2.9	4.8		16.8	0.3			1.0	
Delay (s)				9.1	13.0		46.2	23.4			25.3	
Level of Service				A	B		D	C			C	
Approach Delay (s)		0.0			11.9			31.4			25.3	
Approach LOS		A			B			C			C	

Intersection Summary			
HCM 2000 Control Delay	17.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	13.2
Intersection Capacity Utilization	75.2%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	120	0	40	260	450	330	20	1350	0	0	1400	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	9	12	9	11	11	11	12	10	12	12	10	12
Total Lost time (s)	3.9		3.9	3.9	3.9	3.9		3.6			4.0	
Lane Util. Factor	1.00		1.00	0.97	1.00	1.00		0.91			0.86	
Frt	1.00		0.85	1.00	1.00	0.85		1.00			1.00	
Flt Protected	0.95		1.00	0.95	1.00	1.00		1.00			1.00	
Satd. Flow (prot)	1593		1425	3319	1801	1531		4743			5968	
Flt Permitted	0.14		1.00	0.95	1.00	1.00		0.88			1.00	
Satd. Flow (perm)	230		1425	3319	1801	1531		4190			5968	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	126	0	42	274	474	347	21	1421	0	0	1474	21
RTOR Reduction (vph)	0	0	38	0	0	146	0	0	0	0	1	0
Lane Group Flow (vph)	126	0	4	274	474	201	0	1442	0	0	1494	0
Turn Type	D.Pm		custom	Split	NA	Perm	Perm	NA			NA	
Protected Phases			8	4	4			6			2	
Permitted Phases	4					4	6					
Actuated Green, G (s)	28.1		12.1	28.1	28.1	28.1		75.4			75.0	
Effective Green, g (s)	29.1		13.1	29.1	29.1	29.1		76.4			76.0	
Actuated g/C Ratio	0.22		0.10	0.22	0.22	0.22		0.59			0.58	
Clearance Time (s)	4.9		4.9	4.9	4.9	4.9		4.6			5.0	
Vehicle Extension (s)	2.5		2.5	2.5	2.5	2.5		2.5			2.5	
Lane Grp Cap (vph)	51		143	742	403	342		2462			3488	
v/s Ratio Prot			c0.00	0.08	0.26						0.25	
v/s Ratio Perm	c0.55					0.13		c0.34				
v/c Ratio	2.47		0.03	0.37	1.18	0.59		0.59			0.43	
Uniform Delay, d1	50.5		52.7	42.7	50.5	45.1		16.8			15.0	
Progression Factor	1.00		1.00	1.00	1.00	1.00		0.06			1.00	
Incremental Delay, d2	716.5		0.4	1.4	102.4	7.2		0.1			0.4	
Delay (s)	767.0		53.1	44.1	152.8	52.3		1.2			15.3	
Level of Service	F		D	D	F	D		A			B	
Approach Delay (s)		588.5			93.8			1.2			15.3	
Approach LOS		F			F			A			B	

Intersection Summary			
HCM 2000 Control Delay	53.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.98		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	11.8
Intersection Capacity Utilization	80.4%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	1100	50	0	1360	40	190	1420	430	310	1400	150
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	0.0	186.3	190.0	0.0	186.3	190.0	186.3	186.3	190.0	186.3	186.3	186.3
Lanes	0	2	0	0	2	0	1	3	0	1	2	1
Cap, veh/h	0	1313	60	0	1338	39	258	1589	476	298	1633	694
Arrive On Green	0.00	0.37	0.36	0.00	0.37	0.36	0.08	0.38	0.38	0.27	0.88	0.88
Sat Flow, veh/h	0	3535	162	0	3601	105	1774	4133	1237	1774	3725	1583
Grp Volume(v), veh/h	0	610	601	0	740	734	200	1346	602	326	1474	158
Grp Sat Flow(s),veh/h/ln	0	1863	1834	0	1863	1844	1774	1863	1644	1774	1863	1583
Q Serve(g_s), s	0.0	39.8	39.8	0.0	48.3	48.3	9.0	45.3	46.2	17.5	30.3	2.0
Cycle Q Clear(g_c), s	0.0	39.8	39.8	0.0	48.3	48.3	9.0	45.3	46.2	17.5	30.3	2.0
Prop In Lane	0.00		0.09	0.00		0.06	1.00		0.75	1.00		1.00
Lane Grp Cap(c), veh/h	0	692	681	0	692	685	258	1433	632	298	1633	694
V/C Ratio(X)	0.00	0.88	0.88	0.00	1.07	1.07	0.77	0.94	0.95	1.09	0.90	0.23
Avail Cap(c_a), veh/h	0	692	681	0	692	685	258	1433	632	298	1633	694
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	0.91
Uniform Delay (d), s/veh	0.0	38.2	38.2	0.0	40.9	40.9	27.2	38.5	39.2	34.8	6.4	4.6
Incr Delay (d2), s/veh	0.0	15.1	15.3	0.0	54.1	55.2	12.5	13.1	25.7	77.2	7.9	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.0	21.7	21.4	0.0	33.3	33.2	7.7	23.9	23.8	15.8	5.0	0.8
Lane Grp Delay (d), s/veh	0.0	53.2	53.6	0.0	95.0	96.1	39.7	51.7	64.9	112.0	14.3	5.3
Lane Grp LOS		D	D		F	F	D	D	E	F	B	A
Approach Vol, veh/h		1211			1474			2148			1958	
Approach Delay, s/veh		53.4			95.5			54.3			29.8	
Approach LOS		D			F			D			C	

Timer												
Assigned Phs		6			2		7	4		3	8	
Phs Duration (G+Y+Rc), s		54.0			54.0		14.0	55.0		21.0	62.0	
Change Period (Y+Rc), s		6.7			6.7		3.0	6.0		3.0	6.0	
Max Green Setting (Gmax), s		47.3			47.3		11.0	49.0		18.0	56.0	
Max Q Clear Time (g_c+I1), s		41.8			50.3		11.0	48.2		19.5	32.3	
Green Ext Time (p_c), s		4.3			0.0		0.0	0.7		0.0	18.2	

Intersection Summary	
HCM 2010 Ctrl Delay	56.0
HCM 2010 LOS	E

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	50	1620	30	0	0	0	0	110	50	75	100	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	186.3	190.0	190.0	186.3	0.0
Lanes	0	3	0				0	1	0	0	1	0
Cap, veh/h	109	3743	72				0	242	110	120	142	0
Arrive On Green	0.70	0.71	0.70				0.00	0.20	0.20	0.20	0.20	0.00
Sat Flow, veh/h	155	5305	103				0	1212	554	374	715	0
Grp Volume(v), veh/h	635	580	575				0	0	169	184	0	0
Grp Sat Flow(s),veh/h/ln	1855	1863	1845				0	0	1765	1088	0	0
Q Serve(g_s), s	17.5	15.1	15.2				0.0	0.0	9.6	10.2	0.0	0.0
Cycle Q Clear(g_c), s	17.5	15.1	15.2				0.0	0.0	9.6	19.8	0.0	0.0
Prop In Lane	0.08		0.06				0.00		0.31	0.43		0.00
Lane Grp Cap(c), veh/h	1309	1314	1302				0	0	352	262	0	0
V/C Ratio(X)	0.49	0.44	0.44				0.00	0.00	0.48	0.70	0.00	0.00
Avail Cap(c_a), veh/h	1309	1314	1302				0	0	450	347	0	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	7.5	7.2	7.2				0.0	0.0	40.3	45.9	0.0	0.0
Incr Delay (d2), s/veh	1.3	1.1	1.1				0.0	0.0	1.0	4.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	7.7	6.7	6.6				0.0	0.0	4.4	5.5	0.0	0.0
Lane Grp Delay (d), s/veh	8.8	8.2	8.3				0.0	0.0	41.3	50.0	0.0	0.0
Lane Grp LOS	A	A	A						D	D		
Approach Vol, veh/h		1790						169			184	
Approach Delay, s/veh		8.4						41.3			50.0	
Approach LOS		A						D			D	

Timer												
Assigned Phs		6						4			8	
Phs Duration (G+Y+Rc), s		85.0						28.7			28.7	
Change Period (Y+Rc), s		5.8						6.0			6.0	
Max Green Setting (Gmax), s		79.2						29.0			29.0	
Max Q Clear Time (g_c+I1), s		19.5						11.6			21.8	
Green Ext Time (p_c), s		11.5						1.3			0.8	

Intersection Summary												
HCM 2010 Ctrl Delay			14.6									
HCM 2010 LOS			B									

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	150	1690	70	0	0	0	0	650	150	60	1170	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	186.3	190.0	186.3	186.3	0.0
Lanes	0	3	0				0	2	0	1	2	0
Cap, veh/h	219	2634	113				0	876	202	174	1372	0
Arrive On Green	0.18	0.18	0.18				0.00	0.30	0.29	0.07	0.74	0.00
Sat Flow, veh/h	408	4912	210				0	2930	676	1774	3725	0
Grp Volume(v), veh/h	713	655	644				0	435	407	63	1232	0
Grp Sat Flow(s),veh/h/ln	1842	1863	1826				0	1863	1743	1774	1863	0
Q Serve(g_s), s	43.9	39.4	39.5				0.0	25.7	25.7	2.9	31.0	0.0
Cycle Q Clear(g_c), s	43.9	39.4	39.5				0.0	25.7	25.7	2.9	31.0	0.0
Prop In Lane	0.22		0.11				0.00		0.39	1.00		0.00
Lane Grp Cap(c), veh/h	988	999	979				0	557	521	174	1372	0
V/C Ratio(X)	0.72	0.66	0.66				0.00	0.78	0.78	0.36	0.90	0.00
Avail Cap(c_a), veh/h	988	999	979				0	557	521	228	1372	0
HCM Platoon Ratio	0.33	0.33	0.33				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	0.86	0.86	0.86				0.00	1.00	1.00	0.37	0.37	0.00
Uniform Delay (d), s/veh	41.0	39.2	39.2				0.0	38.6	38.8	29.3	14.1	0.0
Incr Delay (d2), s/veh	3.9	2.9	3.0				0.0	10.4	11.1	0.5	4.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	23.1	20.7	20.4				0.0	13.8	13.1	1.3	9.7	0.0
Lane Grp Delay (d), s/veh	45.0	42.0	42.2				0.0	49.0	49.9	29.8	18.1	0.0
Lane Grp LOS	D	D	D					D	D	C	B	
Approach Vol, veh/h		2011						842			1295	
Approach Delay, s/veh		43.1						49.4			18.6	
Approach LOS		D						D			B	
Timer												
Assigned Phs		6						4		3	8	
Phs Duration (G+Y+Rc), s		71.0						41.0		8.3	49.3	
Change Period (Y+Rc), s		6.5						6.0		4.0	6.0	
Max Green Setting (Gmax), s		64.5						31.0		8.0	43.3	
Max Q Clear Time (g_c+I1), s		45.9						27.7		4.9	33.0	
Green Ext Time (p_c), s		7.8						2.4		0.0	6.0	
Intersection Summary												
HCM 2010 Ctrl Delay			36.8									
HCM 2010 LOS			D									
Notes												

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	80	1820	0	0	70	0
Number	1	6			3	18
Initial Q (Qb), veh	0	0			0	0
Ped-Bike Adj(A_pbT)	1.00				1.00	1.00
Parking Bus Adj	1.00	1.00			1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3			186.3	0.0
Lanes	0	3			1	0
Cap, veh/h	77	3256			0	0
Arrive On Green	0.32	0.32			0.00	0.00
Sat Flow, veh/h	0	3390			0	
Grp Volume(v), veh/h	84	1916			0.0	
Grp Sat Flow(s),veh/h/ln	0	1695				
Q Serve(g_s), s	0.0	44.5				
Cycle Q Clear(g_c), s	90.0	44.5				
Prop In Lane	1.00					
Lane Grp Cap(c), veh/h	77	3256				
V/C Ratio(X)	1.09	0.59				
Avail Cap(c_a), veh/h	77	3256				
HCM Platoon Ratio	0.33	0.33				
Upstream Filter(I)	0.57	0.57				
Uniform Delay (d), s/veh	77.0	16.4				
Incr Delay (d2), s/veh	104.7	0.4				
Initial Q Delay(d3),s/veh	0.0	0.0				
%ile Back of Q (50%), veh/ln	2.2	17.4				
Lane Grp Delay (d), s/veh	181.7	16.9				
Lane Grp LOS	F	B				
Approach Vol, veh/h		2000				
Approach Delay, s/veh		23.8				
Approach LOS		C				

Timer	
Assigned Phs	6
Phs Duration (G+Y+Rc), s	93.7
Change Period (Y+Rc), s	4.7
Max Green Setting (Gmax), s	89.0
Max Q Clear Time (g_c+I1), s	92.0
Green Ext Time (p_c), s	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	23.8
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	110	1950	30	0	0	0	0	80	80	140	90	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	193.7	190.0	190.0	193.7	0.0
Lanes	0	3	0				0	1	0	0	1	0
Cap, veh/h	181	3420	55				0	252	252	233	139	0
Arrive On Green	0.22	0.22	0.21				0.00	0.28	0.28	0.09	0.09	0.00
Sat Flow, veh/h	275	5201	83				0	890	890	653	489	0
Grp Volume(v), veh/h	779	713	709				0	0	168	242	0	0
Grp Sat Flow(s),veh/h/ln	1849	1863	1848				0	0	1780	1142	0	0
Q Serve(g_s), s	46.0	41.2	41.3				0.0	0.0	9.0	17.9	0.0	0.0
Cycle Q Clear(g_c), s	46.0	41.2	41.3				0.0	0.0	9.0	26.9	0.0	0.0
Prop In Lane	0.15		0.05				0.00		0.50	0.61		0.00
Lane Grp Cap(c), veh/h	1216	1225	1215				0	0	504	372	0	0
V/C Ratio(X)	0.64	0.58	0.58				0.00	0.00	0.33	0.65	0.00	0.00
Avail Cap(c_a), veh/h	1216	1225	1215				0	0	504	372	0	0
HCM Platoon Ratio	0.33	0.33	0.33				1.00	1.00	1.00	0.33	0.33	1.00
Upstream Filter(I)	0.88	0.88	0.88				0.00	0.00	1.00	0.81	0.00	0.00
Uniform Delay (d), s/veh	34.1	32.2	32.3				0.0	0.0	34.2	54.2	0.0	0.0
Incr Delay (d2), s/veh	2.3	1.8	1.8				0.0	0.0	1.8	7.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	24.3	21.8	21.7				0.0	0.0	4.3	8.5	0.0	0.0
Lane Grp Delay (d), s/veh	36.4	34.0	34.1				0.0	0.0	36.0	61.2	0.0	0.0
Lane Grp LOS	D	C	C						D	E		
Approach Vol, veh/h		2201						168			242	
Approach Delay, s/veh		34.9						36.0			61.2	
Approach LOS		C						D			E	

Timer												
Assigned Phs		6						4			8	
Phs Duration (G+Y+Rc), s		82.7						37.3			37.3	
Change Period (Y+Rc), s		4.8						4.3			4.3	
Max Green Setting (Gmax), s		77.9						33.0			33.0	
Max Q Clear Time (g_c+I1), s		48.0						11.0			28.9	
Green Ext Time (p_c), s		10.6						1.2			0.5	

Intersection Summary			
HCM 2010 Ctrl Delay		37.4	
HCM 2010 LOS		D	

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	140	1840	110	0	0	0	0	640	170	240	950	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	186.3	190.0	186.3	186.3	0.0
Lanes	0	3	0				0	2	0	1	2	0
Cap, veh/h	176	2477	152				0	786	209	305	1581	0
Arrive On Green	0.51	0.51	0.50				0.00	0.28	0.27	0.24	0.85	0.00
Sat Flow, veh/h	347	4872	299				0	2839	753	1774	3725	0
Grp Volume(v), veh/h	782	717	701				0	442	411	253	1000	0
Grp Sat Flow(s),veh/h/ln	1845	1863	1810				0	1863	1730	1774	1863	0
Q Serve(g_s), s	42.0	35.7	36.1				0.0	26.1	26.2	11.8	10.2	0.0
Cycle Q Clear(g_c), s	42.0	35.7	36.1				0.0	26.1	26.2	11.8	10.2	0.0
Prop In Lane	0.19		0.17				0.00		0.44	1.00		0.00
Lane Grp Cap(c), veh/h	938	947	920				0	516	479	305	1581	0
V/C Ratio(X)	0.83	0.76	0.76				0.00	0.86	0.86	0.83	0.63	0.00
Avail Cap(c_a), veh/h	938	947	920				0	533	495	349	1708	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	0.18	0.18	0.00
Uniform Delay (d), s/veh	24.3	22.8	23.0				0.0	39.8	40.0	24.4	5.8	0.0
Incr Delay (d2), s/veh	8.6	5.6	5.9				0.0	12.8	13.7	2.7	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	21.4	17.8	17.7				0.0	14.1	13.4	7.1	2.4	0.0
Lane Grp Delay (d), s/veh	33.0	28.4	28.9				0.0	52.6	53.7	27.1	5.9	0.0
Lane Grp LOS	C	C	C					D	D	C	A	
Approach Vol, veh/h		2200						853			1253	
Approach Delay, s/veh		30.2						53.1			10.2	
Approach LOS		C						D			B	

Timer												
Assigned Phs		6						4		3	8	
Phs Duration (G+Y+Rc), s		63.0						35.9		17.1	53.1	
Change Period (Y+Rc), s		5.0						4.8		3.0	4.8	
Max Green Setting (Gmax), s		58.0						32.2		17.0	52.2	
Max Q Clear Time (g_c+I1), s		44.0						28.2		13.8	12.2	
Green Ext Time (p_c), s		9.2						3.0		0.3	12.2	

Intersection Summary			
HCM 2010 Ctrl Delay		28.9	
HCM 2010 LOS		C	

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	200	1770	100	0	0	0	0	500	120	200	560	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	186.3	190.0	190.0	186.3	0.0
Lanes	0	3	0				0	2	0	0	2	0
Cap, veh/h	201	1896	109				0	1559	372	359	1314	0
Arrive On Green	0.40	0.40	0.39				0.00	0.54	0.53	1.00	1.00	0.00
Sat Flow, veh/h	502	4739	274				0	2909	694	567	1827	0
Grp Volume(v), veh/h	773	710	696				0	336	316	400	400	0
Grp Sat Flow(s),veh/h/ln	1838	1863	1814				0	1863	1740	1157	1863	0
Q Serve(g_s), s	48.0	44.4	44.8				0.0	12.3	12.4	0.1	0.0	0.0
Cycle Q Clear(g_c), s	48.0	44.4	44.8				0.0	12.3	12.4	64.3	0.0	0.0
Prop In Lane	0.27		0.15				0.00		0.40	0.83		0.00
Lane Grp Cap(c), veh/h	735	745	726				0	998	933	61	998	0
V/C Ratio(X)	1.05	0.95	0.96				0.00	0.34	0.34	6.52	0.40	0.00
Avail Cap(c_a), veh/h	735	745	726				0	998	933	61	998	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	0.88	0.88	0.00
Uniform Delay (d), s/veh	36.0	34.9	35.1				0.0	15.8	15.9	31.6	0.0	0.0
Incr Delay (d2), s/veh	47.4	23.3	24.8				0.0	0.9	1.0	2515.6	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	31.7	25.5	25.3				0.0	5.8	5.5	44.9	0.1	0.0
Lane Grp Delay (d), s/veh	83.4	58.3	59.9				0.0	16.7	16.9	2547.2	0.2	0.0
Lane Grp LOS	F	E	E					B	B	F	A	
Approach Vol, veh/h		2179						652			800	
Approach Delay, s/veh		67.7						16.8			1273.7	
Approach LOS		E						B			F	

Timer					
Assigned Phs		6		4		3	8
Phs Duration (G+Y+Rc), s		52.0		68.0		0.0	68.0
Change Period (Y+Rc), s		5.0		4.7		4.0	4.7
Max Green Setting (Gmax), s		47.0		45.3		14.0	63.3
Max Q Clear Time (g_c+I1), s		50.0		14.4		0.0	66.3
Green Ext Time (p_c), s		0.0		9.2		0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	324.3
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	2020	70	0	0	0	0	0	50	80	70	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	10	12	12	12	12	12	11	12	12	11	12
Total Lost time (s)		5.0							4.3	4.3	4.3	
Lane Util. Factor		0.91							1.00	1.00	1.00	
Frt		0.99							0.86	1.00	1.00	
Flt Protected		1.00							1.00	0.95	1.00	
Satd. Flow (prot)		4722							1611	1770	1801	
Flt Permitted		1.00							1.00	0.95	1.00	
Satd. Flow (perm)		4722							1611	1770	1801	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	2126	74	0	0	0	0	0	53	84	74	0
RTOR Reduction (vph)	0	3	0	0	0	0	0	0	15	15	0	0
Lane Group Flow (vph)	0	2197	0	0	0	0	0	0	38	69	74	0
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	0%	2%	2%	2%	2%	0%
Turn Type		NA							custom	Perm	NA	
Protected Phases		6									8	
Permitted Phases									4	8		
Actuated Green, G (s)		86.0							24.7	24.7	24.7	
Effective Green, g (s)		86.0							24.7	24.7	24.7	
Actuated g/C Ratio		0.72							0.21	0.21	0.21	
Clearance Time (s)		5.0							4.3	4.3	4.3	
Vehicle Extension (s)		3.0							3.0	3.0	3.0	
Lane Grp Cap (vph)		3384							331	364	370	
v/s Ratio Prot		c0.47									c0.04	
v/s Ratio Perm									0.02	0.04		
v/c Ratio		0.65							0.11	0.19	0.20	
Uniform Delay, d1		9.0							38.8	39.4	39.5	
Progression Factor		0.25							1.00	1.00	1.00	
Incremental Delay, d2		0.1							0.7	0.3	0.3	
Delay (s)		2.4							39.5	39.6	39.7	
Level of Service		A							D	D	D	
Approach Delay (s)		2.4			0.0			39.5			39.7	
Approach LOS		A			A			D			D	

Intersection Summary			
HCM 2000 Control Delay	5.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	9.3
Intersection Capacity Utilization	58.3%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	180	2000	70	0	0	0	0	140	40	120	150	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	186.3	190.0	190.0	186.3	0.0
Lanes	0	3	0				0	1	0	0	1	0
Cap, veh/h	250	2982	107				0	421	120	186	218	0
Arrive On Green	0.20	0.20	0.20				0.00	0.30	0.30	0.59	0.60	0.00
Sat Flow, veh/h	415	4943	178				0	1394	398	473	723	0
Grp Volume(v), veh/h	839	769	761				0	0	189	284	0	0
Grp Sat Flow(s),veh/h/ln	1842	1863	1831				0	0	1792	1196	0	0
Q Serve(g_s), s	51.5	45.9	46.3				0.0	0.0	9.9	0.1	0.0	0.0
Cycle Q Clear(g_c), s	51.5	45.9	46.3				0.0	0.0	9.9	26.2	0.0	0.0
Prop In Lane	0.23		0.10				0.00		0.22	0.44		0.00
Lane Grp Cap(c), veh/h	1111	1124	1105				0	0	541	404	0	0
V/C Ratio(X)	0.75	0.68	0.69				0.00	0.00	0.35	0.70	0.00	0.00
Avail Cap(c_a), veh/h	1111	1124	1105				0	0	541	404	0	0
HCM Platoon Ratio	0.33	0.33	0.33				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	0.74	0.74	0.74				0.00	0.00	1.00	0.90	0.00	0.00
Uniform Delay (d), s/veh	39.7	37.4	37.6				0.0	0.0	32.7	23.9	0.0	0.0
Incr Delay (d2), s/veh	3.6	2.5	2.6				0.0	0.0	1.8	8.9	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	27.0	24.2	23.9				0.0	0.0	4.8	7.1	0.0	0.0
Lane Grp Delay (d), s/veh	43.3	40.0	40.2				0.0	0.0	34.5	32.8	0.0	0.0
Lane Grp LOS	D	D	D						C	C		
Approach Vol, veh/h		2368						189			284	
Approach Delay, s/veh		41.2						34.5			32.8	
Approach LOS		D						C			C	

Timer				
Assigned Phs	6	4	3	8
Phs Duration (G+Y+Rc), s	78.0	42.0	0.0	42.0
Change Period (Y+Rc), s	5.6	5.8	3.0	5.8
Max Green Setting (Gmax), s	72.4	20.2	13.0	36.2
Max Q Clear Time (g_c+I1), s	53.5	11.9	0.0	28.2
Green Ext Time (p_c), s	9.9	1.1	0.0	1.0

Intersection Summary	
HCM 2010 Ctrl Delay	39.9
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	210	1940	70	0	0	0	0	140	460	0	0	0
Number	1	6	16				7	4	14			
Initial Q (Qb), veh	0	0	0				0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00			
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00			
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	186.3	190.0			
Lanes	0	3	0				0	1	0			
Cap, veh/h	55	2001	72				0	123	407			
Arrive On Green	0.62	0.62	0.62				0.00	0.32	0.32			
Sat Flow, veh/h	0	3252	118				0	382	1258			
Grp Volume(v), veh/h	221	1062	1054				0	0	631			
Grp Sat Flow(s),veh/h/ln	0	1695	1674				0	0	1641			
Q Serve(g_s), s	0.0	80.0	80.0				0.0	0.0	42.0			
Cycle Q Clear(g_c), s	80.0	80.0	80.0				0.0	0.0	42.0			
Prop In Lane	1.00		0.07				0.00		0.77			
Lane Grp Cap(c), veh/h	55	1043	1030				0	0	530			
V/C Ratio(X)	3.99	1.02	1.02				0.00	0.00	1.19			
Avail Cap(c_a), veh/h	55	1043	1030				0	0	530			
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	1.00				0.00	0.00	1.00			
Uniform Delay (d), s/veh	65.0	25.0	25.0				0.0	0.0	44.0			
Incr Delay (d2), s/veh	1387.7	32.5	33.9				0.0	0.0	103.3			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0			
%ile Back of Q (50%), veh/ln	23.2	41.6	41.5				0.0	0.0	32.7			
Lane Grp Delay (d), s/veh	1452.7	57.5	58.9				0.0	0.0	147.3			
Lane Grp LOS	F	F	F						F			
Approach Vol, veh/h		2337						631				
Approach Delay, s/veh		190.1						147.3				
Approach LOS		F						F				

Timer	
Assigned Phs	6
Phs Duration (G+Y+Rc), s	84.0
Change Period (Y+Rc), s	4.0
Max Green Setting (Gmax), s	80.0
Max Q Clear Time (g_c+I1), s	82.0
Green Ext Time (p_c), s	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	181.0
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	2170	210	0	0	0	0	0	0	590	500	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.7	6.7							6.0	6.0	
Lane Util. Factor		0.91	1.00							0.86	0.86	
Frt		1.00	0.85							1.00	1.00	
Flt Protected		1.00	1.00							0.95	0.99	
Satd. Flow (prot)		4424	1425							2739	2868	
Flt Permitted		1.00	1.00							0.95	0.99	
Satd. Flow (perm)		4424	1425							2739	2868	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	2284	221	0	0	0	0	0	0	621	526	0
RTOR Reduction (vph)	0	0	41	0	0	0	0	0	0	23	23	0
Lane Group Flow (vph)	0	2284	180	0	0	0	0	0	0	536	565	0
Parking (#/hr)		0										
Turn Type		NA	Perm							Perm	NA	
Protected Phases		6									8	
Permitted Phases			6							8		
Actuated Green, G (s)		83.9	83.9							33.4	33.4	
Effective Green, g (s)		83.9	83.9							33.4	33.4	
Actuated g/C Ratio		0.65	0.65							0.26	0.26	
Clearance Time (s)		6.7	6.7							6.0	6.0	
Vehicle Extension (s)		2.0	2.0							2.0	2.0	
Lane Grp Cap (vph)		2855	919							703	736	
v/s Ratio Prot		c0.52										
v/s Ratio Perm			0.13							0.20	0.20	
v/c Ratio		0.80	0.20							0.76	0.77	
Uniform Delay, d1		16.9	9.4							44.6	44.7	
Progression Factor		0.52	0.30							0.70	0.70	
Incremental Delay, d2		1.3	0.3							2.8	2.7	
Delay (s)		10.2	3.1							34.0	34.0	
Level of Service		B	A							C	C	
Approach Delay (s)		9.5			0.0			0.0			34.0	
Approach LOS		A			A			A			C	

Intersection Summary			
HCM 2000 Control Delay	17.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	12.7
Intersection Capacity Utilization	74.4%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	300	1720	0	0	0	0	0	260	1030	250	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5						4.7	4.7	4.7		
Lane Util. Factor		0.91						0.95	0.95	1.00		
Frt		1.00						0.91	0.85	1.00		
Flt Protected		0.99						1.00	1.00	0.95		
Satd. Flow (prot)		4543						1448	1354	1593		
Flt Permitted		0.99						1.00	1.00	0.95		
Satd. Flow (perm)		4543						1448	1354	1593		
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	316	1811	0	0	0	0	0	274	1084	263	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	20	36	0	0	0
Lane Group Flow (vph)	0	2127	0	0	0	0	0	677	625	263	0	0
Turn Type	Perm	NA						NA	Perm	custom		
Protected Phases		6						4		3		
Permitted Phases	6								4	3		
Actuated Green, G (s)		56.5						40.3	40.3	19.3		
Effective Green, g (s)		56.5						40.3	40.3	19.3		
Actuated g/C Ratio		0.43						0.31	0.31	0.15		
Clearance Time (s)		4.5						4.7	4.7	4.7		
Vehicle Extension (s)		2.5						3.0	3.0	3.0		
Lane Grp Cap (vph)		1974						448	419	236		
v/s Ratio Prot								c0.47		c0.17		
v/s Ratio Perm		0.47							0.46			
v/c Ratio		1.08						1.51	1.49	1.11		
Uniform Delay, d1		36.8						44.9	44.9	55.4		
Progression Factor		1.06						1.00	1.00	0.74		
Incremental Delay, d2		43.8						241.3	233.7	78.0		
Delay (s)		82.8						286.2	278.6	118.7		
Level of Service		F						F	F	F		
Approach Delay (s)		82.8			0.0			282.5			118.7	
Approach LOS		F			A			F			F	

Intersection Summary			
HCM 2000 Control Delay	157.7	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.23		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	13.9
Intersection Capacity Utilization	141.6%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	440	1900	460	0	0	0	0	950	110	190	370	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	171.0	166.0	171.0				0.0	166.0	171.0	171.0	166.0	0.0
Lanes	0	3	0				0	2	0	0	2	0
Cap, veh/h	408	1878	440				0	982	114	57	1097	0
Arrive On Green	0.19	0.19	0.19				0.00	0.34	0.34	0.67	0.67	0.00
Sat Flow, veh/h	720	3313	775				0	2922	339	4	1511	0
Grp Volume(v), veh/h	1045	951	951				0	568	548	295	294	0
Grp Sat Flow(s),veh/h/ln	1624	1660	1523				0	1660	1600	1606	1660	0
Q Serve(g_s), s	73.7	73.7	73.7				0.0	43.7	43.7	0.1	11.7	0.0
Cycle Q Clear(g_c), s	73.7	73.7	73.7				0.0	43.7	43.7	43.7	11.7	0.0
Prop In Lane	0.44		0.51				0.00		0.21	1.00		0.00
Lane Grp Cap(c), veh/h	921	941	864				0	558	538	55	558	0
V/C Ratio(X)	1.13	1.01	1.10				0.00	1.02	1.02	5.32	0.53	0.00
Avail Cap(c_a), veh/h	921	941	864				0	558	538	55	558	0
HCM Platoon Ratio	0.33	0.33	0.33				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	0.09	0.09	0.09				0.00	1.00	1.00	0.24	0.24	0.00
Uniform Delay (d), s/veh	52.8	52.8	52.8				0.0	43.2	43.2	43.2	16.1	0.0
Incr Delay (d2), s/veh	62.2	11.5	47.5				0.0	42.6	43.6	1952.4	0.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	48.7	36.6	42.2				0.0	25.2	24.4	30.0	3.6	0.0
Lane Grp Delay (d), s/veh	115.0	64.3	100.3				0.0	85.8	86.7	1995.6	16.9	0.0
Lane Grp LOS	F	F	F					F	F	F	B	
Approach Vol, veh/h		2947						1116			589	
Approach Delay, s/veh		93.9						86.2			1006.3	
Approach LOS		F						F			F	

Timer					
Assigned Phs		6		4	3	8
Phs Duration (G+Y+Rc), s		80.0		50.0	0.0	50.0
Change Period (Y+Rc), s		6.3		6.3	3.0	6.3
Max Green Setting (Gmax), s		73.7		29.7	11.0	43.7
Max Q Clear Time (g_c+I1), s		75.7		45.7	0.0	45.7
Green Ext Time (p_c), s		0.0		0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	207.6
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	1970	450	0	0	0	0	0	0	490	980	0
Number	1	6	16							3	8	18
Initial Q (Qb), veh	0	0	0							0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00							1.00		1.00
Parking Bus Adj	1.00	1.00	1.00							1.00	1.00	1.00
Adj Sat Flow veh/h/ln	0.0	166.0	171.0							171.0	166.0	0.0
Lanes	0	3	0							0	2	0
Cap, veh/h	0	1993	436							55	644	0
Arrive On Green	0.00	0.17	0.17							0.14	0.14	0.00
Sat Flow, veh/h	0	3961	866							0	1511	0
Grp Volume(v), veh/h	0	1723	825							516	1032	0
Grp Sat Flow(s),veh/h/ln	0	1660	1507							0	1511	0
Q Serve(g_s), s	0.0	65.4	65.4							0.0	55.4	0.0
Cycle Q Clear(g_c), s	0.0	65.4	65.4							55.4	55.4	0.0
Prop In Lane	0.00		0.57							1.00		0.00
Lane Grp Cap(c), veh/h	0	1670	758							55	644	0
V/C Ratio(X)	0.00	1.03	1.09							9.32	1.60	0.00
Avail Cap(c_a), veh/h	0	1670	758							55	644	0
HCM Platoon Ratio	1.00	0.33	0.33							0.33	0.33	1.00
Upstream Filter(I)	0.00	0.09	0.09							0.47	0.47	0.00
Uniform Delay (d), s/veh	0.0	54.2	54.2							83.6	55.9	0.0
Incr Delay (d2), s/veh	0.0	16.9	41.8							3759.7	274.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0							0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.0	33.6	35.7							59.8	72.0	0.0
Lane Grp Delay (d), s/veh	0.0	71.1	96.1							3843.3	330.7	0.0
Lane Grp LOS		F	F							F	F	
Approach Vol, veh/h		2548									1548	
Approach Delay, s/veh		79.2									1501.5	
Approach LOS		E									F	

Timer	
Assigned Phs	6
Phs Duration (G+Y+Rc), s	70.0
Change Period (Y+Rc), s	4.6
Max Green Setting (Gmax), s	65.4
Max Q Clear Time (g_c+I1), s	67.4
Green Ext Time (p_c), s	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	616.7
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	990	1520	0	0	0	0	0	940	100	0	0	0
Number	1	6	16				7	4	14			
Initial Q (Qb), veh	0	0	0				0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00			
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00			
Adj Sat Flow veh/h/ln	171.0	166.0	0.0				0.0	166.0	171.0			
Lanes	0	3	0				0	3	0			
Cap, veh/h	57	2013	0				0	1156	122			
Arrive On Green	0.22	0.22	0.00				0.00	0.26	0.26			
Sat Flow, veh/h	0	3022	0				0	4429	469			
Grp Volume(v), veh/h	1042	1600	0				0	741	353			
Grp Sat Flow(s),veh/h/ln	0	1511	0				0	1660	1577			
Q Serve(g_s), s	0.0	63.4	0.0				0.0	26.9	27.0			
Cycle Q Clear(g_c), s	84.4	63.4	0.0				0.0	26.9	27.0			
Prop In Lane	1.00		0.00				0.00		0.30			
Lane Grp Cap(c), veh/h	57	2013	0				0	867	412			
V/C Ratio(X)	18.33	0.79	0.00				0.00	0.85	0.86			
Avail Cap(c_a), veh/h	57	2013	0				0	954	453			
HCM Platoon Ratio	0.33	0.33	1.00				1.00	1.00	1.00			
Upstream Filter(I)	0.09	0.09	0.00				0.00	1.00	1.00			
Uniform Delay (d), s/veh	91.6	41.2	0.0				0.0	44.5	44.6			
Incr Delay (d2), s/veh	7802.2	0.3	0.0				0.0	7.2	14.1			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0			
%ile Back of Q (50%), veh/ln	125.2	26.5	0.0				0.0	12.3	12.6			
Lane Grp Delay (d), s/veh	7893.8	41.5	0.0				0.0	51.7	58.6			
Lane Grp LOS	F	D						D	E			
Approach Vol, veh/h		2642						1094				
Approach Delay, s/veh		3138.5						53.9				
Approach LOS		F						D				

Timer	
Assigned Phs	6
Phs Duration (G+Y+Rc), s	89.0
Change Period (Y+Rc), s	4.6
Max Green Setting (Gmax), s	84.4
Max Q Clear Time (g_c+I1), s	86.4
Green Ext Time (p_c), s	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	2235.2
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	540	630	330	320	0	660	0	1120	210	380	1310	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.7	6.7		6.7		6.7		6.2	6.2	4.0	6.2	
Lane Util. Factor	0.97	0.95		1.00		1.00		0.95	1.00	0.97	0.95	
Frt	1.00	0.95		1.00		0.85		1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00		0.95		1.00		1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3060	2992		1577		1411		3154	1411	3060	3154	
Flt Permitted	0.95	1.00		0.10		1.00		1.00	1.00	0.95	1.00	
Satd. Flow (perm)	3060	2992		161		1411		3154	1411	3060	3154	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	568	663	347	337	0	695	0	1179	221	400	1379	0
RTOR Reduction (vph)	0	45	0	0	0	125	0	0	94	0	0	0
Lane Group Flow (vph)	568	965	0	337	0	570	0	1179	127	400	1379	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Split	NA		D.Pm		custom		NA	Perm	Prot	NA	
Protected Phases	8	8						6		5	2	
Permitted Phases				8		4			6			
Actuated Green, G (s)	41.3	41.3		41.3		33.3		40.8	40.8	11.0	55.8	
Effective Green, g (s)	41.3	41.3		41.3		33.3		40.8	40.8	11.0	55.8	
Actuated g/C Ratio	0.28	0.28		0.28		0.22		0.27	0.27	0.07	0.37	
Clearance Time (s)	6.7	6.7		6.7		6.7		6.2	6.2	4.0	6.2	
Vehicle Extension (s)	3.0	3.0		3.0		3.0		3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	842	823		44		313		857	383	224	1173	
v/s Ratio Prot	0.19	0.32						c0.37		c0.13	0.44	
v/s Ratio Perm				c2.10		c0.40			0.09			
v/c Ratio	0.67	1.17		7.66		1.82		1.38	0.33	1.79	1.18	
Uniform Delay, d1	48.4	54.4		54.4		58.4		54.6	43.7	69.5	47.1	
Progression Factor	1.00	1.00		1.00		1.00		1.00	1.00	1.20	0.35	
Incremental Delay, d2	2.1	90.4		3042.9		381.5		176.4	2.3	355.2	79.9	
Delay (s)	50.5	144.8		3097.3		439.8		231.0	46.0	438.5	96.4	
Level of Service	D	F		F		F		F	D	F	F	
Approach Delay (s)		110.9			1307.6			201.8			173.3	
Approach LOS		F			F			F			F	

Intersection Summary			
HCM 2000 Control Delay	365.4	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	3.56		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	23.6
Intersection Capacity Utilization	114.6%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	10	70	70	600	2200	320	260	1480	680
Number				7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				171.0	166.0	171.0	166.0	166.0	171.0	166.0	166.0	166.0
Lanes				0	2	0	2	3	0	1	2	1
Cap, veh/h				16	108	106	695	2839	399	299	1863	792
Arrive On Green				0.08	0.08	0.08	0.45	1.00	1.00	0.11	0.56	0.56
Sat Flow, veh/h				213	1436	1411	3067	4273	601	1581	3320	1411
Grp Volume(v), veh/h				85	0	74	632	1782	871	274	1558	716
Grp Sat Flow(s),veh/h/ln				1650	0	1411	1534	1660	1554	1581	1660	1411
Q Serve(g_s), s				5.8	0.0	5.9	22.2	0.0	0.0	11.0	45.0	52.4
Cycle Q Clear(g_c), s				5.8	0.0	5.9	22.2	0.0	0.0	11.0	45.0	52.4
Prop In Lane				0.13		1.00	1.00		0.39	1.00		1.00
Lane Grp Cap(c), veh/h				124	0	106	695	2206	1033	299	1863	792
V/C Ratio(X)				0.69	0.00	0.70	0.91	0.81	0.84	0.92	0.84	0.90
Avail Cap(c_a), veh/h				428	0	367	979	2206	1033	337	1863	792
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.09	0.09	0.09	1.00	1.00	1.00
Uniform Delay (d), s/veh				52.2	0.0	52.3	30.6	0.0	0.0	25.1	21.0	22.7
Incr Delay (d2), s/veh				6.5	0.0	8.0	1.0	0.3	0.8	27.0	4.6	15.7
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				2.7	0.0	2.4	7.4	0.1	0.2	10.1	18.9	21.2
Lane Grp Delay (d), s/veh				58.8	0.0	60.3	31.6	0.3	0.8	52.1	25.7	38.4
Lane Grp LOS				E		E	C	A	A	D	C	D
Approach Vol, veh/h					159			3285			2548	
Approach Delay, s/veh					59.5			6.5			32.1	
Approach LOS					E			A			C	
Timer												
Assigned Phs					4		1	6		5	2	
Phs Duration (G+Y+Rc), s					15.4		29.3	83.2		17.3	71.2	
Change Period (Y+Rc), s					6.7		3.0	6.2		4.0	6.2	
Max Green Setting (Gmax), s					30.1		37.0	77.0		16.0	57.0	
Max Q Clear Time (g_c+I1), s					7.9		24.2	2.0		13.0	54.4	
Green Ext Time (p_c), s					0.8		2.0	72.9		0.2	2.6	
Intersection Summary												
HCM 2010 Ctrl Delay			18.8									
HCM 2010 LOS			B									
Notes												

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	0	1180	300	520	850	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.2		4.2	4.2				
Lane Util. Factor					0.91		0.91	0.91				
Frt					0.97		1.00	1.00				
Flt Protected					1.00		0.95	1.00				
Satd. Flow (prot)					4394		1435	3009				
Flt Permitted					1.00		0.95	1.00				
Satd. Flow (perm)					4394		1435	3009				
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	0	1242	316	547	895	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	26	0	17	5	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	1532	0	448	972	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type					NA		Perm	NA				
Protected Phases					2			4				
Permitted Phases							4					
Actuated Green, G (s)					79.5		62.1	62.1				
Effective Green, g (s)					79.5		62.1	62.1				
Actuated g/C Ratio					0.53		0.41	0.41				
Clearance Time (s)					4.2		4.2	4.2				
Vehicle Extension (s)					3.0		3.0	3.0				
Lane Grp Cap (vph)					2328		594	1245				
v/s Ratio Prot					c0.35							
v/s Ratio Perm							0.31	0.32				
v/c Ratio					0.66		0.75	0.78				
Uniform Delay, d1					25.4		37.4	38.0				
Progression Factor					1.00		0.50	0.52				
Incremental Delay, d2					1.5		0.5	0.3				
Delay (s)					26.9		19.3	20.2				
Level of Service					C		B	C				
Approach Delay (s)		0.0			26.9			19.9			0.0	
Approach LOS		A			C			B			A	

Intersection Summary			
HCM 2000 Control Delay	23.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	8.4
Intersection Capacity Utilization	166.2%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	350	1500	0	0	0	0	0	1150	480
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					5.8						4.6	4.6
Lane Util. Factor					0.91						0.91	0.91
Frt					1.00						0.99	0.85
Flt Protected					0.99						1.00	1.00
Satd. Flow (prot)					4490						3003	1284
Flt Permitted					0.99						1.00	1.00
Satd. Flow (perm)					4490						3003	1284
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	368	1579	0	0	0	0	0	1211	505
RTOR Reduction (vph)	0	0	0	0	17	0	0	0	0	0	2	11
Lane Group Flow (vph)	0	0	0	0	1930	0	0	0	0	0	1260	443
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type				Perm	NA						NA	Perm
Protected Phases					2						8	
Permitted Phases				2								8
Actuated Green, G (s)					71.1						68.5	68.5
Effective Green, g (s)					71.1						68.5	68.5
Actuated g/C Ratio					0.47						0.46	0.46
Clearance Time (s)					5.8						4.6	4.6
Vehicle Extension (s)					3.0						3.0	3.0
Lane Grp Cap (vph)					2128						1371	586
v/s Ratio Prot											c0.42	
v/s Ratio Perm					0.43							0.35
v/c Ratio					0.91						0.92	0.76
Uniform Delay, d1					36.4						38.1	33.8
Progression Factor					0.74						1.00	1.00
Incremental Delay, d2					5.8						10.0	5.5
Delay (s)					32.6						48.1	39.4
Level of Service					C						D	D
Approach Delay (s)		0.0			32.6			0.0			45.8	
Approach LOS		A			C			A			D	

Intersection Summary			
HCM 2000 Control Delay	38.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	10.4
Intersection Capacity Utilization	89.7%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	170	1700	190	420	1130	0	0	270	180
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				171.0	166.0	171.0	166.0	166.0	0.0	0.0	166.0	171.0
Lanes				0	3	0	1	2	0	0	2	0
Cap, veh/h				190	2019	231	452	1448	0	0	320	206
Arrive On Green				0.17	0.17	0.17	0.25	0.44	0.00	0.00	0.17	0.17
Sat Flow, veh/h				380	4039	462	1581	3320	0	0	1887	1218
Grp Volume(v), veh/h				774	711	684	442	1189	0	0	249	224
Grp Sat Flow(s),veh/h/ln				1641	1660	1579	1581	1660	0	0	1660	1445
Q Serve(g_s), s				69.9	62.4	63.3	35.7	47.2	0.0	0.0	22.0	22.9
Cycle Q Clear(g_c), s				69.9	62.4	63.3	35.7	47.2	0.0	0.0	22.0	22.9
Prop In Lane				0.23		0.29	1.00		0.00	0.00		0.84
Lane Grp Cap(c), veh/h				821	830	789	452	1448	0	0	281	245
V/C Ratio(X)				0.94	0.86	0.87	0.98	0.82	0.00	0.00	0.88	0.92
Avail Cap(c_a), veh/h				821	830	789	452	1448	0	0	281	245
HCM Platoon Ratio				0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.35	0.35	0.35	0.34	0.34	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				60.5	57.4	57.7	41.5	37.2	0.0	0.0	60.9	61.3
Incr Delay (d2), s/veh				9.4	4.3	4.8	19.5	1.9	0.0	0.0	30.9	39.4
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				33.4	29.2	28.3	19.9	20.4	0.0	0.0	11.9	11.3
Lane Grp Delay (d), s/veh				69.9	61.7	62.6	61.0	39.0	0.0	0.0	91.7	100.6
Lane Grp LOS				E	E	E	E	D			F	F
Approach Vol, veh/h					2168			1631			473	
Approach Delay, s/veh					64.9			45.0			95.9	
Approach LOS					E			D			F	

Timer												
Assigned Phs					2		7	4			8	
Phs Duration (G+Y+Rc), s					80.0		40.0	70.0			30.0	
Change Period (Y+Rc), s					5.0		3.0	4.6			4.6	
Max Green Setting (Gmax), s					75.0		37.0	65.4			25.4	
Max Q Clear Time (g_c+I1), s					71.9		37.7	49.2			24.9	
Green Ext Time (p_c), s					2.8		0.0	10.3			0.4	

Intersection Summary												
HCM 2010 Ctrl Delay			60.7									
HCM 2010 LOS			E									

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	180	1180	180	120	290	0	0	0	0
Number				5	2	12	7	4	14			
Initial Q (Qb), veh				0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00			
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow veh/h/ln				171.0	166.0	171.0	166.0	166.0	0.0			
Lanes				0	3	0	1	1	0			
Cap, veh/h				48	1568	239	48	550	0			
Arrive On Green				0.61	0.61	0.61	0.11	0.11	0.00			
Sat Flow, veh/h				0	2563	390	1581	1660	0			
Grp Volume(v), veh/h				189	732	699	126	305	0			
Grp Sat Flow(s),veh/h/ln				0	1511	1442	1581	1660	0			
Q Serve(g_s), s				0.0	54.7	54.8	0.0	26.1	0.0			
Cycle Q Clear(g_c), s				91.8	54.7	54.8	49.7	26.1	0.0			
Prop In Lane				1.00		0.27	1.00		0.00			
Lane Grp Cap(c), veh/h				48	925	882	48	550	0			
V/C Ratio(X)				3.94	0.79	0.79	2.62	0.55	0.00			
Avail Cap(c_a), veh/h				48	925	882	48	550	0			
HCM Platoon Ratio				1.00	1.00	1.00	0.33	0.33	1.00			
Upstream Filter(I)				1.00	1.00	1.00	0.09	0.09	0.00			
Uniform Delay (d), s/veh				75.0	21.9	21.9	91.6	56.3	0.0			
Incr Delay (d2), s/veh				1370.4	6.9	7.2	736.7	0.4	0.0			
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0			
%ile Back of Q (50%), veh/ln				20.2	22.1	21.2	11.8	12.0	0.0			
Lane Grp Delay (d), s/veh				1445.4	28.8	29.1	828.3	56.7	0.0			
Lane Grp LOS				F	C	C	F	E				
Approach Vol, veh/h					1620			431				
Approach Delay, s/veh					194.2			282.3				
Approach LOS					F			F				

Timer	
Assigned Phs	2
Phs Duration (G+Y+Rc), s	96.0
Change Period (Y+Rc), s	4.2
Max Green Setting (Gmax), s	91.8
Max Q Clear Time (g_c+I1), s	93.8
Green Ext Time (p_c), s	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	212.7
HCM 2010 LOS	F

Notes

Movement	WBL	WBT	SBT	SBR	SWL	SWR
Lane Configurations						
Volume (vph)	270	600	360	10	950	350
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.5	6.5	7.0		7.0	7.0
Lane Util. Factor	0.91	0.91	1.00		0.97	0.91
Frt	1.00	1.00	1.00		0.99	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1449	3045	1670		3086	1297
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	1449	3045	1670		3086	1297
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	284	632	379	11	1000	368
RTOR Reduction (vph)	62	60	1	0	0	0
Lane Group Flow (vph)	194	600	389	0	1037	331
Turn Type	Perm	NA	NA		NA	Perm
Protected Phases		2	9		8	
Permitted Phases	2					8
Actuated Green, G (s)	37.9	37.9	37.3		54.3	54.3
Effective Green, g (s)	37.9	37.9	37.3		54.3	54.3
Actuated g/C Ratio	0.25	0.25	0.25		0.36	0.36
Clearance Time (s)	6.5	6.5	7.0		7.0	7.0
Vehicle Extension (s)	1.0	1.0	3.0		3.0	3.0
Lane Grp Cap (vph)	366	769	415		1117	469
v/s Ratio Prot			c0.23		c0.34	
v/s Ratio Perm	0.13	0.20				0.26
v/c Ratio	0.53	0.78	0.94		0.93	0.71
Uniform Delay, d1	48.4	52.2	55.2		46.0	41.0
Progression Factor	0.40	0.53	1.00		1.00	1.00
Incremental Delay, d2	4.5	6.5	28.7		13.0	4.8
Delay (s)	23.9	34.3	83.9		59.0	45.8
Level of Service	C	C	F		E	D
Approach Delay (s)		31.4	83.9		55.8	
Approach LOS		C	F		E	

Intersection Summary			
HCM 2000 Control Delay	51.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	20.5
Intersection Capacity Utilization	91.4%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	150	1050	100	80	360	0	0	320	130
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	186.3	190.0	190.0	186.3	0.0	0.0	193.7	190.0
Lanes				0	3	0	0	1	0	0	1	0
Cap, veh/h				289	2160	211	101	419	0	0	564	229
Arrive On Green				0.49	0.49	0.48	0.86	0.86	0.00	0.00	0.43	0.43
Sat Flow, veh/h				595	4452	435	154	973	0	0	1310	533
Grp Volume(v), veh/h				487	450	431	463	0	0	0	0	474
Grp Sat Flow(s),veh/h/ln				1833	1863	1786	1127	0	0	0	0	1843
Q Serve(g_s), s				23.1	20.3	20.4	24.6	0.0	0.0	0.0	0.0	24.5
Cycle Q Clear(g_c), s				23.1	20.3	20.4	49.1	0.0	0.0	0.0	0.0	24.5
Prop In Lane				0.32		0.24	0.18		0.00	0.00		0.29
Lane Grp Cap(c), veh/h				889	904	866	519	0	0	0	0	793
V/C Ratio(X)				0.55	0.50	0.50	0.89	0.00	0.00	0.00	0.00	0.60
Avail Cap(c_a), veh/h				889	904	866	594	0	0	0	0	881
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.55	0.55	0.55	0.90	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				22.4	21.7	21.8	11.3	0.0	0.0	0.0	0.0	27.1
Incr Delay (d2), s/veh				1.3	1.1	1.1	12.7	0.0	0.0	0.0	0.0	0.8
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				10.7	9.6	9.3	8.3	0.0	0.0	0.0	0.0	11.5
Lane Grp Delay (d), s/veh				23.7	22.8	22.9	24.0	0.0	0.0	0.0	0.0	27.9
Lane Grp LOS				C	C	C	C					C
Approach Vol, veh/h					1368			463			474	
Approach Delay, s/veh					23.2			24.0			27.9	
Approach LOS					C			C			C	

Timer			
Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	65.0	59.1	59.1
Change Period (Y+Rc), s	5.8	5.7	5.7
Max Green Setting (Gmax), s	59.2	59.3	59.3
Max Q Clear Time (g_c+I1), s	25.1	51.1	26.5
Green Ext Time (p_c), s	5.2	2.3	3.4

Intersection Summary	
HCM 2010 Ctrl Delay	24.3
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	120	1150	110	190	660	0	0	480	140
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99
Adj Sat Flow veh/h/ln				190.0	184.5	190.0	190.0	184.5	0.0	0.0	177.1	190.0
Lanes				0	3	0	0	2	0	0	2	0
Cap, veh/h				165	1691	167	327	1400	0	0	1457	422
Arrive On Green				0.37	0.37	0.36	1.00	1.00	0.00	0.00	0.55	0.55
Sat Flow, veh/h				443	4542	448	507	1954	0	0	2631	762
Grp Volume(v), veh/h				518	478	457	448	447	0	0	339	313
Grp Sat Flow(s),veh/h/ln				1823	1845	1766	1190	1845	0	0	1771	1622
Q Serve(g_s), s				32.4	28.5	28.5	0.1	0.0	0.0	0.0	13.7	14.0
Cycle Q Clear(g_c), s				32.4	28.5	28.5	72.0	0.0	0.0	0.0	13.7	14.0
Prop In Lane				0.24		0.25	0.67		0.00	0.00		0.47
Lane Grp Cap(c), veh/h				679	687	657	60	1022	0	0	981	898
V/C Ratio(X)				0.76	0.70	0.70	7.43	0.44	0.00	0.00	0.35	0.35
Avail Cap(c_a), veh/h				679	687	657	60	1022	0	0	981	898
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	0.70	0.70	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				35.8	34.6	34.7	34.9	0.0	0.0	0.0	16.0	16.2
Incr Delay (d2), s/veh				8.0	5.7	6.0	2916.9	1.0	0.0	0.0	1.0	1.1
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				16.5	14.5	13.9	51.0	0.3	0.0	0.0	6.2	5.8
Lane Grp Delay (d), s/veh				43.8	40.3	40.7	2951.8	1.0	0.0	0.0	17.0	17.3
Lane Grp LOS				D	D	D	F	A			B	B
Approach Vol, veh/h					1453			895			652	
Approach Delay, s/veh					41.7			1476.4			17.1	
Approach LOS					D			F			B	

Timer												
Assigned Phs					2		7	4			8	
Phs Duration (G+Y+Rc), s					53.0		0.0	77.0			77.0	
Change Period (Y+Rc), s					5.6		5.0	6.0			6.0	
Max Green Setting (Gmax), s					47.4		7.0	71.0			59.0	
Max Q Clear Time (g_c+I1), s					34.4		0.0	74.0			16.0	
Green Ext Time (p_c), s					5.6		0.0	0.0			10.6	

Intersection Summary		
HCM 2010 Ctrl Delay		464.3
HCM 2010 LOS		F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	60	1570	0	0	0	0	0	50	20
Number				5	2	12				3	8	18
Initial Q (Qb), veh				0	0	0				0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00				1.00		1.00
Parking Bus Adj				1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	182.7	0.0				0.0	190.0	190.0
Lanes				0	3	0				0	1	0
Cap, veh/h				55	2558	0				0	219	87
Arrive On Green				0.25	0.25	0.00				0.00	0.17	0.17
Sat Flow, veh/h				0	3325	0				0	1296	513
Grp Volume(v), veh/h				63	1653	0				0	0	74
Grp Sat Flow(s),veh/h/ln				0	1663	0				0	0	1809
Q Serve(g_s), s				0.0	57.7	0.0				0.0	0.0	4.6
Cycle Q Clear(g_c), s				100.0	57.7	0.0				0.0	0.0	4.6
Prop In Lane				1.00		0.00				0.00		0.28
Lane Grp Cap(c), veh/h				55	2558	0				0	0	306
V/C Ratio(X)				1.14	0.65	0.00				0.00	0.00	0.24
Avail Cap(c_a), veh/h				55	2558	0				0	0	306
HCM Platoon Ratio				0.33	0.33	1.00				1.00	1.00	1.00
Upstream Filter(I)				0.43	0.43	0.00				0.00	0.00	1.00
Uniform Delay (d), s/veh				98.5	32.7	0.0				0.0	0.0	46.8
Incr Delay (d2), s/veh				120.9	0.5	0.0				0.0	0.0	1.9
Initial Q Delay(d3),s/veh				0.0	0.0	0.0				0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				3.8	26.2	0.0				0.0	0.0	2.3
Lane Grp Delay (d), s/veh				219.4	33.3	0.0				0.0	0.0	48.6
Lane Grp LOS				F	C							D
Approach Vol, veh/h					1716						74	
Approach Delay, s/veh					40.1						48.6	
Approach LOS					D						D	

Timer	
Assigned Phs	2
Phs Duration (G+Y+Rc), s	104.0
Change Period (Y+Rc), s	5.0
Max Green Setting (Gmax), s	99.0
Max Q Clear Time (g_c+I1), s	102.0
Green Ext Time (p_c), s	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	40.5
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	170	1280	180	220	950	0	0	1310	220
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	184.5	190.0	184.5	184.5	0.0	0.0	184.5	190.0
Lanes				0	3	0	1	2	0	0	2	0
Cap, veh/h				182	1463	211	258	2219	0	0	1410	234
Arrive On Green				0.11	0.11	0.11	0.22	1.00	0.00	0.00	0.46	0.46
Sat Flow, veh/h				530	4255	614	1757	3689	0	0	3086	513
Grp Volume(v), veh/h				614	567	534	232	1000	0	0	817	794
Grp Sat Flow(s),veh/h/ln				1818	1845	1736	1757	1845	0	0	1845	1754
Q Serve(g_s), s				43.8	39.4	39.5	12.0	0.0	0.0	0.0	56.1	58.4
Cycle Q Clear(g_c), s				43.8	39.4	39.5	12.0	0.0	0.0	0.0	56.1	58.4
Prop In Lane				0.29		0.35	1.00		0.00	0.00		0.29
Lane Grp Cap(c), veh/h				625	634	597	258	2219	0	0	843	802
V/C Ratio(X)				0.98	0.89	0.89	0.90	0.45	0.00	0.00	0.97	0.99
Avail Cap(c_a), veh/h				625	634	597	258	2219	0	0	843	802
HCM Platoon Ratio				0.33	0.33	0.33	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.88	0.88	0.88	0.09	0.09	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				57.2	55.3	55.4	34.1	0.0	0.0	0.0	34.4	35.0
Incr Delay (d2), s/veh				29.8	15.8	16.8	4.3	0.1	0.0	0.0	24.4	29.5
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				27.0	22.7	21.6	7.6	0.0	0.0	0.0	31.6	32.2
Lane Grp Delay (d), s/veh				87.0	71.1	72.1	38.3	0.1	0.0	0.0	58.8	64.6
Lane Grp LOS				F	E	E	D	A			E	E
Approach Vol, veh/h					1715			1232			1611	
Approach Delay, s/veh					77.1			7.3			61.7	
Approach LOS					E			A			E	

Timer					
Assigned Phs	2	7	4	8	
Phs Duration (G+Y+Rc), s	48.0	17.8	82.0	64.2	
Change Period (Y+Rc), s	4.3	4.2	4.8	4.8	
Max Green Setting (Gmax), s	43.7	13.6	77.2	59.4	
Max Q Clear Time (g_c+I1), s	45.8	14.0	2.0	60.4	
Green Ext Time (p_c), s	0.0	0.0	3.6	0.0	

Intersection Summary	
HCM 2010 Ctrl Delay	52.8
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	70	1610	40	70	70	0	0	180	70
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	186.3	190.0	190.0	186.3	0.0	0.0	186.3	190.0
Lanes				0	3	0	0	1	0	0	1	0
Cap, veh/h				144	3508	90	124	110	0	0	311	122
Arrive On Green				0.22	0.22	0.22	0.41	0.41	0.00	0.00	0.24	0.24
Sat Flow, veh/h				213	5208	133	320	450	0	0	1275	499
Grp Volume(v), veh/h				642	588	581	148	0	0	0	0	263
Grp Sat Flow(s),veh/h/ln				1852	1863	1839	770	0	0	0	0	1775
Q Serve(g_s), s				35.8	32.2	32.2	9.1	0.0	0.0	0.0	0.0	15.5
Cycle Q Clear(g_c), s				35.8	32.2	32.2	24.6	0.0	0.0	0.0	0.0	15.5
Prop In Lane				0.12		0.07	0.50		0.00	0.00		0.28
Lane Grp Cap(c), veh/h				1248	1255	1239	234	0	0	0	0	433
V/C Ratio(X)				0.51	0.47	0.47	0.63	0.00	0.00	0.00	0.00	0.61
Avail Cap(c_a), veh/h				1248	1255	1239	381	0	0	0	0	620
HCM Platoon Ratio				0.33	0.33	0.33	1.67	1.67	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.09	0.09	0.09	0.87	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				28.8	27.4	27.5	36.9	0.0	0.0	0.0	0.0	39.6
Incr Delay (d2), s/veh				0.1	0.1	0.1	1.8	0.0	0.0	0.0	0.0	1.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				18.3	16.5	16.3	4.1	0.0	0.0	0.0	0.0	7.2
Lane Grp Delay (d), s/veh				29.0	27.6	27.6	38.7	0.0	0.0	0.0	0.0	40.6
Lane Grp LOS				C	C	C	D					D
Approach Vol, veh/h					1811			148			263	
Approach Delay, s/veh					28.1			38.7			40.6	
Approach LOS					C			D			D	

Timer			
Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	84.0	33.6	33.6
Change Period (Y+Rc), s	5.8	5.9	5.9
Max Green Setting (Gmax), s	78.2	40.1	40.1
Max Q Clear Time (g_c+I1), s	37.8	26.6	17.5
Green Ext Time (p_c), s	8.0	1.1	1.2

Intersection Summary	
HCM 2010 Ctrl Delay	30.3
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	340	1300	240	120	950	0	0	1070	80
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	186.3	190.0	186.3	186.3	0.0	0.0	186.3	190.0
Lanes				0	3	0	1	2	0	0	2	0
Cap, veh/h				404	1657	312	196	1762	0	0	1321	98
Arrive On Green				0.44	0.44	0.43	0.12	0.95	0.00	0.00	0.39	0.38
Sat Flow, veh/h				922	3783	712	1774	3725	0	0	3425	255
Grp Volume(v), veh/h				706	656	617	126	1000	0	0	612	598
Grp Sat Flow(s),veh/h/ln				1817	1863	1737	1774	1863	0	0	1863	1818
Q Serve(g_s), s				44.9	38.5	39.0	5.4	3.9	0.0	0.0	37.8	37.9
Cycle Q Clear(g_c), s				44.9	38.5	39.0	5.4	3.9	0.0	0.0	37.8	37.9
Prop In Lane				0.51		0.41	1.00		0.00	0.00		0.14
Lane Grp Cap(c), veh/h				796	816	761	196	1762	0	0	718	701
V/C Ratio(X)				0.89	0.80	0.81	0.64	0.57	0.00	0.00	0.85	0.85
Avail Cap(c_a), veh/h				856	878	819	196	1762	0	0	718	701
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	0.09	0.09	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				32.5	30.7	31.0	27.0	1.9	0.0	0.0	35.4	35.5
Incr Delay (d2), s/veh				13.9	8.3	9.2	1.5	0.0	0.0	0.0	12.2	12.6
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				23.5	19.7	18.9	2.2	0.9	0.0	0.0	20.3	19.9
Lane Grp Delay (d), s/veh				46.4	39.0	40.2	28.5	1.9	0.0	0.0	47.6	48.0
Lane Grp LOS				D	D	D	C	A			D	D
Approach Vol, veh/h					1979			1126			1210	
Approach Delay, s/veh					42.0			4.9			47.8	
Approach LOS					D			A			D	

Timer												
Assigned Phs					2		7	4			8	
Phs Duration (G+Y+Rc), s					60.8		11.0	65.0			54.0	
Change Period (Y+Rc), s					6.7		3.0	6.5			6.5	
Max Green Setting (Gmax), s					58.3		8.0	58.5			47.5	
Max Q Clear Time (g_c+I1), s					46.9		7.4	5.9			39.9	
Green Ext Time (p_c), s					7.2		0.0	17.2			5.7	

Intersection Summary		
HCM 2010 Ctrl Delay		33.9
HCM 2010 LOS		C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Volume (vph)	0	0	0	600	750	0	180	260	0	0	320	390
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	10	12	11	10	12	12	13	12
Total Lost time (s)				6.7	6.7		3.0	6.5			6.5	
Lane Util. Factor				0.91	0.91		1.00	0.95			0.95	
Frt				1.00	1.00		1.00	1.00			0.92	
Flt Protected				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (prot)				1610	3124		1711	3303			3356	
Flt Permitted				0.95	0.99		0.19	1.00			1.00	
Satd. Flow (perm)				1610	3124		347	3303			3356	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	632	789	0	189	274	0	0	337	411
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	109	0
Lane Group Flow (vph)	0	0	0	360	1061	0	189	274	0	0	639	0
Turn Type				Perm	NA		pm+pt	NA			NA	
Protected Phases					2		7	4			8	
Permitted Phases				2			4					
Actuated Green, G (s)				58.3	58.3		58.5	58.5			41.6	
Effective Green, g (s)				58.3	58.3		58.5	58.5			41.6	
Actuated g/C Ratio				0.45	0.45		0.45	0.45			0.32	
Clearance Time (s)				6.7	6.7		3.0	6.5			6.5	
Vehicle Extension (s)				2.5	2.5		3.0	2.0			2.5	
Lane Grp Cap (vph)				722	1400		301	1486			1073	
v/s Ratio Prot							c0.07	0.08			0.19	
v/s Ratio Perm				0.22	0.34		c0.21					
v/c Ratio				0.50	0.76		0.63	0.18			0.60	
Uniform Delay, d1				25.5	30.0		24.5	21.4			37.1	
Progression Factor				0.26	0.26		1.00	1.00			1.00	
Incremental Delay, d2				1.0	1.7		4.1	0.3			2.4	
Delay (s)				7.6	9.6		28.6	21.7			39.6	
Level of Service				A	A		C	C			D	
Approach Delay (s)		0.0			9.1			24.5			39.6	
Approach LOS		A			A			C			D	

Intersection Summary			
HCM 2000 Control Delay	20.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	16.2
Intersection Capacity Utilization	71.1%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	50	0	20	660	180	740	0	1900	0	0	2490	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	9	12	9	11	11	11	12	10	12	12	10	12
Total Lost time (s)	3.9		3.9	3.9	3.9	3.9		3.6			4.0	
Lane Util. Factor	1.00		1.00	0.97	1.00	1.00		0.91			0.86	
Frt	1.00		0.85	1.00	1.00	0.85		1.00			1.00	
Flt Protected	0.95		1.00	0.95	1.00	1.00		1.00			1.00	
Satd. Flow (prot)	1593		1425	3319	1801	1531		4746			5967	
Flt Permitted	0.64		1.00	0.95	1.00	1.00		1.00			1.00	
Satd. Flow (perm)	1071		1425	3319	1801	1531		4746			5967	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	53	0	21	695	189	779	0	2000	0	0	2621	42
RTOR Reduction (vph)	0	0	19	0	0	48	0	0	0	0	2	0
Lane Group Flow (vph)	53	0	2	695	189	731	0	2000	0	0	2661	0
Turn Type	custom		custom	Split	NA	Perm		NA			NA	
Protected Phases			8	4	4			6			2	
Permitted Phases	8					4						
Actuated Green, G (s)	9.1		9.1	32.1	32.1	32.1		64.4			64.0	
Effective Green, g (s)	10.1		10.1	33.1	33.1	33.1		65.4			65.0	
Actuated g/C Ratio	0.08		0.08	0.28	0.28	0.28		0.55			0.54	
Clearance Time (s)	4.9		4.9	4.9	4.9	4.9		4.6			5.0	
Vehicle Extension (s)	2.5		2.5	2.5	2.5	2.5		2.5			2.5	
Lane Grp Cap (vph)	90		119	915	496	422		2586			3232	
v/s Ratio Prot			0.00	0.21	0.10			0.42			c0.45	
v/s Ratio Perm	c0.05					c0.48						
v/c Ratio	0.59		0.01	0.76	0.38	1.73		0.77			0.82	
Uniform Delay, d1	52.9		50.4	39.8	35.2	43.5		21.5			22.8	
Progression Factor	1.00		1.00	1.00	1.00	1.00		0.24			1.00	
Incremental Delay, d2	25.2		0.2	5.9	2.2	339.5		0.2			2.5	
Delay (s)	78.2		50.6	45.7	37.4	383.0		5.3			25.3	
Level of Service	E		D	D	D	F		A			C	
Approach Delay (s)		70.3			202.7			5.3			25.3	
Approach LOS		E			F			A			C	

Intersection Summary			
HCM 2000 Control Delay	65.7	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.08		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	11.8
Intersection Capacity Utilization	95.9%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	1570	80	0	1450	80	230	1980	430	260	2500	320
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	0.0	186.3	190.0	0.0	186.3	190.0	186.3	186.3	190.0	186.3	186.3	186.3
Lanes	0	2	0	0	2	0	1	3	0	1	2	1
Cap, veh/h	0	1474	74	0	1467	80	201	1720	359	202	1428	607
Arrive On Green	0.00	0.42	0.41	0.00	0.42	0.41	0.08	0.38	0.38	0.08	0.38	0.38
Sat Flow, veh/h	0	3516	178	0	3500	192	1774	4487	936	1774	3725	1583
Grp Volume(v), veh/h	0	871	866	0	809	801	242	1716	821	274	2632	337
Grp Sat Flow(s),veh/h/ln	0	1863	1831	0	1863	1829	1774	1863	1698	1774	1863	1583
Q Serve(g_s), s	0.0	50.3	50.3	0.0	50.3	50.3	9.5	46.0	46.0	9.5	46.0	20.0
Cycle Q Clear(g_c), s	0.0	50.3	50.3	0.0	50.3	50.3	9.5	46.0	46.0	9.5	46.0	20.0
Prop In Lane	0.00		0.10	0.00		0.10	1.00		0.55	1.00		1.00
Lane Grp Cap(c), veh/h	0	781	768	0	781	767	201	1428	651	202	1428	607
V/C Ratio(X)	0.00	1.12	1.13	0.00	1.04	1.04	1.20	1.20	1.26	1.36	1.84	0.56
Avail Cap(c_a), veh/h	0	781	768	0	781	767	201	1428	651	202	1428	607
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.49	0.49	0.49
Uniform Delay (d), s/veh	0.0	34.9	34.9	0.0	34.9	34.9	33.8	37.0	37.3	33.7	37.0	29.0
Incr Delay (d2), s/veh	0.0	69.0	73.6	0.0	42.0	44.7	128.2	97.6	130.1	175.5	380.7	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.0	38.4	38.7	0.0	32.5	32.5	13.4	40.8	43.1	16.1	96.9	8.3
Lane Grp Delay (d), s/veh	0.0	103.8	108.5	0.0	76.8	79.6	162.0	134.6	167.4	209.2	417.7	30.8
Lane Grp LOS		F	F		F	F	F	F	F	F	F	C
Approach Vol, veh/h		1737			1610			2779			3243	
Approach Delay, s/veh		106.2			78.2			146.7			359.9	
Approach LOS		F			E			F			F	

Timer							
Assigned Phs	6	2	7	4	3	8	
Phs Duration (G+Y+Rc), s	56.0	56.0	13.0	51.0	13.0	51.0	
Change Period (Y+Rc), s	6.7	6.7	3.0	6.0	3.0	6.0	
Max Green Setting (Gmax), s	49.3	49.3	10.0	45.0	10.0	45.0	
Max Q Clear Time (g_c+I1), s	52.3	52.3	11.5	48.0	11.5	48.0	
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.0	

Intersection Summary	
HCM 2010 Ctrl Delay	201.2
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	70	1960	50	0	0	0	0	60	90	50	70	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	186.3	190.0	190.0	186.3	0.0
Lanes	0	3	0				0	1	0	0	1	0
Cap, veh/h	132	3917	104				0	109	165	91	111	0
Arrive On Green	0.74	0.75	0.74				0.00	0.16	0.16	0.16	0.16	0.00
Sat Flow, veh/h	176	5240	139				0	671	1013	299	680	0
Grp Volume(v), veh/h	777	710	703				0	0	158	127	0	0
Grp Sat Flow(s),veh/h/ln	1854	1863	1838				0	0	1684	979	0	0
Q Serve(g_s), s	22.0	18.7	18.9				0.0	0.0	10.5	6.4	0.0	0.0
Cycle Q Clear(g_c), s	22.0	18.7	18.9				0.0	0.0	10.5	16.9	0.0	0.0
Prop In Lane	0.10		0.08				0.00		0.60	0.42		0.00
Lane Grp Cap(c), veh/h	1386	1393	1374				0	0	274	202	0	0
V/C Ratio(X)	0.56	0.51	0.51				0.00	0.00	0.58	0.63	0.00	0.00
Avail Cap(c_a), veh/h	1386	1393	1374				0	0	405	320	0	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	6.6	6.2	6.2				0.0	0.0	46.7	50.3	0.0	0.0
Incr Delay (d2), s/veh	1.6	1.3	1.4				0.0	0.0	1.9	3.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	9.5	8.0	8.0				0.0	0.0	4.7	4.1	0.0	0.0
Lane Grp Delay (d), s/veh	8.3	7.5	7.6				0.0	0.0	48.6	53.5	0.0	0.0
Lane Grp LOS	A	A	A						D	D		
Approach Vol, veh/h		2190						158			127	
Approach Delay, s/veh		7.8						48.6			53.5	
Approach LOS		A						D			D	

Timer												
Assigned Phs		6						4			8	
Phs Duration (G+Y+Rc), s		95.0						25.7			25.7	
Change Period (Y+Rc), s		5.8						6.0			6.0	
Max Green Setting (Gmax), s		89.2						29.0			29.0	
Max Q Clear Time (g_c+I1), s		24.0						12.5			18.9	
Green Ext Time (p_c), s		17.8						1.0			0.8	

Intersection Summary			
HCM 2010 Ctrl Delay		12.8	
HCM 2010 LOS		B	

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	130	2050	100	0	0	0	0	1040	220	180	1280	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	186.3	190.0	186.3	186.3	0.0
Lanes	0	3	0				0	2	0	1	2	0
Cap, veh/h	136	2276	113				0	1061	224	178	1695	0
Arrive On Green	0.15	0.15	0.15				0.00	0.36	0.35	0.14	0.91	0.00
Sat Flow, veh/h	297	4984	249				0	2985	629	1774	3725	0
Grp Volume(v), veh/h	852	779	768				0	681	646	189	1347	0
Grp Sat Flow(s),veh/h/ln	1848	1863	1819				0	1863	1752	1774	1863	0
Q Serve(g_s), s	59.5	53.7	54.3				0.0	46.3	46.3	9.0	15.3	0.0
Cycle Q Clear(g_c), s	59.5	53.7	54.3				0.0	46.3	46.3	9.0	15.3	0.0
Prop In Lane	0.16		0.14				0.00		0.36	1.00		0.00
Lane Grp Cap(c), veh/h	844	851	831				0	662	622	178	1695	0
V/C Ratio(X)	1.01	0.92	0.93				0.00	1.03	1.04	1.06	0.79	0.00
Avail Cap(c_a), veh/h	844	851	831				0	662	622	178	1695	0
HCM Platoon Ratio	0.33	0.33	0.33				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	0.80	0.80	0.80				0.00	1.00	1.00	0.27	0.27	0.00
Uniform Delay (d), s/veh	55.3	52.9	53.1				0.0	42.0	42.2	31.8	3.9	0.0
Incr Delay (d2), s/veh	30.2	13.6	14.8				0.0	42.7	46.1	52.8	1.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	37.0	30.4	30.4				0.0	29.7	28.6	8.2	2.4	0.0
Lane Grp Delay (d), s/veh	85.5	66.4	68.0				0.0	84.7	88.3	84.5	5.0	0.0
Lane Grp LOS	F	E	E					F	F	F	A	
Approach Vol, veh/h		2400						1327			1536	
Approach Delay, s/veh		73.7						86.4			14.7	
Approach LOS		E						F			B	

Timer					
Assigned Phs		6		4		3	8	
Phs Duration (G+Y+Rc), s		66.0		51.3		13.0	64.3	
Change Period (Y+Rc), s		6.5		6.0		4.0	6.0	
Max Green Setting (Gmax), s		59.5		45.0		9.0	58.3	
Max Q Clear Time (g_c+I1), s		61.5		48.3		11.0	17.3	
Green Ext Time (p_c), s		0.0		0.0		0.0	16.8	

Intersection Summary	
HCM 2010 Ctrl Delay	59.7
HCM 2010 LOS	E

Notes

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	80	2480	0	0	50	0
Number	1	6			3	18
Initial Q (Qb), veh	0	0			0	0
Ped-Bike Adj(A_pbT)	1.00				1.00	1.00
Parking Bus Adj	1.00	1.00			1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3			186.3	0.0
Lanes	0	3			1	0
Cap, veh/h	70	3268			0	0
Arrive On Green	0.32	0.32			0.00	0.00
Sat Flow, veh/h	0	3390			0	
Grp Volume(v), veh/h	84	2611			0.0	
Grp Sat Flow(s),veh/h/ln	0	1695				
Q Serve(g_s), s	0.0	72.5				
Cycle Q Clear(g_c), s	99.3	72.5				
Prop In Lane	1.00					
Lane Grp Cap(c), veh/h	70	3268				
V/C Ratio(X)	1.20	0.80				
Avail Cap(c_a), veh/h	70	3268				
HCM Platoon Ratio	0.33	0.33				
Upstream Filter(I)	0.09	0.09				
Uniform Delay (d), s/veh	84.8	26.0				
Incr Delay (d2), s/veh	102.9	0.2				
Initial Q Delay(d3),s/veh	0.0	0.0				
%ile Back of Q (50%), veh/ln	2.0	29.0				
Lane Grp Delay (d), s/veh	187.7	26.2				
Lane Grp LOS	F	C				
Approach Vol, veh/h		2695				
Approach Delay, s/veh		31.2				
Approach LOS		C				

Timer	
Assigned Phs	6
Phs Duration (G+Y+Rc), s	103.0
Change Period (Y+Rc), s	4.7
Max Green Setting (Gmax), s	98.3
Max Q Clear Time (g_c+I1), s	101.3
Green Ext Time (p_c), s	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	31.2
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	80	2360	40	0	0	0	0	90	120	60	110	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	193.7	190.0	190.0	193.7	0.0
Lanes	0	3	0				0	1	0	0	1	0
Cap, veh/h	119	3761	65				0	179	237	108	185	0
Arrive On Green	0.23	0.23	0.23				0.00	0.24	0.23	0.47	0.47	0.00
Sat Flow, veh/h	168	5303	92				0	757	1004	300	784	0
Grp Volume(v), veh/h	926	844	841				0	0	221	179	0	0
Grp Sat Flow(s),veh/h/ln	1854	1863	1846				0	0	1760	1083	0	0
Q Serve(g_s), s	59.5	53.0	53.4				0.0	0.0	14.3	8.3	0.0	0.0
Cycle Q Clear(g_c), s	59.5	53.0	53.4				0.0	0.0	14.3	22.6	0.0	0.0
Prop In Lane	0.09		0.05				0.00		0.57	0.35		0.00
Lane Grp Cap(c), veh/h	1315	1321	1310				0	0	416	293	0	0
V/C Ratio(X)	0.70	0.64	0.64				0.00	0.00	0.53	0.61	0.00	0.00
Avail Cap(c_a), veh/h	1315	1321	1310				0	0	416	293	0	0
HCM Platoon Ratio	0.33	0.33	0.33				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	0.75	0.75	0.75				0.00	0.00	1.00	0.55	0.00	0.00
Uniform Delay (d), s/veh	37.3	34.8	34.9				0.0	0.0	43.6	33.3	0.0	0.0
Incr Delay (d2), s/veh	2.4	1.8	1.8				0.0	0.0	4.8	5.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	30.9	27.6	27.5				0.0	0.0	7.1	5.2	0.0	0.0
Lane Grp Delay (d), s/veh	39.7	36.6	36.8				0.0	0.0	48.4	38.5	0.0	0.0
Lane Grp LOS	D	D	D						D	D		
Approach Vol, veh/h		2610						221			179	
Approach Delay, s/veh		37.7						48.4			38.5	
Approach LOS		D						D			D	

Timer												
Assigned Phs		6						4			8	
Phs Duration (G+Y+Rc), s		96.0						34.0			34.0	
Change Period (Y+Rc), s		4.8						4.3			4.3	
Max Green Setting (Gmax), s		91.2						29.7			29.7	
Max Q Clear Time (g_c+I1), s		61.5						16.3			24.6	
Green Ext Time (p_c), s		14.4						1.1			0.6	

Intersection Summary			
HCM 2010 Ctrl Delay			38.6
HCM 2010 LOS			D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	250	2190	100	0	0	0	0	880	360	300	1240	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	186.3	190.0	186.3	186.3	0.0
Lanes	0	3	0				0	2	0	1	2	0
Cap, veh/h	235	2211	103				0	838	340	274	1783	0
Arrive On Green	0.46	0.46	0.45				0.00	0.33	0.32	0.25	0.96	0.00
Sat Flow, veh/h	510	4791	223				0	2521	1023	1774	3725	0
Grp Volume(v), veh/h	947	866	860				0	682	623	316	1305	0
Grp Sat Flow(s),veh/h/ln	1837	1863	1823				0	1863	1682	1774	1863	0
Q Serve(g_s), s	60.0	60.0	60.0				0.0	43.2	43.2	16.0	6.6	0.0
Cycle Q Clear(g_c), s	60.0	60.0	60.0				0.0	43.2	43.2	16.0	6.6	0.0
Prop In Lane	0.28		0.12				0.00		0.61	1.00		0.00
Lane Grp Cap(c), veh/h	848	860	842				0	619	559	274	1783	0
V/C Ratio(X)	1.12	1.01	1.02				0.00	1.10	1.11	1.15	0.73	0.00
Avail Cap(c_a), veh/h	848	860	842				0	619	559	274	1783	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	0.09	0.09	0.00
Uniform Delay (d), s/veh	35.0	35.0	35.1				0.0	43.4	43.7	33.3	1.6	0.0
Incr Delay (d2), s/veh	68.3	32.4	36.7				0.0	67.3	73.5	73.7	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	43.4	35.7	35.9				0.0	32.0	29.9	14.3	1.0	0.0
Lane Grp Delay (d), s/veh	103.3	67.4	71.7				0.0	110.7	117.2	106.9	1.7	0.0
Lane Grp LOS	F	F	F					F	F	F	A	
Approach Vol, veh/h		2673						1305			1621	
Approach Delay, s/veh		81.5						113.8			22.2	
Approach LOS		F						F			C	

Timer					
Assigned Phs		6		4		3	8	
Phs Duration (G+Y+Rc), s		64.0		47.0		19.0	66.0	
Change Period (Y+Rc), s		5.0		4.8		3.0	4.8	
Max Green Setting (Gmax), s		59.0		42.2		16.0	61.2	
Max Q Clear Time (g_c+I1), s		62.0		45.2		18.0	8.6	
Green Ext Time (p_c), s		0.0		0.0		0.0	24.2	

Intersection Summary			
HCM 2010 Ctrl Delay		71.9	
HCM 2010 LOS		E	

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	250	2630	140	0	0	0	0	580	130	180	430	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	186.3	190.0	190.0	186.3	0.0
Lanes	0	3	0				0	2	0	0	2	0
Cap, veh/h	255	2861	154				0	1028	230	177	944	0
Arrive On Green	0.59	0.59	0.58				0.00	0.35	0.34	0.68	0.70	0.00
Sat Flow, veh/h	430	4831	260				0	2949	660	350	1695	0
Grp Volume(v), veh/h	1127	1026	1026				0	385	363	321	321	0
Grp Sat Flow(s),veh/h/ln	1841	1863	1817				0	1863	1746	1195	1863	0
Q Serve(g_s), s	77.0	64.9	68.7				0.0	22.1	22.2	0.1	10.4	0.0
Cycle Q Clear(g_c), s	77.0	64.9	68.7				0.0	22.1	22.2	45.3	10.4	0.0
Prop In Lane	0.23		0.14				0.00		0.38	1.00		0.00
Lane Grp Cap(c), veh/h	1091	1103	1076				0	649	609	55	649	0
V/C Ratio(X)	1.03	0.93	0.95				0.00	0.59	0.60	5.80	0.49	0.00
Avail Cap(c_a), veh/h	1091	1103	1076				0	649	609	55	649	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	0.93	0.93	0.00
Uniform Delay (d), s/veh	26.5	24.0	24.9				0.0	34.8	35.0	42.9	14.4	0.0
Incr Delay (d2), s/veh	36.2	14.7	18.2				0.0	4.0	4.3	2194.1	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	44.9	33.6	35.4				0.0	11.2	10.6	33.8	3.6	0.0
Lane Grp Delay (d), s/veh	62.7	38.7	43.1				0.0	38.8	39.3	2237.0	14.9	0.0
Lane Grp LOS	F	D	D					D	D	F	B	
Approach Vol, veh/h		3178						748			642	
Approach Delay, s/veh		48.6						39.0			1126.0	
Approach LOS		D						D			F	

Timer					
Assigned Phs		6		4	3	8
Phs Duration (G+Y+Rc), s		81.0		49.0	0.0	49.0
Change Period (Y+Rc), s		5.0		4.7	4.0	4.7
Max Green Setting (Gmax), s		76.0		31.3	9.0	44.3
Max Q Clear Time (g_c+I1), s		79.0		24.2	0.0	47.3
Green Ext Time (p_c), s		0.0		4.1	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	198.5
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	2890	50	0	0	0	0	0	40	120	80	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	10	12	12	12	12	12	11	12	12	11	12
Total Lost time (s)		5.0							4.0	4.3	4.3	
Lane Util. Factor		0.91							1.00	1.00	1.00	
Frt		1.00							0.86	1.00	1.00	
Flt Protected		1.00							1.00	0.95	1.00	
Satd. Flow (prot)		4734							1611	1770	1801	
Flt Permitted		1.00							1.00	0.95	1.00	
Satd. Flow (perm)		4734							1611	1770	1801	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	3042	53	0	0	0	0	0	42	126	84	0
RTOR Reduction (vph)	0	1	0	0	0	0	0	0	15	15	0	0
Lane Group Flow (vph)	0	3094	0	0	0	0	0	0	27	111	84	0
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	0%	2%	2%	2%	2%	0%
Turn Type		NA							custom	Perm	NA	
Protected Phases		6									8	
Permitted Phases									4	8		
Actuated Green, G (s)		107.3							13.7	13.4	13.4	
Effective Green, g (s)		107.3							13.7	13.4	13.4	
Actuated g/C Ratio		0.83							0.11	0.10	0.10	
Clearance Time (s)		5.0							4.0	4.3	4.3	
Vehicle Extension (s)		3.0							3.0	3.0	3.0	
Lane Grp Cap (vph)		3907							169	182	185	
v/s Ratio Prot		c0.65									0.05	
v/s Ratio Perm									0.02	c0.06		
v/c Ratio		0.79							0.16	0.61	0.45	
Uniform Delay, d1		5.7							52.9	55.8	54.9	
Progression Factor		0.42							1.00	1.00	1.00	
Incremental Delay, d2		0.2							0.4	5.7	1.8	
Delay (s)		2.6							53.3	61.5	56.6	
Level of Service		A							D	E	E	
Approach Delay (s)		2.6			0.0			53.3			59.5	
Approach LOS		A			A			D			E	

Intersection Summary			
HCM 2000 Control Delay	6.8	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	9.3
Intersection Capacity Utilization	74.5%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	200	2380	80	0	0	0	0	240	70	230	200	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	186.3	190.0	190.0	186.3	0.0
Lanes	0	3	0				0	1	0	0	1	0
Cap, veh/h	194	2465	84				0	578	169	242	199	0
Arrive On Green	0.16	0.16	0.16				0.00	0.42	0.42	0.69	0.70	0.00
Sat Flow, veh/h	392	4976	171				0	1386	405	479	478	0
Grp Volume(v), veh/h	993	905	903				0	0	327	453	0	0
Grp Sat Flow(s),veh/h/ln	1843	1863	1833				0	0	1791	957	0	0
Q Serve(g_s), s	64.4	62.9	63.9				0.0	0.0	16.9	0.1	0.0	0.0
Cycle Q Clear(g_c), s	64.4	62.9	63.9				0.0	0.0	16.9	54.2	0.0	0.0
Prop In Lane	0.21		0.09				0.00		0.23	0.53		0.00
Lane Grp Cap(c), veh/h	913	923	908				0	0	747	441	0	0
V/C Ratio(X)	1.09	0.98	0.99				0.00	0.00	0.44	1.03	0.00	0.00
Avail Cap(c_a), veh/h	913	923	908				0	0	747	441	0	0
HCM Platoon Ratio	0.33	0.33	0.33				1.00	1.00	1.00	1.67	1.67	1.00
Upstream Filter(I)	0.53	0.53	0.53				0.00	0.00	1.00	0.80	0.00	0.00
Uniform Delay (d), s/veh	54.4	53.8	54.2				0.0	0.0	27.0	28.4	0.0	0.0
Incr Delay (d2), s/veh	49.6	17.5	20.5				0.0	0.0	1.9	45.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	45.0	36.4	37.1				0.0	0.0	8.0	5.5	0.0	0.0
Lane Grp Delay (d), s/veh	104.0	71.3	74.7				0.0	0.0	28.9	73.6	0.0	0.0
Lane Grp LOS	F	E	E						C	F		
Approach Vol, veh/h		2800						327			453	
Approach Delay, s/veh		84.0						28.9			73.6	
Approach LOS		F						C			E	

Timer												
Assigned Phs		6						4		3	8	
Phs Duration (G+Y+Rc), s		70.0						60.0		0.0	60.0	
Change Period (Y+Rc), s		5.6						5.8		3.0	5.8	
Max Green Setting (Gmax), s		64.4						39.2		12.0	54.2	
Max Q Clear Time (g_c+I1), s		66.4						18.9		0.0	56.2	
Green Ext Time (p_c), s		0.0						2.9		0.0	0.0	

Intersection Summary												
HCM 2010 Ctrl Delay			77.6									
HCM 2010 LOS			E									

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	160	2460	20	0	0	0	0	110	420	0	0	0
Number	1	6	16				7	4	14			
Initial Q (Qb), veh	0	0	0				0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00			
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00			
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	186.3	190.0			
Lanes	0	3	0				0	1	0			
Cap, veh/h	48	2127	17				0	106	406			
Arrive On Green	0.63	0.63	0.63				0.00	0.31	0.31			
Sat Flow, veh/h	0	3358	27				0	340	1295			
Grp Volume(v), veh/h	168	1305	1305				0	0	558			
Grp Sat Flow(s),veh/h/ln	0	1695	1690				0	0	1634			
Q Serve(g_s), s	0.0	95.0	95.0				0.0	0.0	47.0			
Cycle Q Clear(g_c), s	95.0	95.0	95.0				0.0	0.0	47.0			
Prop In Lane	1.00		0.02				0.00		0.79			
Lane Grp Cap(c), veh/h	48	1074	1071				0	0	512			
V/C Ratio(X)	3.50	1.22	1.22				0.00	0.00	1.09			
Avail Cap(c_a), veh/h	48	1074	1071				0	0	512			
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	1.00				0.00	0.00	1.00			
Uniform Delay (d), s/veh	75.0	27.5	27.5				0.0	0.0	51.5			
Incr Delay (d2), s/veh	1175.3	105.8	107.0				0.0	0.0	66.3			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0			
%ile Back of Q (50%), veh/ln	17.6	70.3	70.5				0.0	0.0	29.2			
Lane Grp Delay (d), s/veh	1250.3	133.3	134.5				0.0	0.0	117.8			
Lane Grp LOS	F	F	F						F			
Approach Vol, veh/h		2778						558				
Approach Delay, s/veh		201.4						117.8				
Approach LOS		F						F				

Timer	
Assigned Phs	6
Phs Duration (G+Y+Rc), s	99.0
Change Period (Y+Rc), s	4.0
Max Green Setting (Gmax), s	95.0
Max Q Clear Time (g_c+I1), s	97.0
Green Ext Time (p_c), s	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	187.5
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	3020	150	0	0	0	0	0	0	1070	720	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.7	6.7							6.0	6.0	
Lane Util. Factor		0.91	1.00							0.86	0.86	
Frt		1.00	0.85							1.00	1.00	
Flt Protected		1.00	1.00							0.95	0.99	
Satd. Flow (prot)		4424	1425							2739	2853	
Flt Permitted		1.00	1.00							0.95	0.99	
Satd. Flow (perm)		4424	1425							2739	2853	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	3179	158	0	0	0	0	0	0	1126	758	0
RTOR Reduction (vph)	0	0	23	0	0	0	0	0	0	18	18	0
Lane Group Flow (vph)	0	3179	135	0	0	0	0	0	0	905	943	0
Parking (#/hr)		0										
Turn Type		NA	Perm							Perm	NA	
Protected Phases		6									8	
Permitted Phases			6							8		
Actuated Green, G (s)		85.3	85.3							52.0	52.0	
Effective Green, g (s)		85.3	85.3							52.0	52.0	
Actuated g/C Ratio		0.57	0.57							0.35	0.35	
Clearance Time (s)		6.7	6.7							6.0	6.0	
Vehicle Extension (s)		2.0	2.0							2.0	2.0	
Lane Grp Cap (vph)		2515	810							949	989	
v/s Ratio Prot		c0.72										
v/s Ratio Perm			0.09							0.33	0.33	
v/c Ratio		1.26	0.17							0.95	0.95	
Uniform Delay, d1		32.4	15.4							47.8	47.8	
Progression Factor		1.00	1.00							0.75	0.75	
Incremental Delay, d2		122.1	0.4							13.7	13.3	
Delay (s)		154.5	15.9							49.6	49.2	
Level of Service		F	B							D	D	
Approach Delay (s)		147.9			0.0			0.0			49.4	
Approach LOS		F			A			A			D	

Intersection Summary			
HCM 2000 Control Delay	112.4	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.15		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	12.7
Intersection Capacity Utilization	103.8%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	190	2500	0	0	0	0	0	220	1700	180	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5						4.7	4.7	4.7		
Lane Util. Factor		0.91						0.95	0.95	1.00		
Frt		1.00						0.88	0.85	1.00		
Flt Protected		1.00						1.00	1.00	0.95		
Satd. Flow (prot)		4561						1408	1354	1593		
Flt Permitted		1.00						1.00	1.00	0.95		
Satd. Flow (perm)		4561						1408	1354	1593		
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	200	2632	0	0	0	0	0	232	1789	189	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	24	27	0	0	0
Lane Group Flow (vph)	0	2832	0	0	0	0	0	995	975	189	0	0
Turn Type	Perm	NA						NA	Perm	custom		
Protected Phases		6						4		3		
Permitted Phases	6								4	3		
Actuated Green, G (s)		55.5						61.5	61.5	19.1		
Effective Green, g (s)		55.5						61.5	61.5	19.1		
Actuated g/C Ratio		0.37						0.41	0.41	0.13		
Clearance Time (s)		4.5						4.7	4.7	4.7		
Vehicle Extension (s)		2.5						3.0	3.0	2.5		
Lane Grp Cap (vph)		1687						577	555	202		
v/s Ratio Prot								0.71		c0.12		
v/s Ratio Perm		0.62							c0.72			
v/c Ratio		1.68						1.73	1.76	0.94		
Uniform Delay, d1		47.2						44.2	44.2	64.8		
Progression Factor		0.85						1.00	1.00	0.68		
Incremental Delay, d2		305.7						333.6	348.3	39.3		
Delay (s)		345.7						377.8	392.5	83.7		
Level of Service		F						F	F	F		
Approach Delay (s)		345.7			0.0			385.1			83.7	
Approach LOS		F			A			F			F	

Intersection Summary			
HCM 2000 Control Delay	351.7	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.61		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	13.9
Intersection Capacity Utilization	168.8%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	700	3470	440	0	0	0	0	740	130	150	270	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	171.0	166.0	171.0				0.0	166.0	171.0	171.0	166.0	0.0
Lanes	0	3	0				0	2	0	0	2	0
Cap, veh/h	407	2164	273				0	912	160	85	969	0
Arrive On Green	0.19	0.19	0.19				0.00	0.33	0.33	0.11	0.11	0.00
Sat Flow, veh/h	696	3701	466				0	2751	484	113	1511	0
Grp Volume(v), veh/h	1721	1566	1566				0	470	446	221	221	0
Grp Sat Flow(s),veh/h/ln	1625	1660	1578				0	1660	1575	1377	1660	0
Q Serve(g_s), s	87.7	87.7	87.7				0.0	39.6	39.6	0.1	18.6	0.0
Cycle Q Clear(g_c), s	87.7	87.7	87.7				0.0	39.6	39.6	49.7	18.6	0.0
Prop In Lane	0.43		0.30				0.00		0.31	1.00		0.00
Lane Grp Cap(c), veh/h	950	971	923				0	550	522	48	550	0
V/C Ratio(X)	1.81	1.61	1.70				0.00	0.85	0.85	4.60	0.40	0.00
Avail Cap(c_a), veh/h	950	971	923				0	550	522	48	550	0
HCM Platoon Ratio	0.33	0.33	0.33				1.00	1.00	1.00	0.33	0.33	1.00
Upstream Filter(I)	0.09	0.09	0.09				0.00	1.00	1.00	0.37	0.37	0.00
Uniform Delay (d), s/veh	60.5	60.5	60.5				0.0	46.8	46.8	91.6	53.0	0.0
Incr Delay (d2), s/veh	365.3	276.5	314.3				0.0	15.5	16.2	1639.6	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	135.6	114.5	118.6				0.0	19.5	18.6	21.9	8.6	0.0
Lane Grp Delay (d), s/veh	425.8	337.0	374.9				0.0	62.3	63.0	1731.3	53.8	0.0
Lane Grp LOS	F	F	F					E	E	F	D	
Approach Vol, veh/h		4853						916			442	
Approach Delay, s/veh		380.7						62.7			892.5	
Approach LOS		F						E			F	

Timer					
Assigned Phs		6		4	3	8
Phs Duration (G+Y+Rc), s		94.0		56.0	0.0	56.0
Change Period (Y+Rc), s		6.3		6.3	3.0	6.3
Max Green Setting (Gmax), s		87.7		37.7	9.0	49.7
Max Q Clear Time (g_c+I1), s		89.7		41.6	0.0	51.7
Green Ext Time (p_c), s		0.0		0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	370.2
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	3290	840	0	0	0	0	0	0	630	720	0
Number	1	6	16							3	8	18
Initial Q (Qb), veh	0	0	0							0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00							1.00		1.00
Parking Bus Adj	1.00	1.00	1.00							1.00	1.00	1.00
Adj Sat Flow veh/h/ln	0.0	166.0	171.0							171.0	166.0	0.0
Lanes	0	3	0							0	2	0
Cap, veh/h	0	2457	575							48	467	0
Arrive On Green	0.00	0.21	0.21							0.10	0.10	0.00
Sat Flow, veh/h	0	3905	914							0	1511	0
Grp Volume(v), veh/h	0	2898	1449							663	758	0
Grp Sat Flow(s),veh/h/ln	0	1660	1499							0	1511	0
Q Serve(g_s), s	0.0	94.4	94.4							0.0	46.4	0.0
Cycle Q Clear(g_c), s	0.0	94.4	94.4							46.4	46.4	0.0
Prop In Lane	0.00		0.61							1.00		0.00
Lane Grp Cap(c), veh/h	0	2090	943							48	467	0
V/C Ratio(X)	0.00	1.39	1.54							13.81	1.62	0.00
Avail Cap(c_a), veh/h	0	2090	943							48	467	0
HCM Platoon Ratio	1.00	0.33	0.33							0.33	0.33	1.00
Upstream Filter(I)	0.00	0.09	0.09							0.27	0.27	0.00
Uniform Delay (d), s/veh	0.0	59.4	59.4							90.5	67.3	0.0
Incr Delay (d2), s/veh	0.0	174.4	241.8							5776.7	282.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0							0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.0	93.6	102.1							79.0	55.9	0.0
Lane Grp Delay (d), s/veh	0.0	233.8	301.2							5867.2	350.0	0.0
Lane Grp LOS		F	F							F	F	
Approach Vol, veh/h		4347									1421	
Approach Delay, s/veh		256.3									2924.2	
Approach LOS		F									F	

Timer	
Assigned Phs	6	8
Phs Duration (G+Y+Rc), s	99.0	51.0
Change Period (Y+Rc), s	4.6	4.6
Max Green Setting (Gmax), s	94.4	46.4
Max Q Clear Time (g_c+I1), s	96.4	48.4
Green Ext Time (p_c), s	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	913.5
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	560	3660	0	0	0	0	0	860	140	0	0	0
Number	1	6	16				7	4	14			
Initial Q (Qb), veh	0	0	0				0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00			
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00			
Adj Sat Flow veh/h/ln	171.0	166.0	0.0				0.0	166.0	171.0			
Lanes	0	3	0				0	3	0			
Cap, veh/h	48	2163	0				0	932	151			
Arrive On Green	0.24	0.24	0.00				0.00	0.22	0.22			
Sat Flow, veh/h	0	3022	0				0	4185	677			
Grp Volume(v), veh/h	589	3853	0				0	717	335			
Grp Sat Flow(s),veh/h/ln	0	1511	0				0	1660	1541			
Q Serve(g_s), s	0.0	107.4	0.0				0.0	32.1	32.4			
Cycle Q Clear(g_c), s	107.4	107.4	0.0				0.0	32.1	32.4			
Prop In Lane	1.00		0.00				0.00		0.44			
Lane Grp Cap(c), veh/h	48	2163	0				0	739	343			
V/C Ratio(X)	12.27	1.78	0.00				0.00	0.97	0.98			
Avail Cap(c_a), veh/h	48	2163	0				0	739	343			
HCM Platoon Ratio	0.33	0.33	1.00				1.00	1.00	1.00			
Upstream Filter(I)	0.09	0.09	0.00				0.00	1.00	1.00			
Uniform Delay (d), s/veh	111.0	57.3	0.0				0.0	57.8	57.9			
Incr Delay (d2), s/veh	5075.5	351.6	0.0				0.0	25.8	41.9			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0			
%ile Back of Q (50%), veh/ln	69.6	150.1	0.0				0.0	16.6	17.0			
Lane Grp Delay (d), s/veh	5186.5	408.9	0.0				0.0	83.6	99.8			
Lane Grp LOS	F	F						F	F			
Approach Vol, veh/h		4442						1052				
Approach Delay, s/veh		1042.4						88.8				
Approach LOS		F						F				

Timer	
Assigned Phs	6
Phs Duration (G+Y+Rc), s	112.0
Change Period (Y+Rc), s	4.6
Max Green Setting (Gmax), s	107.4
Max Q Clear Time (g_c+I1), s	109.4
Green Ext Time (p_c), s	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	859.8
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1540	1260	760	320	0	850	0	1100	300	450	1050	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.7	6.7		6.7		6.7		6.2	6.2	4.0	6.2	
Lane Util. Factor	0.97	0.95		1.00		1.00		0.95	1.00	0.97	0.95	
Frt	1.00	0.94		1.00		0.85		1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00		0.95		1.00		1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3060	2976		1577		1411		3154	1411	3060	3154	
Flt Permitted	0.95	1.00		0.10		1.00		1.00	1.00	0.95	1.00	
Satd. Flow (perm)	3060	2976		173		1411		3154	1411	3060	3154	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	1621	1326	800	337	0	895	0	1158	316	474	1105	0
RTOR Reduction (vph)	0	65	0	0	0	101	0	0	147	0	0	0
Lane Group Flow (vph)	1621	2061	0	337	0	794	0	1158	169	474	1105	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Split	NA		D.Pm		custom		NA	Perm	Prot	NA	
Protected Phases	8	8						6		5	2	
Permitted Phases				8		4			6			
Actuated Green, G (s)	38.3	38.3		38.3		28.3		39.8	39.8	10.0	53.8	
Effective Green, g (s)	38.3	38.3		38.3		28.3		39.8	39.8	10.0	53.8	
Actuated g/C Ratio	0.27	0.27		0.27		0.20		0.28	0.28	0.07	0.38	
Clearance Time (s)	6.7	6.7		6.7		6.7		6.2	6.2	4.0	6.2	
Vehicle Extension (s)	3.0	3.0		3.0		3.0		3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	837	814		47		285		896	401	218	1212	
v/s Ratio Prot	0.53	0.69						c0.37		c0.15	0.35	
v/s Ratio Perm				c1.94		c0.56			0.12			
v/c Ratio	1.94	2.53		7.17		2.79		1.29	0.42	2.17	0.91	
Uniform Delay, d1	50.9	50.9		50.9		55.9		50.1	40.7	65.0	40.8	
Progression Factor	1.00	1.00		1.00		1.00		1.00	1.00	1.13	0.50	
Incremental Delay, d2	425.9	693.2		2820.4		814.2		139.9	3.2	536.0	6.6	
Delay (s)	476.8	744.1		2871.3		870.0		190.0	44.0	609.5	27.0	
Level of Service	F	F		F		F		F	D	F	C	
Approach Delay (s)		628.4			1417.4			158.7			201.8	
Approach LOS		F			F			F			F	

Intersection Summary			
HCM 2000 Control Delay	579.4	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	3.65		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	23.6
Intersection Capacity Utilization	157.4%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	290	550	170	980	1800	0	30	1900	1500
Number				7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				171.0	166.0	171.0	166.0	166.0	171.0	166.0	166.0	166.0
Lanes				0	2	0	2	3	0	1	2	1
Cap, veh/h				175	350	113	758	3353	0	150	1481	629
Arrive On Green				0.20	0.20	0.20	0.08	0.22	0.00	0.02	0.45	0.45
Sat Flow, veh/h				872	1744	562	3067	4981	0	1581	3320	1411
Grp Volume(v), veh/h				566	0	497	1032	1895	0	32	2000	1579
Grp Sat Flow(s),veh/h/ln				1617	0	1561	1534	1660	0	1581	1660	1411
Q Serve(g_s), s				30.1	0.0	30.1	37.0	50.7	0.0	1.7	66.8	66.8
Cycle Q Clear(g_c), s				30.1	0.0	30.1	37.0	50.7	0.0	1.7	66.8	66.8
Prop In Lane				0.54		0.36	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h				325	0	314	758	3353	0	150	1481	629
V/C Ratio(X)				1.74	0.00	1.59	1.36	0.57	0.00	0.21	1.35	2.51
Avail Cap(c_a), veh/h				325	0	314	758	3353	0	214	1481	629
HCM Platoon Ratio				1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.09	0.09	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh				59.9	0.0	59.9	68.8	38.8	0.0	22.9	41.5	41.5
Incr Delay (d2), s/veh				346.3	0.0	278.1	163.8	0.1	0.0	0.7	162.4	683.9
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				44.0	0.0	36.5	32.7	22.9	0.0	0.7	61.6	143.5
Lane Grp Delay (d), s/veh				406.1	0.0	338.0	232.6	38.8	0.0	23.6	203.9	725.4
Lane Grp LOS				F		F	F	D		C	F	F
Approach Vol, veh/h					1063			2927			3611	
Approach Delay, s/veh					374.2			107.1			430.3	
Approach LOS					F			F			F	

Timer												
Assigned Phs					4		1	6		5	2	
Phs Duration (G+Y+Rc), s					36.8		40.0	107.1		5.9	73.0	
Change Period (Y+Rc), s					6.7		3.0	6.2		3.0	6.2	
Max Green Setting (Gmax), s					30.1		37.0	95.0		9.0	66.8	
Max Q Clear Time (g_c+I1), s					32.1		39.0	52.7		3.7	68.8	
Green Ext Time (p_c), s					0.0		0.0	42.1		0.0	0.0	

Intersection Summary		
HCM 2010 Ctrl Delay		298.0
HCM 2010 LOS		F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	0	2680	650	890	1370	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.2		4.2	4.2				
Lane Util. Factor					0.91		0.91	0.91				
Frt					0.97		1.00	1.00				
Flt Protected					1.00		0.95	0.99				
Satd. Flow (prot)					4400		1435	3006				
Flt Permitted					1.00		0.95	0.99				
Satd. Flow (perm)					4400		1435	3006				
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	0	2821	684	937	1442	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	3	0	6	6	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	3502	0	762	1605	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type					NA		Perm	NA				
Protected Phases					2			4				
Permitted Phases							4					
Actuated Green, G (s)					83.8		57.8	57.8				
Effective Green, g (s)					83.8		57.8	57.8				
Actuated g/C Ratio					0.56		0.39	0.39				
Clearance Time (s)					4.2		4.2	4.2				
Vehicle Extension (s)					3.0		3.0	3.0				
Lane Grp Cap (vph)					2458		552	1158				
v/s Ratio Prot					c0.80							
v/s Ratio Perm							0.53	0.53				
v/c Ratio					1.42		1.38	1.39				
Uniform Delay, d1					33.1		46.1	46.1				
Progression Factor					0.93		0.72	0.73				
Incremental Delay, d2					191.4		172.6	174.4				
Delay (s)					222.3		206.0	207.9				
Level of Service					F		F	F				
Approach Delay (s)		0.0			222.3			207.3			0.0	
Approach LOS		A			F			F			A	

Intersection Summary			
HCM 2000 Control Delay	216.2	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.41		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	8.4
Intersection Capacity Utilization	217.7%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	620	3320	0	0	0	0	0	1250	460
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					5.8						4.6	4.6
Lane Util. Factor					0.91						0.91	0.91
Frt					1.00						0.99	0.85
Flt Protected					0.99						1.00	1.00
Satd. Flow (prot)					4497						3006	1284
Flt Permitted					0.99						1.00	1.00
Satd. Flow (perm)					4497						3006	1284
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	653	3495	0	0	0	0	0	1316	484
RTOR Reduction (vph)	0	0	0	0	5	0	0	0	0	0	0	14
Lane Group Flow (vph)	0	0	0	0	4143	0	0	0	0	0	1364	422
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type				Perm	NA						NA	Perm
Protected Phases					2						8	
Permitted Phases				2								8
Actuated Green, G (s)					92.2						47.4	47.4
Effective Green, g (s)					92.2						47.4	47.4
Actuated g/C Ratio					0.61						0.32	0.32
Clearance Time (s)					5.8						4.6	4.6
Vehicle Extension (s)					3.0						3.0	3.0
Lane Grp Cap (vph)					2764						949	405
v/s Ratio Prot											c0.45	
v/s Ratio Perm					0.92							0.33
v/c Ratio					1.50						1.44	1.04
Uniform Delay, d1					28.9						51.3	51.3
Progression Factor					0.66						1.00	1.00
Incremental Delay, d2					224.7						202.8	56.3
Delay (s)					243.9						254.1	107.6
Level of Service					F						F	F
Approach Delay (s)		0.0			243.9			0.0			218.6	
Approach LOS		A			F			A			F	

Intersection Summary			
HCM 2000 Control Delay	236.2	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.48		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	10.4
Intersection Capacity Utilization	137.7%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	190	3800	180	450	1130	0	0	510	180
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				171.0	166.0	171.0	166.0	166.0	0.0	0.0	166.0	171.0
Lanes				0	3	0	1	2	0	0	2	0
Cap, veh/h				122	2582	124	280	1204	0	0	461	162
Arrive On Green				0.19	0.19	0.19	0.29	0.73	0.00	0.00	0.20	0.20
Sat Flow, veh/h				212	4503	216	1581	3320	0	0	2351	824
Grp Volume(v), veh/h				1556	1416	1416	474	1189	0	0	379	347
Grp Sat Flow(s),veh/h/ln				1650	1660	1622	1581	1660	0	0	1660	1515
Q Serve(g_s), s				86.0	86.0	86.0	22.0	52.0	0.0	0.0	29.4	29.4
Cycle Q Clear(g_c), s				86.0	86.0	86.0	22.0	52.0	0.0	0.0	29.4	29.4
Prop In Lane				0.13		0.13	1.00		0.00	0.00		0.54
Lane Grp Cap(c), veh/h				946	952	930	280	1204	0	0	325	297
V/C Ratio(X)				1.65	1.49	1.52	1.69	0.99	0.00	0.00	1.16	1.17
Avail Cap(c_a), veh/h				946	952	930	280	1204	0	0	325	297
HCM Platoon Ratio				0.33	0.33	0.33	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.09	0.09	0.09	0.09	0.09	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				60.8	60.8	60.8	34.5	20.3	0.0	0.0	60.3	60.3
Incr Delay (d2), s/veh				291.0	220.1	235.9	313.5	5.4	0.0	0.0	102.0	106.5
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				115.1	97.1	98.9	34.8	16.7	0.0	0.0	22.0	20.4
Lane Grp Delay (d), s/veh				351.8	280.9	296.7	348.0	25.7	0.0	0.0	162.3	166.8
Lane Grp LOS				F	F	F	F	C			F	F
Approach Vol, veh/h					4389			1663			726	
Approach Delay, s/veh					311.1			117.5			164.5	
Approach LOS					F			F			F	

Timer												
Assigned Phs					2		7	4			8	
Phs Duration (G+Y+Rc), s					91.0		25.0	59.0			34.0	
Change Period (Y+Rc), s					5.0		3.0	4.6			4.6	
Max Green Setting (Gmax), s					86.0		22.0	54.4			29.4	
Max Q Clear Time (g_c+I1), s					88.0		24.0	54.0			31.4	
Green Ext Time (p_c), s					0.0		0.0	0.4			0.0	

Intersection Summary		
HCM 2010 Ctrl Delay		247.9
HCM 2010 LOS		F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	320	2510	530	170	520	0	0	0	0
Number				5	2	12	7	4	14			
Initial Q (Qb), veh				0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00			
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow veh/h/ln				171.0	166.0	171.0	166.0	166.0	0.0			
Lanes				0	3	0	1	1	0			
Cap, veh/h				48	1606	327	48	473	0			
Arrive On Green				0.66	0.66	0.66	0.09	0.09	0.00			
Sat Flow, veh/h				0	2438	496	1581	1660	0			
Grp Volume(v), veh/h				337	1600	1600	179	547	0			
Grp Sat Flow(s),veh/h/ln				0	1511	1423	1581	1660	0			
Q Serve(g_s), s				0.0	98.8	98.8	0.0	42.7	0.0			
Cycle Q Clear(g_c), s				98.8	98.8	98.8	42.7	42.7	0.0			
Prop In Lane				1.00		0.35	1.00		0.00			
Lane Grp Cap(c), veh/h				48	995	937	48	473	0			
V/C Ratio(X)				7.02	1.61	1.71	3.73	1.16	0.00			
Avail Cap(c_a), veh/h				48	995	937	48	473	0			
HCM Platoon Ratio				1.00	1.00	1.00	0.33	0.33	1.00			
Upstream Filter(I)				1.00	1.00	1.00	0.09	0.09	0.00			
Uniform Delay (d), s/veh				75.0	25.6	25.6	89.3	68.0	0.0			
Incr Delay (d2), s/veh				2752.4	278.3	322.6	1232.7	73.3	0.0			
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0			
%ile Back of Q (50%), veh/ln				38.6	113.1	118.1	18.4	29.0	0.0			
Lane Grp Delay (d), s/veh				2827.4	303.9	348.2	1322.0	141.2	0.0			
Lane Grp LOS				F	F	F	F	F				
Approach Vol, veh/h					3537			726				
Approach Delay, s/veh					564.4			432.4				
Approach LOS					F			F				

Timer	
Assigned Phs	2
Phs Duration (G+Y+Rc), s	103.0
Change Period (Y+Rc), s	4.2
Max Green Setting (Gmax), s	98.8
Max Q Clear Time (g_c+I1), s	100.8
Green Ext Time (p_c), s	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	541.9
HCM 2010 LOS	F

Notes

Movement	WBL	WBT	SBT	SBR	SWL	SWR
Lane Configurations						
Volume (vph)	430	2080	220	50	660	370
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.5	6.5	7.0		7.0	7.0
Lane Util. Factor	0.91	0.91	1.00		0.97	0.91
Frt	1.00	1.00	0.97		0.99	0.85
Flt Protected	0.95	1.00	1.00		0.96	1.00
Satd. Flow (prot)	1449	3048	1634		3075	1297
Flt Permitted	0.95	1.00	1.00		0.96	1.00
Satd. Flow (perm)	1449	3048	1634		3075	1297
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	453	2189	232	53	695	389
RTOR Reduction (vph)	39	39	5	0	0	0
Lane Group Flow (vph)	369	2195	280	0	749	335
Turn Type	Perm	NA	NA		NA	Perm
Protected Phases		2	9		8	
Permitted Phases	2					8
Actuated Green, G (s)	77.5	77.5	21.0		31.0	31.0
Effective Green, g (s)	77.5	77.5	21.0		31.0	31.0
Actuated g/C Ratio	0.52	0.52	0.14		0.21	0.21
Clearance Time (s)	6.5	6.5	7.0		7.0	7.0
Vehicle Extension (s)	1.0	1.0	3.0		3.0	3.0
Lane Grp Cap (vph)	748	1574	228		635	268
v/s Ratio Prot			c0.17		0.24	
v/s Ratio Perm	0.25	0.72				c0.26
v/c Ratio	0.49	1.39	1.23		1.18	1.25
Uniform Delay, d1	23.5	36.2	64.5		59.5	59.5
Progression Factor	0.69	0.70	1.00		1.00	1.00
Incremental Delay, d2	0.2	178.0	134.7		96.4	139.6
Delay (s)	16.5	203.3	199.2		155.9	199.1
Level of Service	B	F	F		F	F
Approach Delay (s)		174.5	199.2		169.2	
Approach LOS		F	F		F	

Intersection Summary			
HCM 2000 Control Delay	174.8	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.33		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	20.5
Intersection Capacity Utilization	114.8%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	110	2190	110	120	240	0	0	220	90
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	186.3	190.0	190.0	186.3	0.0	0.0	193.7	190.0
Lanes				0	3	0	0	1	0	0	1	0
Cap, veh/h				139	2944	152	130	222	0	0	428	175
Arrive On Green				0.58	0.58	0.58	0.66	0.66	0.00	0.00	0.33	0.33
Sat Flow, veh/h				238	5033	259	274	679	0	0	1307	535
Grp Volume(v), veh/h				901	823	813	379	0	0	0	0	327
Grp Sat Flow(s),veh/h/ln				1851	1863	1817	953	0	0	0	0	1843
Q Serve(g_s), s				47.3	39.4	40.4	21.9	0.0	0.0	0.0	0.0	17.4
Cycle Q Clear(g_c), s				47.3	39.4	40.4	39.3	0.0	0.0	0.0	0.0	17.4
Prop In Lane				0.13		0.14	0.33		0.00	0.00		0.29
Lane Grp Cap(c), veh/h				1083	1090	1063	352	0	0	0	0	604
V/C Ratio(X)				0.83	0.75	0.77	1.08	0.00	0.00	0.00	0.00	0.54
Avail Cap(c_a), veh/h				1083	1090	1063	352	0	0	0	0	604
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.09	0.09	0.09	0.93	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				20.1	18.5	18.8	27.4	0.0	0.0	0.0	0.0	33.0
Incr Delay (d2), s/veh				0.7	0.5	0.5	68.2	0.0	0.0	0.0	0.0	0.8
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				21.0	17.7	17.6	16.8	0.0	0.0	0.0	0.0	8.2
Lane Grp Delay (d), s/veh				20.9	19.0	19.3	95.6	0.0	0.0	0.0	0.0	33.8
Lane Grp LOS				C	B	B	F					C
Approach Vol, veh/h					2537			379			327	
Approach Delay, s/veh					19.7			95.6			33.8	
Approach LOS					B			F			C	

Timer			
Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	75.0	45.0	45.0
Change Period (Y+Rc), s	5.8	5.7	5.7
Max Green Setting (Gmax), s	69.2	39.3	39.3
Max Q Clear Time (g_c+I1), s	49.3	41.3	19.4
Green Ext Time (p_c), s	11.3	0.0	2.2

Intersection Summary	
HCM 2010 Ctrl Delay	30.0
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	220	2260	160	240	660	0	0	680	150
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99
Adj Sat Flow veh/h/ln				190.0	184.5	190.0	190.0	184.5	0.0	0.0	177.1	190.0
Lanes				0	3	0	0	2	0	0	2	0
Cap, veh/h				180	1969	141	261	1250	0	0	1400	309
Arrive On Green				0.42	0.42	0.41	0.98	1.00	0.00	0.00	0.50	0.49
Sat Flow, veh/h				429	4689	336	402	1679	0	0	2801	618
Grp Volume(v), veh/h				986	899	894	474	474	0	0	453	421
Grp Sat Flow(s),veh/h/ln				1823	1845	1785	1058	1845	0	0	1771	1648
Q Serve(g_s), s				50.4	50.4	50.4	0.1	0.0	0.0	0.0	20.6	20.7
Cycle Q Clear(g_c), s				50.4	50.4	50.4	60.0	0.0	0.0	0.0	20.6	20.7
Prop In Lane				0.24		0.19	1.00		0.00	0.00		0.37
Lane Grp Cap(c), veh/h				766	775	750	60	922	0	0	885	824
V/C Ratio(X)				1.29	1.16	1.19	7.90	0.51	0.00	0.00	0.51	0.51
Avail Cap(c_a), veh/h				766	775	750	60	922	0	0	885	824
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	0.85	0.85	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				34.8	34.8	34.9	30.5	0.0	0.0	0.0	20.2	20.3
Incr Delay (d2), s/veh				139.2	86.3	99.3	3134.0	1.7	0.0	0.0	2.1	2.3
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				52.6	41.8	43.2	52.2	0.4	0.0	0.0	9.4	8.9
Lane Grp Delay (d), s/veh				174.0	121.1	134.2	3164.6	1.7	0.0	0.0	22.3	22.6
Lane Grp LOS				F	F	F	F	A			C	C
Approach Vol, veh/h					2779			948			874	
Approach Delay, s/veh					144.1			1583.2			22.4	
Approach LOS					F			F			C	

Timer												
Assigned Phs					2		7	4			8	
Phs Duration (G+Y+Rc), s					55.0		0.0	65.0			65.0	
Change Period (Y+Rc), s					5.6		5.0	6.0			6.0	
Max Green Setting (Gmax), s					49.4		13.0	59.0			41.0	
Max Q Clear Time (g_c+I1), s					52.4		0.0	62.0			22.7	
Green Ext Time (p_c), s					0.0		0.0	0.0			11.0	

Intersection Summary		
HCM 2010 Ctrl Delay		417.5
HCM 2010 LOS		F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	90	2410	0	0	0	0	0	60	40
Number				5	2	12				3	8	18
Initial Q (Qb), veh				0	0	0				0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00				1.00		1.00
Parking Bus Adj				1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	182.7	0.0				0.0	190.0	190.0
Lanes				0	3	0				0	1	0
Cap, veh/h				60	2494	0				0	195	130
Arrive On Green				0.25	0.25	0.00				0.00	0.18	0.18
Sat Flow, veh/h				0	3325	0				0	1065	710
Grp Volume(v), veh/h				95	2537	0				0	0	105
Grp Sat Flow(s),veh/h/ln				0	1663	0				0	0	1775
Q Serve(g_s), s				0.0	90.0	0.0				0.0	0.0	6.2
Cycle Q Clear(g_c), s				90.0	90.0	0.0				0.0	0.0	6.2
Prop In Lane				1.00		0.00				0.00		0.40
Lane Grp Cap(c), veh/h				60	2494	0				0	0	325
V/C Ratio(X)				1.58	1.02	0.00				0.00	0.00	0.32
Avail Cap(c_a), veh/h				60	2494	0				0	0	325
HCM Platoon Ratio				0.33	0.33	1.00				1.00	1.00	1.00
Upstream Filter(I)				0.09	0.09	0.00				0.00	0.00	1.00
Uniform Delay (d), s/veh				90.2	45.1	0.0				0.0	0.0	42.5
Incr Delay (d2), s/veh				269.6	10.6	0.0				0.0	0.0	2.6
Initial Q Delay(d3),s/veh				0.0	0.0	0.0				0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				6.4	44.1	0.0				0.0	0.0	3.0
Lane Grp Delay (d), s/veh				359.8	55.8	0.0				0.0	0.0	45.1
Lane Grp LOS				F	F							D
Approach Vol, veh/h					2632						105	
Approach Delay, s/veh					66.7						45.1	
Approach LOS					E						D	

Timer	
Assigned Phs	2	8
Phs Duration (G+Y+Rc), s	94.0	26.0
Change Period (Y+Rc), s	5.0	4.0
Max Green Setting (Gmax), s	89.0	22.0
Max Q Clear Time (g_c+I1), s	92.0	8.2
Green Ext Time (p_c), s	0.0	0.3

Intersection Summary	
HCM 2010 Ctrl Delay	65.9
HCM 2010 LOS	E

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	270	2090	140	140	750	0	0	1170	150
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	184.5	190.0	184.5	184.5	0.0	0.0	184.5	190.0
Lanes				0	3	0	1	2	0	0	2	0
Cap, veh/h				261	2167	147	192	1728	0	0	1155	147
Arrive On Green				0.16	0.16	0.15	0.15	0.94	0.00	0.00	0.36	0.36
Sat Flow, veh/h				553	4587	312	1757	3689	0	0	3207	410
Grp Volume(v), veh/h				933	854	844	147	789	0	0	706	684
Grp Sat Flow(s),veh/h/ln				1817	1845	1790	1757	1845	0	0	1845	1772
Q Serve(g_s), s				56.7	55.3	56.6	6.0	2.8	0.0	0.0	43.2	43.2
Cycle Q Clear(g_c), s				56.7	55.3	56.6	6.0	2.8	0.0	0.0	43.2	43.2
Prop In Lane				0.30		0.17	1.00		0.00	0.00		0.23
Lane Grp Cap(c), veh/h				859	872	846	192	1728	0	0	664	638
V/C Ratio(X)				1.09	0.98	1.00	0.77	0.46	0.00	0.00	1.06	1.07
Avail Cap(c_a), veh/h				859	872	846	192	1728	0	0	664	638
HCM Platoon Ratio				0.33	0.33	0.33	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.61	0.61	0.61	0.09	0.09	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				50.6	50.1	50.6	25.9	2.1	0.0	0.0	38.4	38.4
Incr Delay (d2), s/veh				51.2	19.4	23.8	1.5	0.1	0.0	0.0	53.1	56.3
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				40.4	32.6	33.3	4.3	0.8	0.0	0.0	29.9	29.3
Lane Grp Delay (d), s/veh				101.9	69.4	74.5	27.4	2.2	0.0	0.0	91.5	94.7
Lane Grp LOS				F	E	E	C	A			F	F
Approach Vol, veh/h					2631			936			1390	
Approach Delay, s/veh					82.6			6.2			93.1	
Approach LOS					F			A			F	

Timer								
Assigned Phs				2		7	4			8
Phs Duration (G+Y+Rc), s				60.0		12.0	60.0			48.0
Change Period (Y+Rc), s				4.3		4.2	4.8			4.8
Max Green Setting (Gmax), s				55.7		7.8	55.2			43.2
Max Q Clear Time (g_c+I1), s				58.7		8.0	4.8			45.2
Green Ext Time (p_c), s				0.0		0.0	2.7			0.0

Intersection Summary	
HCM 2010 Ctrl Delay	71.1
HCM 2010 LOS	E

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	120	2280	50	90	80	0	0	130	60
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	186.3	190.0	190.0	186.3	0.0	0.0	186.3	190.0
Lanes				0	3	0	0	1	0	0	1	0
Cap, veh/h				173	3507	80	154	122	0	0	285	131
Arrive On Green				0.22	0.22	0.22	0.08	0.08	0.00	0.00	0.24	0.23
Sat Flow, veh/h				255	5182	118	442	517	0	0	1209	556
Grp Volume(v), veh/h				914	834	830	179	0	0	0	0	200
Grp Sat Flow(s),veh/h/ln				1850	1863	1842	959	0	0	0	0	1765
Q Serve(g_s), s				51.0	45.4	45.7	11.5	0.0	0.0	0.0	0.0	10.9
Cycle Q Clear(g_c), s				51.0	45.4	45.7	22.4	0.0	0.0	0.0	0.0	10.9
Prop In Lane				0.14		0.06	0.53		0.00	0.00		0.31
Lane Grp Cap(c), veh/h				1252	1261	1246	276	0	0	0	0	416
V/C Ratio(X)				0.73	0.66	0.67	0.65	0.00	0.00	0.00	0.00	0.48
Avail Cap(c_a), veh/h				1252	1261	1246	389	0	0	0	0	557
HCM Platoon Ratio				0.33	0.33	0.33	0.33	0.33	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.09	0.09	0.09	0.95	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				33.7	31.6	31.7	52.2	0.0	0.0	0.0	0.0	36.7
Incr Delay (d2), s/veh				0.3	0.3	0.3	1.8	0.0	0.0	0.0	0.0	0.6
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				25.6	23.0	22.9	5.5	0.0	0.0	0.0	0.0	5.0
Lane Grp Delay (d), s/veh				34.1	31.8	32.0	54.0	0.0	0.0	0.0	0.0	37.4
Lane Grp LOS				C	C	C	D					D
Approach Vol, veh/h					2579			179			200	
Approach Delay, s/veh					32.7			54.0			37.4	
Approach LOS					C			D			D	

Timer												
Assigned Phs					2			4			8	
Phs Duration (G+Y+Rc), s					80.0			31.1			31.1	
Change Period (Y+Rc), s					5.8			5.9			5.9	
Max Green Setting (Gmax), s					74.2			34.1			34.1	
Max Q Clear Time (g_c+I1), s					53.0			24.4			12.9	
Green Ext Time (p_c), s					11.9			0.8			1.1	

Intersection Summary		
HCM 2010 Ctrl Delay		34.3
HCM 2010 LOS		C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	350	1840	240	120	920	0	0	1010	100
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	186.3	190.0	186.3	186.3	0.0	0.0	186.3	190.0
Lanes				0	3	0	1	2	0	0	2	0
Cap, veh/h				365	2059	271	171	1537	0	0	1071	106
Arrive On Green				0.49	0.49	0.49	0.13	0.82	0.00	0.00	0.32	0.31
Sat Flow, veh/h				739	4167	548	1774	3725	0	0	3338	329
Grp Volume(v), veh/h				909	834	815	126	968	0	0	593	575
Grp Sat Flow(s),veh/h/ln				1826	1863	1766	1774	1863	0	0	1863	1805
Q Serve(g_s), s				59.3	49.2	52.0	5.7	11.4	0.0	0.0	38.1	38.1
Cycle Q Clear(g_c), s				59.3	49.2	52.0	5.7	11.4	0.0	0.0	38.1	38.1
Prop In Lane				0.40		0.31	1.00		0.00	0.00		0.18
Lane Grp Cap(c), veh/h				902	921	873	171	1537	0	0	598	579
V/C Ratio(X)				1.01	0.91	0.93	0.74	0.63	0.00	0.00	0.99	0.99
Avail Cap(c_a), veh/h				902	921	873	171	1537	0	0	598	579
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	0.09	0.09	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				30.4	27.8	28.7	28.5	7.2	0.0	0.0	40.6	40.7
Incr Delay (d2), s/veh				31.8	14.2	18.1	2.6	0.1	0.0	0.0	34.9	35.8
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				34.5	26.1	27.0	2.4	2.8	0.0	0.0	23.9	23.3
Lane Grp Delay (d), s/veh				62.1	42.0	46.8	31.2	7.2	0.0	0.0	75.5	76.5
Lane Grp LOS				F	D	D	C	A			E	E
Approach Vol, veh/h					2558			1094			1168	
Approach Delay, s/veh					50.6			10.0			76.0	
Approach LOS					D			A			E	

Timer					
Assigned Phs		2	7	4	8
Phs Duration (G+Y+Rc), s		65.0	11.0	55.0	44.0
Change Period (Y+Rc), s		6.7	3.0	6.5	6.5
Max Green Setting (Gmax), s		58.3	8.0	48.5	37.5
Max Q Clear Time (g_c+I1), s		61.3	7.7	13.4	40.1
Green Ext Time (p_c), s		0.0	0.0	14.4	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	47.6
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Volume (vph)	0	0	0	1120	950	120	210	280	0	0	400	380
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	10	12	11	10	12	12	13	12
Total Lost time (s)				6.7	6.7		6.5	6.5			4.0	
Lane Util. Factor				0.91	0.91		1.00	0.95			0.95	
Frt				1.00	0.99		1.00	1.00			0.93	
Flt Protected				0.95	0.98		0.95	1.00			1.00	
Satd. Flow (prot)				1610	3080		1711	3303			3390	
Flt Permitted				0.95	0.98		0.22	1.00			1.00	
Satd. Flow (perm)				1610	3080		390	3303			3390	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	1179	1000	126	221	295	0	0	421	400
RTOR Reduction (vph)	0	0	0	0	5	0	0	0	0	0	40	0
Lane Group Flow (vph)	0	0	0	672	1628	0	221	295	0	0	781	0
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					2			4			8	
Permitted Phases				2			4					
Actuated Green, G (s)				58.3	58.3		48.5	48.5			51.0	
Effective Green, g (s)				58.3	58.3		48.5	48.5			51.0	
Actuated g/C Ratio				0.49	0.49		0.40	0.40			0.42	
Clearance Time (s)				6.7	6.7		6.5	6.5			4.0	
Vehicle Extension (s)				2.5	2.5		2.0	2.0			2.5	
Lane Grp Cap (vph)				782	1496		157	1334			1440	
v/s Ratio Prot								0.09			0.23	
v/s Ratio Perm				0.42	0.53		c0.57					
v/c Ratio				0.86	1.09		1.41	0.22			0.54	
Uniform Delay, d1				27.2	30.9		35.8	23.4			25.8	
Progression Factor				0.27	0.29		1.00	1.00			1.00	
Incremental Delay, d2				3.3	43.0		216.9	0.4			1.5	
Delay (s)				10.6	52.0		252.7	23.8			27.2	
Level of Service				B	D		F	C			C	
Approach Delay (s)		0.0			39.9			121.8			27.2	
Approach LOS		A			D			F			C	

Intersection Summary			
HCM 2000 Control Delay	48.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.23		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	13.2
Intersection Capacity Utilization	91.0%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	150	0	50	320	550	400	0	1610	0	0	1670	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	9	12	9	11	11	11	12	10	12	12	10	12
Total Lost time (s)	3.9		3.9	3.9	3.9	3.9		3.6			4.0	
Lane Util. Factor	1.00		1.00	0.97	1.00	1.00		0.91			0.86	
Frt	1.00		0.85	1.00	1.00	0.85		1.00			1.00	
Flt Protected	0.95		1.00	0.95	1.00	1.00		1.00			1.00	
Satd. Flow (prot)	1593		1425	3319	1801	1531		4746			5965	
Flt Permitted	0.14		1.00	0.95	1.00	1.00		1.00			1.00	
Satd. Flow (perm)	230		1425	3319	1801	1531		4746			5965	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	158	0	53	337	579	421	0	1695	0	0	1758	32
RTOR Reduction (vph)	0	0	48	0	0	132	0	0	0	0	2	0
Lane Group Flow (vph)	158	0	5	337	579	289	0	1695	0	0	1788	0
Turn Type	D.Pm		custom	Split	NA	Perm		NA			NA	
Protected Phases			8	4	4			6			2	
Permitted Phases	4					4						
Actuated Green, G (s)	28.1		12.1	28.1	28.1	28.1		75.4			75.0	
Effective Green, g (s)	29.1		13.1	29.1	29.1	29.1		76.4			76.0	
Actuated g/C Ratio	0.22		0.10	0.22	0.22	0.22		0.59			0.58	
Clearance Time (s)	4.9		4.9	4.9	4.9	4.9		4.6			5.0	
Vehicle Extension (s)	2.5		2.5	2.5	2.5	2.5		2.5			2.5	
Lane Grp Cap (vph)	51		143	742	403	342		2789			3487	
v/s Ratio Prot			c0.00	0.10	0.32			c0.36			0.30	
v/s Ratio Perm	c0.69					0.19						
v/c Ratio	3.10		0.04	0.45	1.44	0.85		0.61			0.51	
Uniform Delay, d1	50.5		52.8	43.6	50.5	48.3		17.2			16.0	
Progression Factor	1.00		1.00	1.00	1.00	1.00		0.07			1.00	
Incremental Delay, d2	993.6		0.5	2.0	210.3	21.9		0.1			0.5	
Delay (s)	1044.1		53.2	45.6	260.7	70.2		1.2			16.6	
Level of Service	F		D	D	F	E		A			B	
Approach Delay (s)		795.2			146.5			1.2			16.6	
Approach LOS		F			F			A			B	

Intersection Summary			
HCM 2000 Control Delay	78.6	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.15		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	11.8
Intersection Capacity Utilization	78.4%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	1350	70	0	1670	50	230	1690	510	370	1670	180
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	0.0	186.3	190.0	0.0	186.3	190.0	186.3	186.3	190.0	186.3	186.3	186.3
Lanes	0	2	0	0	2	0	1	3	0	1	2	1
Cap, veh/h	0	1304	68	0	1337	40	201	1601	466	294	1633	694
Arrive On Green	0.00	0.37	0.36	0.00	0.37	0.36	0.08	0.38	0.38	0.27	0.88	0.88
Sat Flow, veh/h	0	3511	182	0	3598	108	1774	4162	1212	1774	3725	1583
Grp Volume(v), veh/h	0	752	743	0	907	904	242	1585	731	389	1758	189
Grp Sat Flow(s),veh/h/ln	0	1863	1831	0	1863	1844	1774	1863	1649	1774	1863	1583
Q Serve(g_s), s	0.0	48.3	48.3	0.0	48.3	48.3	10.5	50.0	50.0	17.5	57.0	2.5
Cycle Q Clear(g_c), s	0.0	48.3	48.3	0.0	48.3	48.3	10.5	50.0	50.0	17.5	57.0	2.5
Prop In Lane	0.00		0.10	0.00		0.06	1.00		0.74	1.00		1.00
Lane Grp Cap(c), veh/h	0	692	680	0	692	685	201	1433	634	294	1633	694
V/C Ratio(X)	0.00	1.09	1.09	0.00	1.31	1.32	1.20	1.11	1.15	1.32	1.08	0.27
Avail Cap(c_a), veh/h	0	692	680	0	692	685	201	1433	634	294	1633	694
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.86	0.86	0.86
Uniform Delay (d), s/veh	0.0	40.9	40.9	0.0	40.9	40.9	37.8	40.0	40.4	35.5	8.0	4.6
Incr Delay (d2), s/veh	0.0	60.2	62.4	0.0	149.8	154.2	128.7	58.6	85.6	164.1	44.6	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.0	34.4	34.3	0.0	51.7	52.0	14.0	35.1	35.9	22.7	13.7	0.9
Lane Grp Delay (d), s/veh	0.0	101.0	103.3	0.0	190.6	195.1	166.4	98.6	126.0	199.6	52.6	5.5
Lane Grp LOS		F	F		F	F	F	F	F	F	F	A
Approach Vol, veh/h		1495			1811			2558			2336	
Approach Delay, s/veh		102.1			192.9			112.8			73.3	
Approach LOS		F			F			F			E	

Timer							
Assigned Phs		6		2		7	4		3	8	
Phs Duration (G+Y+Rc), s		54.0		54.0		14.0	55.0		21.0	62.0	
Change Period (Y+Rc), s		6.7		6.7		3.0	6.0		3.0	6.0	
Max Green Setting (Gmax), s		47.3		47.3		11.0	49.0		18.0	56.0	
Max Q Clear Time (g_c+I1), s		50.3		50.3		12.5	52.0		19.5	59.0	
Green Ext Time (p_c), s		0.0		0.0		0.0	0.0		0.0	0.0	

Intersection Summary	
HCM 2010 Ctrl Delay	117.3
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	70	1990	40	0	0	0	0	130	60	80	120	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	186.3	190.0	190.0	186.3	0.0
Lanes	0	3	0				0	1	0	0	1	0
Cap, veh/h	118	3549	73				0	277	128	125	169	0
Arrive On Green	0.66	0.67	0.66				0.00	0.23	0.23	0.23	0.23	0.00
Sat Flow, veh/h	175	5276	109				0	1209	556	345	738	0
Grp Volume(v), veh/h	784	716	711				0	0	200	210	0	0
Grp Sat Flow(s),veh/h/ln	1854	1863	1844				0	0	1765	1083	0	0
Q Serve(g_s), s	26.5	22.5	22.7				0.0	0.0	10.9	11.2	0.0	0.0
Cycle Q Clear(g_c), s	26.5	22.5	22.7				0.0	0.0	10.9	22.0	0.0	0.0
Prop In Lane	0.09		0.06				0.00		0.31	0.40		0.00
Lane Grp Cap(c), veh/h	1247	1253	1240				0	0	405	294	0	0
V/C Ratio(X)	0.63	0.57	0.57				0.00	0.00	0.49	0.71	0.00	0.00
Avail Cap(c_a), veh/h	1247	1253	1240				0	0	560	427	0	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	10.3	9.6	9.6				0.0	0.0	36.9	42.9	0.0	0.0
Incr Delay (d2), s/veh	2.4	1.9	1.9				0.0	0.0	0.9	3.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	12.2	10.2	10.2				0.0	0.0	4.9	6.0	0.0	0.0
Lane Grp Delay (d), s/veh	12.7	11.5	11.6				0.0	0.0	37.9	46.1	0.0	0.0
Lane Grp LOS	B	B	B						D	D		
Approach Vol, veh/h		2211						200			210	
Approach Delay, s/veh		11.9						37.9			46.1	
Approach LOS		B						D			D	

Timer												
Assigned Phs		6						4			8	
Phs Duration (G+Y+Rc), s		79.0						31.3			31.3	
Change Period (Y+Rc), s		5.8						6.0			6.0	
Max Green Setting (Gmax), s		73.2						35.0			35.0	
Max Q Clear Time (g_c+I1), s		28.5						12.9			24.0	
Green Ext Time (p_c), s		16.7						1.6			1.3	

Intersection Summary												
HCM 2010 Ctrl Delay			16.7									
HCM 2010 LOS			B									

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	180	2080	80	0	0	0	0	780	180	80	1390	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	186.3	190.0	186.3	186.3	0.0
Lanes	0	3	0				0	2	0	1	2	0
Cap, veh/h	214	2649	104				0	845	195	144	1372	0
Arrive On Green	0.18	0.18	0.18				0.00	0.29	0.28	0.09	0.74	0.00
Sat Flow, veh/h	399	4941	194				0	2932	675	1774	3725	0
Grp Volume(v), veh/h	873	799	791				0	522	488	84	1463	0
Grp Sat Flow(s),veh/h/ln	1843	1863	1828				0	1863	1744	1774	1863	0
Q Serve(g_s), s	55.6	49.4	50.0				0.0	33.3	33.3	3.9	44.3	0.0
Cycle Q Clear(g_c), s	55.6	49.4	50.0				0.0	33.3	33.3	3.9	44.3	0.0
Prop In Lane	0.22		0.11				0.00		0.39	1.00		0.00
Lane Grp Cap(c), veh/h	988	999	980				0	537	503	144	1372	0
V/C Ratio(X)	0.88	0.80	0.81				0.00	0.97	0.97	0.58	1.07	0.00
Avail Cap(c_a), veh/h	988	999	980				0	537	503	180	1372	0
HCM Platoon Ratio	0.33	0.33	0.33				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	0.72	0.72	0.72				0.00	1.00	1.00	0.09	0.09	0.00
Uniform Delay (d), s/veh	45.8	43.3	43.5				0.0	42.3	42.5	30.9	15.9	0.0
Incr Delay (d2), s/veh	8.6	4.9	5.2				0.0	32.3	33.6	0.3	31.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	30.2	26.4	26.2				0.0	20.6	19.5	2.5	18.6	0.0
Lane Grp Delay (d), s/veh	54.4	48.2	48.7				0.0	74.6	76.1	31.3	47.5	0.0
Lane Grp LOS	D	D	D					E	E	C	F	
Approach Vol, veh/h		2462						1010			1547	
Approach Delay, s/veh		50.6						75.3			46.6	
Approach LOS		D						E			D	

Timer					
Assigned Phs		6		4	3	8
Phs Duration (G+Y+Rc), s		71.0		39.7	9.6	49.3
Change Period (Y+Rc), s		6.5		6.0	4.0	6.0
Max Green Setting (Gmax), s		64.5		31.0	8.0	43.3
Max Q Clear Time (g_c+I1), s		57.6		35.3	5.9	46.3
Green Ext Time (p_c), s		5.1		0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	54.4
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	100	2730	0	0	80	0
Number	1	6			3	18
Initial Q (Qb), veh	0	0			0	0
Ped-Bike Adj(A_pbT)	1.00				1.00	1.00
Parking Bus Adj	1.00	1.00			1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3			186.3	0.0
Lanes	0	3			1	0
Cap, veh/h	77	3255			0	0
Arrive On Green	0.32	0.32			0.00	0.00
Sat Flow, veh/h	0	3390			0	
Grp Volume(v), veh/h	105	2874			0.0	
Grp Sat Flow(s),veh/h/ln	0	1695				
Q Serve(g_s), s	0.0	74.8				
Cycle Q Clear(g_c), s	89.3	74.8				
Prop In Lane	1.00					
Lane Grp Cap(c), veh/h	77	3255				
V/C Ratio(X)	1.36	0.88				
Avail Cap(c_a), veh/h	77	3255				
HCM Platoon Ratio	0.33	0.33				
Upstream Filter(I)	0.26	0.26				
Uniform Delay (d), s/veh	76.4	26.8				
Incr Delay (d2), s/veh	180.9	1.1				
Initial Q Delay(d3),s/veh	0.0	0.0				
%ile Back of Q (50%), veh/ln	3.9	30.4				
Lane Grp Delay (d), s/veh	257.3	27.9				
Lane Grp LOS	F	C				
Approach Vol, veh/h		2979				
Approach Delay, s/veh		36.0				
Approach LOS		D				

Timer	
Assigned Phs	6
Phs Duration (G+Y+Rc), s	93.0
Change Period (Y+Rc), s	4.7
Max Green Setting (Gmax), s	88.3
Max Q Clear Time (g_c+I1), s	91.3
Green Ext Time (p_c), s	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	36.0
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	130	2560	40	0	0	0	0	90	90	170	110	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	193.7	190.0	190.0	193.7	0.0
Lanes	0	3	0				0	1	0	0	1	0
Cap, veh/h	164	3438	55				0	252	252	221	117	0
Arrive On Green	0.22	0.22	0.21				0.00	0.28	0.28	0.09	0.09	0.00
Sat Flow, veh/h	249	5229	84				0	890	890	609	414	0
Grp Volume(v), veh/h	1019	928	927				0	0	190	295	0	0
Grp Sat Flow(s),veh/h/ln	1850	1863	1848				0	0	1780	1023	0	0
Q Serve(g_s), s	63.2	56.0	56.5				0.0	0.0	10.3	23.7	0.0	0.0
Cycle Q Clear(g_c), s	63.2	56.0	56.5				0.0	0.0	10.3	34.0	0.0	0.0
Prop In Lane	0.13		0.05				0.00		0.50	0.61		0.00
Lane Grp Cap(c), veh/h	1217	1225	1215				0	0	504	338	0	0
V/C Ratio(X)	0.84	0.76	0.76				0.00	0.00	0.38	0.87	0.00	0.00
Avail Cap(c_a), veh/h	1217	1225	1215				0	0	504	338	0	0
HCM Platoon Ratio	0.33	0.33	0.33				1.00	1.00	1.00	0.33	0.33	1.00
Upstream Filter(I)	0.66	0.66	0.66				0.00	0.00	1.00	0.79	0.00	0.00
Uniform Delay (d), s/veh	40.9	38.0	38.2				0.0	0.0	34.7	59.3	0.0	0.0
Incr Delay (d2), s/veh	4.7	2.9	3.0				0.0	0.0	2.1	21.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	34.0	29.8	29.9				0.0	0.0	5.0	11.6	0.0	0.0
Lane Grp Delay (d), s/veh	45.6	40.9	41.3				0.0	0.0	36.9	80.5	0.0	0.0
Lane Grp LOS	D	D	D						D	F		
Approach Vol, veh/h		2874						190			295	
Approach Delay, s/veh		42.7						36.9			80.5	
Approach LOS		D						D			F	

Timer												
Assigned Phs		6						4			8	
Phs Duration (G+Y+Rc), s		82.7						37.3			37.3	
Change Period (Y+Rc), s		4.8						4.3			4.3	
Max Green Setting (Gmax), s		77.9						33.0			33.0	
Max Q Clear Time (g_c+I1), s		65.2						12.3			36.0	
Green Ext Time (p_c), s		9.5						1.5			0.0	

Intersection Summary	
HCM 2010 Ctrl Delay	45.7
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	170	2250	140	0	0	0	0	760	200	280	1130	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	186.3	190.0	186.3	186.3	0.0
Lanes	0	3	0				0	2	0	1	2	0
Cap, veh/h	170	2391	151				0	787	207	311	1652	0
Arrive On Green	0.49	0.49	0.48				0.00	0.28	0.27	0.28	0.89	0.00
Sat Flow, veh/h	345	4864	307				0	2843	750	1774	3725	0
Grp Volume(v), veh/h	956	873	865				0	524	487	295	1189	0
Grp Sat Flow(s),veh/h/ln	1845	1863	1809				0	1863	1730	1774	1863	0
Q Serve(g_s), s	59.0	53.8	56.0				0.0	33.2	33.2	15.3	12.0	0.0
Cycle Q Clear(g_c), s	59.0	53.8	56.0				0.0	33.2	33.2	15.3	12.0	0.0
Prop In Lane	0.19		0.17				0.00		0.43	1.00		0.00
Lane Grp Cap(c), veh/h	907	916	889				0	515	479	311	1652	0
V/C Ratio(X)	1.05	0.95	0.97				0.00	1.02	1.02	0.95	0.72	0.00
Avail Cap(c_a), veh/h	907	916	889				0	515	479	311	1652	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	0.09	0.09	0.00
Uniform Delay (d), s/veh	30.5	29.2	29.8				0.0	43.4	43.6	26.9	4.5	0.0
Incr Delay (d2), s/veh	45.1	20.3	24.3				0.0	44.0	45.5	6.7	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	38.1	29.6	30.8				0.0	22.0	20.7	9.1	2.2	0.0
Lane Grp Delay (d), s/veh	75.6	49.4	54.1				0.0	87.4	89.1	33.6	4.6	0.0
Lane Grp LOS	F	D	D					F	F	C	A	
Approach Vol, veh/h		2694						1011			1484	
Approach Delay, s/veh		60.2						88.2			10.4	
Approach LOS		E						F			B	

Timer					
Assigned Phs		6		4	3	8
Phs Duration (G+Y+Rc), s		63.0		37.0	20.0	57.0
Change Period (Y+Rc), s		5.0		4.8	3.0	4.8
Max Green Setting (Gmax), s		58.0		32.2	17.0	52.2
Max Q Clear Time (g_c+I1), s		61.0		35.2	17.3	14.0
Green Ext Time (p_c), s		0.0		0.0	0.0	15.9

Intersection Summary	
HCM 2010 Ctrl Delay	51.4
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	230	2170	120	0	0	0	0	590	140	240	670	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	186.3	190.0	190.0	186.3	0.0
Lanes	0	3	0				0	2	0	0	2	0
Cap, veh/h	221	2229	125				0	1368	323	282	1184	0
Arrive On Green	0.47	0.47	0.46				0.00	0.47	0.46	0.92	0.94	0.00
Sat Flow, veh/h	473	4776	268				0	2915	689	473	1695	0
Grp Volume(v), veh/h	940	859	852				0	396	372	479	479	0
Grp Sat Flow(s),veh/h/ln	1839	1863	1815				0	1863	1741	1133	1863	0
Q Serve(g_s), s	56.0	54.8	56.0				0.0	17.2	17.4	0.1	3.9	0.0
Cycle Q Clear(g_c), s	56.0	54.8	56.0				0.0	17.2	17.4	56.3	3.9	0.0
Prop In Lane	0.26		0.15				0.00		0.40	1.00		0.00
Lane Grp Cap(c), veh/h	858	869	847				0	874	817	60	874	0
V/C Ratio(X)	1.10	0.99	1.01				0.00	0.45	0.45	7.98	0.55	0.00
Avail Cap(c_a), veh/h	858	869	847				0	874	817	60	874	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	0.80	0.80	0.00
Uniform Delay (d), s/veh	32.0	31.7	32.1				0.0	21.5	21.6	32.4	2.1	0.0
Incr Delay (d2), s/veh	60.3	27.9	32.3				0.0	1.7	1.8	3169.8	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	39.6	31.8	32.6				0.0	8.3	7.9	52.8	1.0	0.0
Lane Grp Delay (d), s/veh	92.3	59.6	64.4				0.0	23.2	23.5	3202.1	2.7	0.0
Lane Grp LOS	F	E	F					C	C	F	A	
Approach Vol, veh/h		2652						768			958	
Approach Delay, s/veh		72.7						23.3			1602.4	
Approach LOS		E						C			F	

Timer				
Assigned Phs	6	4	3	8
Phs Duration (G+Y+Rc), s	60.0	60.0	0.0	60.0
Change Period (Y+Rc), s	5.0	4.7	4.0	4.7
Max Green Setting (Gmax), s	55.0	37.3	14.0	55.3
Max Q Clear Time (g_c+I1), s	58.0	19.4	0.0	58.3
Green Ext Time (p_c), s	0.0	10.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	398.8
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	2470	80	0	0	0	0	0	60	90	80	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	10	12	12	12	12	12	11	12	12	11	12
Total Lost time (s)		5.0							4.3	4.3	4.3	
Lane Util. Factor		0.91							1.00	1.00	1.00	
Frt		1.00							0.86	1.00	1.00	
Flt Protected		1.00							1.00	0.95	1.00	
Satd. Flow (prot)		4724							1611	1770	1801	
Flt Permitted		1.00							1.00	0.95	1.00	
Satd. Flow (perm)		4724							1611	1770	1801	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	2600	84	0	0	0	0	0	63	95	84	0
RTOR Reduction (vph)	0	3	0	0	0	0	0	0	14	14	0	0
Lane Group Flow (vph)	0	2681	0	0	0	0	0	0	49	81	84	0
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	0%	2%	2%	2%	2%	0%
Turn Type		NA							custom	Perm	NA	
Protected Phases		6									8	
Permitted Phases									4	8		
Actuated Green, G (s)		86.0							24.7	24.7	24.7	
Effective Green, g (s)		86.0							24.7	24.7	24.7	
Actuated g/C Ratio		0.72							0.21	0.21	0.21	
Clearance Time (s)		5.0							4.3	4.3	4.3	
Vehicle Extension (s)		3.0							3.0	3.0	3.0	
Lane Grp Cap (vph)		3385							331	364	370	
v/s Ratio Prot		c0.57									c0.05	
v/s Ratio Perm									0.03	0.05		
v/c Ratio		0.79							0.15	0.22	0.23	
Uniform Delay, d1		11.1							39.0	39.7	39.7	
Progression Factor		0.44							1.00	1.00	1.00	
Incremental Delay, d2		0.2							0.9	0.3	0.3	
Delay (s)		5.1							40.0	40.0	40.0	
Level of Service		A							D	D	D	
Approach Delay (s)		5.1			0.0			40.0			40.0	
Approach LOS		A			A			D			D	

Intersection Summary			
HCM 2000 Control Delay	8.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	9.3
Intersection Capacity Utilization	67.6%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	230	2480	90	0	0	0	0	160	50	150	180	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	186.3	190.0	190.0	186.3	0.0
Lanes	0	3	0				0	1	0	0	1	0
Cap, veh/h	243	2808	104				0	455	144	202	226	0
Arrive On Green	0.19	0.19	0.19				0.00	0.34	0.34	0.66	0.67	0.00
Sat Flow, veh/h	426	4926	183				0	1359	429	471	675	0
Grp Volume(v), veh/h	1045	951	951				0	0	221	347	0	0
Grp Sat Flow(s),veh/h/ln	1841	1863	1830				0	0	1787	1146	0	0
Q Serve(g_s), s	68.1	59.8	61.1				0.0	0.0	11.3	0.1	0.0	0.0
Cycle Q Clear(g_c), s	68.1	59.8	61.1				0.0	0.0	11.3	34.4	0.0	0.0
Prop In Lane	0.23		0.10				0.00		0.24	0.46		0.00
Lane Grp Cap(c), veh/h	1050	1062	1043				0	0	599	428	0	0
V/C Ratio(X)	1.00	0.90	0.91				0.00	0.00	0.37	0.81	0.00	0.00
Avail Cap(c_a), veh/h	1050	1062	1043				0	0	599	428	0	0
HCM Platoon Ratio	0.33	0.33	0.33				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	0.56	0.56	0.56				0.00	0.00	1.00	0.84	0.00	0.00
Uniform Delay (d), s/veh	48.6	45.2	45.8				0.0	0.0	30.3	21.9	0.0	0.0
Incr Delay (d2), s/veh	19.9	7.1	8.3				0.0	0.0	1.7	13.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	39.9	32.4	32.9				0.0	0.0	5.4	9.2	0.0	0.0
Lane Grp Delay (d), s/veh	68.5	52.4	54.1				0.0	0.0	32.0	35.2	0.0	0.0
Lane Grp LOS	E	D	D						C	D		
Approach Vol, veh/h		2948						221			347	
Approach Delay, s/veh		58.6						32.0			35.2	
Approach LOS		E						C			D	

Timer					
Assigned Phs		6		4		3	8	
Phs Duration (G+Y+Rc), s		74.0		46.0		0.0	46.0	
Change Period (Y+Rc), s		5.6		5.8		3.0	5.8	
Max Green Setting (Gmax), s		68.4		28.2		9.0	40.2	
Max Q Clear Time (g_c+I1), s		70.1		13.3		0.0	36.4	
Green Ext Time (p_c), s		0.0		1.7		0.0	0.8	

Intersection Summary	
HCM 2010 Ctrl Delay	54.6
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	280	2590	90	0	0	0	0	170	550	0	0	0
Number	1	6	16				7	4	14			
Initial Q (Qb), veh	0	0	0				0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00			
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00			
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	186.3	190.0			
Lanes	0	3	0				0	1	0			
Cap, veh/h	48	1976	68				0	132	426			
Arrive On Green	0.61	0.61	0.61				0.00	0.34	0.34			
Sat Flow, veh/h	0	3257	113				0	388	1254			
Grp Volume(v), veh/h	295	1411	1411				0	0	758			
Grp Sat Flow(s),veh/h/ln	0	1695	1675				0	0	1641			
Q Serve(g_s), s	0.0	91.0	91.0				0.0	0.0	51.0			
Cycle Q Clear(g_c), s	91.0	91.0	91.0				0.0	0.0	51.0			
Prop In Lane	1.00		0.07				0.00		0.76			
Lane Grp Cap(c), veh/h	48	1028	1016				0	0	558			
V/C Ratio(X)	6.15	1.37	1.39				0.00	0.00	1.36			
Avail Cap(c_a), veh/h	48	1028	1016				0	0	558			
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	1.00				0.00	0.00	1.00			
Uniform Delay (d), s/veh	75.0	29.5	29.5				0.0	0.0	49.5			
Incr Delay (d2), s/veh	2359.6	173.4	180.7				0.0	0.0	172.6			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0			
%ile Back of Q (50%), veh/ln	33.4	87.3	88.3				0.0	0.0	48.3			
Lane Grp Delay (d), s/veh	2434.6	202.9	210.2				0.0	0.0	222.1			
Lane Grp LOS	F	F	F						F			
Approach Vol, veh/h		3116						758				
Approach Delay, s/veh		417.5						222.1				
Approach LOS		F						F				

Timer	
Assigned Phs	6 4
Phs Duration (G+Y+Rc), s	95.0 55.0
Change Period (Y+Rc), s	4.0 4.0
Max Green Setting (Gmax), s	91.0 51.0
Max Q Clear Time (g_c+I1), s	93.0 53.0
Green Ext Time (p_c), s	0.0 0.0

Intersection Summary	
HCM 2010 Ctrl Delay	379.3
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	3150	300	0	0	0	0	0	0	830	600	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.7	6.7							6.0	6.0	
Lane Util. Factor		0.91	1.00							0.86	0.86	
Frt		1.00	0.85							1.00	1.00	
Flt Protected		1.00	1.00							0.95	0.99	
Satd. Flow (prot)		4424	1425							2739	2858	
Flt Permitted		1.00	1.00							0.95	0.99	
Satd. Flow (perm)		4424	1425							2739	2858	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	3316	316	0	0	0	0	0	0	874	632	0
RTOR Reduction (vph)	0	0	19	0	0	0	0	0	0	19	19	0
Lane Group Flow (vph)	0	3316	297	0	0	0	0	0	0	715	753	0
Parking (#/hr)		0										
Turn Type		NA	Perm							Perm	NA	
Protected Phases		6									8	
Permitted Phases			6							8		
Actuated Green, G (s)		95.6	95.6							41.7	41.7	
Effective Green, g (s)		95.6	95.6							41.7	41.7	
Actuated g/C Ratio		0.64	0.64							0.28	0.28	
Clearance Time (s)		6.7	6.7							6.0	6.0	
Vehicle Extension (s)		2.0	2.0							2.0	2.0	
Lane Grp Cap (vph)		2819	908							761	794	
v/s Ratio Prot		c0.75										
v/s Ratio Perm			0.21							0.26	0.26	
v/c Ratio		1.18	0.33							0.94	0.95	
Uniform Delay, d1		27.2	12.5							52.9	53.1	
Progression Factor		1.00	1.00							0.67	0.67	
Incremental Delay, d2		83.4	1.0							9.3	10.1	
Delay (s)		110.6	13.4							44.8	45.7	
Level of Service		F	B							D	D	
Approach Delay (s)		102.1			0.0			0.0			45.3	
Approach LOS		F			A			A			D	

Intersection Summary			
HCM 2000 Control Delay	85.5	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.11		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	12.7
Intersection Capacity Utilization	100.8%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	430	2210	0	0	0	0	0	310	1280	300	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5						4.7	4.7	4.7		
Lane Util. Factor		0.91						0.95	0.95	1.00		
Frt		1.00						0.91	0.85	1.00		
Flt Protected		0.99						1.00	1.00	0.95		
Satd. Flow (prot)		4540						1444	1354	1593		
Flt Permitted		0.99						1.00	1.00	0.95		
Satd. Flow (perm)		4540						1444	1354	1593		
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	453	2326	0	0	0	0	0	326	1347	316	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	5	28	0	0	0
Lane Group Flow (vph)	0	2779	0	0	0	0	0	860	780	316	0	0
Turn Type	Perm	NA						NA	Perm	custom		
Protected Phases		6						4		3		
Permitted Phases	6								4	3		
Actuated Green, G (s)		59.5						58.3	58.3	18.3		
Effective Green, g (s)		59.5						58.3	58.3	18.3		
Actuated g/C Ratio		0.40						0.39	0.39	0.12		
Clearance Time (s)		4.5						4.7	4.7	4.7		
Vehicle Extension (s)		2.5						3.0	3.0	3.0		
Lane Grp Cap (vph)		1800						561	526	194		
v/s Ratio Prot								c0.60		c0.20		
v/s Ratio Perm		0.61							0.58			
v/c Ratio		1.54						1.53	1.48	1.63		
Uniform Delay, d1		45.2						45.9	45.9	65.8		
Progression Factor		0.88						1.00	1.00	0.71		
Incremental Delay, d2		245.0						248.8	227.8	285.1		
Delay (s)		285.0						294.7	273.6	331.8		
Level of Service		F						F	F	F		
Approach Delay (s)		285.0			0.0			284.5			331.8	
Approach LOS		F			A			F			F	

Intersection Summary			
HCM 2000 Control Delay	287.9	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.55		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	13.9
Intersection Capacity Utilization	189.1%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	550	2840	670	0	0	0	0	1130	130	230	440	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	171.0	166.0	171.0				0.0	166.0	171.0	171.0	166.0	0.0
Lanes	0	3	0				0	2	0	0	2	0
Cap, veh/h	352	1926	440				0	1028	118	49	1146	0
Arrive On Green	0.19	0.19	0.19				0.00	0.35	0.35	0.70	0.70	0.00
Sat Flow, veh/h	622	3411	779				0	2925	336	3	1511	0
Grp Volume(v), veh/h	1515	1379	1379				0	673	653	353	352	0
Grp Sat Flow(s),veh/h/ln	1629	1660	1523				0	1660	1601	1605	1660	0
Q Serve(g_s), s	84.7	84.7	84.7				0.0	52.7	52.7	0.1	16.5	0.0
Cycle Q Clear(g_c), s	84.7	84.7	84.7				0.0	52.7	52.7	52.7	16.5	0.0
Prop In Lane	0.38		0.51				0.00		0.21	1.00		0.00
Lane Grp Cap(c), veh/h	920	937	860				0	583	562	48	583	0
V/C Ratio(X)	1.65	1.47	1.60				0.00	1.15	1.16	7.34	0.60	0.00
Avail Cap(c_a), veh/h	920	937	860				0	583	562	48	583	0
HCM Platoon Ratio	0.33	0.33	0.33				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	0.09	0.09	0.09				0.00	1.00	1.00	0.09	0.09	0.00
Uniform Delay (d), s/veh	61.0	61.0	61.0				0.0	48.6	48.7	48.7	16.9	0.0
Incr Delay (d2), s/veh	291.7	212.4	272.1				0.0	87.9	90.5	2858.6	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	112.4	93.9	100.4				0.0	36.9	36.0	38.1	5.3	0.0
Lane Grp Delay (d), s/veh	352.7	273.5	333.1				0.0	136.5	139.2	2907.2	17.3	0.0
Lane Grp LOS	F	F	F					F	F	F	B	
Approach Vol, veh/h		4273						1326			705	
Approach Delay, s/veh		320.8						137.8			1462.3	
Approach LOS		F						F			F	

Timer					
Assigned Phs		6		4	3	8
Phs Duration (G+Y+Rc), s		91.0		59.0	0.0	59.0
Change Period (Y+Rc), s		6.3		6.3	3.0	6.3
Max Green Setting (Gmax), s		84.7		40.7	9.0	52.7
Max Q Clear Time (g_c+I1), s		86.7		54.7	0.0	54.7
Green Ext Time (p_c), s		0.0		0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	410.0
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	2860	650	0	0	0	0	0	0	580	1170	0
Number	1	6	16							3	8	18
Initial Q (Qb), veh	0	0	0							0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00							1.00		1.00
Parking Bus Adj	1.00	1.00	1.00							1.00	1.00	1.00
Adj Sat Flow veh/h/ln	0.0	166.0	171.0							171.0	166.0	0.0
Lanes	0	3	0							0	2	0
Cap, veh/h	0	2193	461							48	588	0
Arrive On Green	0.00	0.18	0.18							0.13	0.13	0.00
Sat Flow, veh/h	0	3993	840							0	1511	0
Grp Volume(v), veh/h	0	2463	1232							611	1232	0
Grp Sat Flow(s),veh/h/ln	0	1660	1512							0	1511	0
Q Serve(g_s), s	0.0	82.4	82.4							0.0	58.4	0.0
Cycle Q Clear(g_c), s	0.0	82.4	82.4							58.4	58.4	0.0
Prop In Lane	0.00		0.56							1.00		0.00
Lane Grp Cap(c), veh/h	0	1824	831							48	588	0
V/C Ratio(X)	0.00	1.35	1.48							12.73	2.09	0.00
Avail Cap(c_a), veh/h	0	1824	831							48	588	0
HCM Platoon Ratio	1.00	0.33	0.33							0.33	0.33	1.00
Upstream Filter(I)	0.00	0.09	0.09							0.09	0.09	0.00
Uniform Delay (d), s/veh	0.0	61.4	61.4							94.6	65.4	0.0
Incr Delay (d2), s/veh	0.0	158.1	217.9							5281.8	493.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0							0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.0	77.5	84.3							72.4	104.7	0.0
Lane Grp Delay (d), s/veh	0.0	219.5	279.3							5376.3	558.4	0.0
Lane Grp LOS		F	F							F	F	
Approach Vol, veh/h		3695									1843	
Approach Delay, s/veh		239.4									2155.7	
Approach LOS		F									F	

Timer	
Assigned Phs	6	8
Phs Duration (G+Y+Rc), s	87.0	63.0
Change Period (Y+Rc), s	4.6	4.6
Max Green Setting (Gmax), s	82.4	58.4
Max Q Clear Time (g_c+I1), s	84.4	60.4
Green Ext Time (p_c), s	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	877.1
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	1440	2200	0	0	0	0	0	1050	120	0	0	0
Number	1	6	16				7	4	14			
Initial Q (Qb), veh	0	0	0				0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00			
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00			
Adj Sat Flow veh/h/ln	171.0	166.0	0.0				0.0	166.0	171.0			
Lanes	0	3	0				0	3	0			
Cap, veh/h	48	2083	0				0	1095	125			
Arrive On Green	0.23	0.23	0.00				0.00	0.25	0.25			
Sat Flow, veh/h	0	3022	0				0	4392	500			
Grp Volume(v), veh/h	1516	2316	0				0	835	396			
Grp Sat Flow(s),veh/h/ln	0	1511	0				0	1660	1572			
Q Serve(g_s), s	0.0	103.4	0.0				0.0	37.4	37.4			
Cycle Q Clear(g_c), s	103.4	103.4	0.0				0.0	37.4	37.4			
Prop In Lane	1.00		0.00				0.00		0.32			
Lane Grp Cap(c), veh/h	48	2083	0				0	828	392			
V/C Ratio(X)	31.58	1.11	0.00				0.00	1.01	1.01			
Avail Cap(c_a), veh/h	48	2083	0				0	828	392			
HCM Platoon Ratio	0.33	0.33	1.00				1.00	1.00	1.00			
Upstream Filter(I)	0.09	0.09	0.00				0.00	1.00	1.00			
Uniform Delay (d), s/veh	109.6	57.9	0.0				0.0	56.3	56.3			
Incr Delay (d2), s/veh	13766.0	51.1	0.0				0.0	33.4	48.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0			
%ile Back of Q (50%), veh/ln	185.5	57.6	0.0				0.0	20.1	20.6			
Lane Grp Delay (d), s/veh	13875.6	109.1	0.0				0.0	89.7	104.3			
Lane Grp LOS	F	F						F	F			
Approach Vol, veh/h		3832						1231				
Approach Delay, s/veh		5555.3						94.4				
Approach LOS		F						F				

Timer	
Assigned Phs	6
Phs Duration (G+Y+Rc), s	108.0
Change Period (Y+Rc), s	4.6
Max Green Setting (Gmax), s	103.4
Max Q Clear Time (g_c+I1), s	105.4
Green Ext Time (p_c), s	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	4227.6
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	790	920	480	380	0	780	0	1340	260	450	1570	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.7	6.7		6.7		6.7		6.2	6.2	4.0	6.2	
Lane Util. Factor	0.97	0.95		1.00		1.00		0.95	1.00	0.97	0.95	
Frt	1.00	0.95		1.00		0.85		1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00		0.95		1.00		1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3060	2992		1577		1411		3154	1411	3060	3154	
Flt Permitted	0.95	1.00		0.10		1.00		1.00	1.00	0.95	1.00	
Satd. Flow (perm)	3060	2992		161		1411		3154	1411	3060	3154	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	832	968	505	400	0	821	0	1411	274	474	1653	0
RTOR Reduction (vph)	0	45	0	0	0	107	0	0	98	0	0	0
Lane Group Flow (vph)	832	1428	0	400	0	714	0	1411	176	474	1653	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Split	NA		D.Pm		custom		NA	Perm	Prot	NA	
Protected Phases	8	8						6		5	2	
Permitted Phases				8		4			6			
Actuated Green, G (s)	41.3	41.3		41.3		33.3		40.8	40.8	11.0	55.8	
Effective Green, g (s)	41.3	41.3		41.3		33.3		40.8	40.8	11.0	55.8	
Actuated g/C Ratio	0.28	0.28		0.28		0.22		0.27	0.27	0.07	0.37	
Clearance Time (s)	6.7	6.7		6.7		6.7		6.2	6.2	4.0	6.2	
Vehicle Extension (s)	3.0	3.0		3.0		3.0		3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	842	823		44		313		857	383	224	1173	
v/s Ratio Prot	0.27	0.48						c0.45		c0.15	0.52	
v/s Ratio Perm				c2.49		c0.51			0.13			
v/c Ratio	0.99	1.74		9.09		2.28		1.65	0.46	2.12	1.41	
Uniform Delay, d1	54.1	54.4		54.4		58.4		54.6	45.4	69.5	47.1	
Progression Factor	0.84	0.83		1.00		1.00		1.00	1.00	0.65	0.81	
Incremental Delay, d2	6.8	331.3		3686.3		587.2		296.2	4.0	503.6	184.6	
Delay (s)	52.4	376.7		3740.7		645.5		350.8	49.4	548.9	222.9	
Level of Service	D	F		F		F		F	D	F	F	
Approach Delay (s)		259.6			1659.5			301.7			295.5	
Approach LOS		F			F			F			F	

Intersection Summary			
HCM 2000 Control Delay	512.6	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	4.26		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	23.6
Intersection Capacity Utilization	141.6%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	610	250	800	50	0	50	0	1250	270	220	1860	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.7	6.7	6.7	6.7		6.7		6.2		3.0	6.2	
Lane Util. Factor	0.95	0.95	1.00	1.00		1.00		0.91		1.00	0.95	
Frt	1.00	1.00	0.85	1.00		0.85		0.97		1.00	1.00	
Flt Protected	0.95	0.98	1.00	0.95		1.00		1.00		0.95	1.00	
Satd. Flow (prot)	1498	1544	1411	1577		1411		4412		1577	3154	
Flt Permitted	0.95	0.98	1.00	0.49		1.00		1.00		0.07	1.00	
Satd. Flow (perm)	1498	1544	1411	812		1411		4412		109	3154	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	642	263	842	53	0	53	0	1316	284	232	1958	0
RTOR Reduction (vph)	0	0	93	0	0	49	0	23	0	0	0	0
Lane Group Flow (vph)	449	456	749	53	0	4	0	1577	0	232	1958	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Split	NA	Perm	custom		custom		NA		pm+pt	NA	
Protected Phases	3	3						6		5	2	
Permitted Phases			3	4		4				2		
Actuated Green, G (s)	29.3	29.3	29.3	11.8		11.8		58.2		79.3	79.3	
Effective Green, g (s)	29.3	29.3	29.3	11.8		11.8		58.2		79.3	79.3	
Actuated g/C Ratio	0.21	0.21	0.21	0.08		0.08		0.42		0.57	0.57	
Clearance Time (s)	6.7	6.7	6.7	6.7		6.7		6.2		3.0	6.2	
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0		3.0		3.0	3.0	
Lane Grp Cap (vph)	313	323	295	68		118		1834		251	1786	
v/s Ratio Prot	0.30	0.30						0.36		0.12	c0.62	
v/s Ratio Perm			c0.53	c0.07		0.00				0.41		
v/c Ratio	1.43	1.41	2.54	0.78		0.04		0.86		0.92	1.10	
Uniform Delay, d1	55.4	55.4	55.4	62.8		58.9		37.2		43.5	30.4	
Progression Factor	1.00	1.00	1.00	1.00		1.00		0.23		1.00	1.00	
Incremental Delay, d2	213.0	202.8	702.0	41.9		0.1		0.5		36.7	52.8	
Delay (s)	268.3	258.1	757.4	104.8		59.0		9.0		80.2	83.1	
Level of Service	F	F	F	F		E		A		F	F	
Approach Delay (s)		501.4			81.9			9.0			82.8	
Approach LOS		F			F			A			F	

Intersection Summary			
HCM 2000 Control Delay	191.4	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.45		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	22.6
Intersection Capacity Utilization	129.6%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	390	1720	0	0	0	0	0	720	120	0	0	0
Number	1	6	16				7	4	14			
Initial Q (Qb), veh	0	0	0				0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00			
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00			
Adj Sat Flow veh/h/ln	171.0	166.0	0.0				0.0	166.0	166.0			
Lanes	0	3	0				0	2	1			
Cap, veh/h	62	1995	0				0	866	368			
Arrive On Green	0.22	0.22	0.00				0.00	0.26	0.26			
Sat Flow, veh/h	0	3022	0				0	3320	1411			
Grp Volume(v), veh/h	411	1811	0				0	758	126			
Grp Sat Flow(s),veh/h/ln	0	1511	0				0	1660	1411			
Q Serve(g_s), s	0.0	68.1	0.0				0.0	25.5	8.5			
Cycle Q Clear(g_c), s	77.0	68.1	0.0				0.0	25.5	8.5			
Prop In Lane	1.00		0.00				0.00		1.00			
Lane Grp Cap(c), veh/h	62	1995	0				0	866	368			
V/C Ratio(X)	6.66	0.91	0.00				0.00	0.88	0.34			
Avail Cap(c_a), veh/h	62	1995	0				0	962	409			
HCM Platoon Ratio	0.33	0.33	1.00				1.00	1.00	1.00			
Upstream Filter(I)	0.09	0.09	0.00				0.00	0.50	0.50			
Uniform Delay (d), s/veh	84.1	42.1	0.0				0.0	41.3	35.0			
Incr Delay (d2), s/veh	2548.3	0.8	0.0				0.0	4.5	0.3			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0			
%ile Back of Q (50%), veh/ln	45.7	28.3	0.0				0.0	11.4	3.1			
Lane Grp Delay (d), s/veh	2632.4	42.9	0.0				0.0	45.8	35.3			
Lane Grp LOS	F	D						D	D			
Approach Vol, veh/h		2222						884				
Approach Delay, s/veh		521.9						44.3				
Approach LOS		F						D				

Timer	
Assigned Phs	6
Phs Duration (G+Y+Rc), s	82.0
Change Period (Y+Rc), s	5.0
Max Green Setting (Gmax), s	77.0
Max Q Clear Time (g_c+I1), s	79.0
Green Ext Time (p_c), s	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	386.0
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1720	580	0	0	0	0	0	0	530	630	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0								4.6	4.6	
Lane Util. Factor		0.91								0.95	0.95	
Frt		0.96								1.00	1.00	
Flt Protected		1.00								0.95	1.00	
Satd. Flow (prot)		4361								1498	1571	
Flt Permitted		1.00								0.95	1.00	
Satd. Flow (perm)		4361								1498	1571	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	1811	611	0	0	0	0	0	0	558	663	0
RTOR Reduction (vph)	0	51	0	0	0	0	0	0	0	10	10	0
Lane Group Flow (vph)	0	2372	0	0	0	0	0	0	0	492	709	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type		NA								Perm	NA	
Protected Phases		6									8	
Permitted Phases										8		
Actuated Green, G (s)		60.0								50.4	50.4	
Effective Green, g (s)		60.0								50.4	50.4	
Actuated g/C Ratio		0.50								0.42	0.42	
Clearance Time (s)		5.0								4.6	4.6	
Vehicle Extension (s)		3.0								3.0	3.0	
Lane Grp Cap (vph)		2180								629	659	
v/s Ratio Prot		c0.54										
v/s Ratio Perm										0.33	0.45	
v/c Ratio		1.09								0.78	1.08	
Uniform Delay, d1		30.0								30.0	34.8	
Progression Factor		0.55								1.00	1.00	
Incremental Delay, d2		40.4								6.3	57.0	
Delay (s)		57.1								36.3	91.8	
Level of Service		E								D	F	
Approach Delay (s)		57.1			0.0			0.0			69.0	
Approach LOS		E			A			A			E	

Intersection Summary			
HCM 2000 Control Delay	61.1	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.08		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	9.6
Intersection Capacity Utilization	96.2%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	660	1860	300	0	0	0	0	760	90	140	230	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	171.0	166.0	171.0				0.0	166.0	171.0	166.0	166.0	0.0
Lanes	0	3	0				0	2	0	1	2	0
Cap, veh/h	557	1710	272				0	859	102	194	1312	0
Arrive On Green	0.17	0.17	0.17				0.00	0.29	0.29	0.08	0.40	0.00
Sat Flow, veh/h	1061	3258	517				0	2913	346	1581	3320	0
Grp Volume(v), veh/h	1053	958	958				0	456	439	147	242	0
Grp Sat Flow(s),veh/h/ln	1607	1660	1569				0	1660	1599	1581	1660	0
Q Serve(g_s), s	63.0	63.0	63.0				0.0	32.0	32.0	7.5	5.7	0.0
Cycle Q Clear(g_c), s	63.0	63.0	63.0				0.0	32.0	32.0	7.5	5.7	0.0
Prop In Lane	0.66		0.33				0.00		0.22	1.00		0.00
Lane Grp Cap(c), veh/h	844	872	824				0	490	472	194	1312	0
V/C Ratio(X)	1.25	1.10	1.16				0.00	0.93	0.93	0.76	0.18	0.00
Avail Cap(c_a), veh/h	844	872	824				0	490	472	194	1312	0
HCM Platoon Ratio	0.33	0.33	0.33				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.10	0.10	0.10				0.00	0.59	0.59	1.00	1.00	0.00
Uniform Delay (d), s/veh	49.6	49.6	49.6				0.0	41.1	41.1	30.5	23.7	0.0
Incr Delay (d2), s/veh	112.6	46.9	75.0				0.0	18.3	18.8	15.7	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	53.8	39.7	43.9				0.0	16.0	15.5	5.4	2.4	0.0
Lane Grp Delay (d), s/veh	162.2	96.5	124.6				0.0	59.4	59.9	46.2	24.0	0.0
Lane Grp LOS	F	F	F					E	E	D	C	
Approach Vol, veh/h		2969						895			389	
Approach Delay, s/veh		128.9						59.6			32.4	
Approach LOS		F						E			C	

Timer					
Assigned Phs		6		4	3	8
Phs Duration (G+Y+Rc), s		68.0		40.0	12.0	52.0
Change Period (Y+Rc), s		5.0		4.6	3.0	4.6
Max Green Setting (Gmax), s		63.0		35.4	9.0	47.4
Max Q Clear Time (g_c+I1), s		65.0		34.0	9.5	7.7
Green Ext Time (p_c), s		0.0		0.9	0.0	9.4

Intersection Summary	
HCM 2010 Ctrl Delay	105.5
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	160	2150	170	0	0	0	0	260	410	0	0	0
Number	1	6	16				7	4	14			
Initial Q (Qb), veh	0	0	0				0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00			
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00			
Adj Sat Flow veh/h/ln	171.0	166.0	171.0				0.0	166.0	171.0			
Lanes	0	3	0				0	1	0			
Cap, veh/h	60	1614	127				0	197	311			
Arrive On Green	0.19	0.19	0.19				0.00	0.11	0.11			
Sat Flow, veh/h	0	2766	217				0	582	917			
Grp Volume(v), veh/h	168	1227	1215				0	0	706			
Grp Sat Flow(s),veh/h/ln	0	1511	1472				0	0	1498			
Q Serve(g_s), s	0.0	70.0	70.0				0.0	0.0	40.7			
Cycle Q Clear(g_c), s	70.0	70.0	70.0				0.0	0.0	40.7			
Prop In Lane	1.00		0.15				0.00		0.61			
Lane Grp Cap(c), veh/h	60	881	859				0	0	508			
V/C Ratio(X)	2.80	1.39	1.41				0.00	0.00	1.39			
Avail Cap(c_a), veh/h	60	881	859				0	0	508			
HCM Platoon Ratio	0.33	0.33	0.33				1.00	0.33	0.33			
Upstream Filter(I)	1.00	1.00	1.00				0.00	0.00	0.75			
Uniform Delay (d), s/veh	83.5	48.5	48.5				0.0	0.0	53.3			
Incr Delay (d2), s/veh	854.2	183.5	193.4				0.0	0.0	184.1			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0			
%ile Back of Q (50%), veh/ln	16.2	73.6	74.1				0.0	0.0	42.7			
Lane Grp Delay (d), s/veh	937.7	231.9	241.9				0.0	0.0	237.4			
Lane Grp LOS	F	F	F						F			
Approach Vol, veh/h		2610						706				
Approach Delay, s/veh		282.0						237.4				
Approach LOS		F						F				

Timer			
Assigned Phs	6	4
Phs Duration (G+Y+Rc), s	75.0	45.0
Change Period (Y+Rc), s	5.0	4.3
Max Green Setting (Gmax), s	70.0	40.7
Max Q Clear Time (g_c+I1), s	72.0	42.7
Green Ext Time (p_c), s	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	272.5
HCM 2010 LOS	F

Notes

Movement	EBT	EBR	SBL	SBT	SWL2	SWL
Lane Configurations						
Volume (vph)	2150	270	300	350	1210	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0			7.0	7.0	
Lane Util. Factor	0.91			0.95	0.97	
Frt	0.98			1.00	1.00	
Flt Protected	1.00			0.98	0.95	
Satd. Flow (prot)	4500			3113	3090	
Flt Permitted	1.00			0.98	0.95	
Satd. Flow (perm)	4500			3113	3090	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	2263	284	316	368	1274	0
RTOR Reduction (vph)	13	0	0	0	55	0
Lane Group Flow (vph)	2534	0	0	684	1219	0
Turn Type	NA		Perm	NA	Perm	
Protected Phases	6			9		8
Permitted Phases			9		8	
Actuated Green, G (s)	40.0			22.0	39.0	
Effective Green, g (s)	40.0			22.0	39.0	
Actuated g/C Ratio	0.33			0.18	0.32	
Clearance Time (s)	5.0			7.0	7.0	
Vehicle Extension (s)	3.0			3.0	3.0	
Lane Grp Cap (vph)	1500			570	1004	
v/s Ratio Prot	c0.56					
v/s Ratio Perm				0.22	c0.39	
v/c Ratio	1.69			1.20	1.21	
Uniform Delay, d1	40.0			49.0	40.5	
Progression Factor	1.00			1.00	1.00	
Incremental Delay, d2	313.0			106.1	105.5	
Delay (s)	353.0			155.1	146.0	
Level of Service	F			F	F	
Approach Delay (s)	353.0			155.1		146.0
Approach LOS	F			F		F

Intersection Summary			
HCM 2000 Control Delay	264.4	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.40		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	19.0
Intersection Capacity Utilization	127.5%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	190	2100	60	0	0	0	0	290	70	200	290	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	186.3	190.0	190.0	193.7	0.0
Lanes	0	3	0				0	1	0	0	1	0
Cap, veh/h	189	2239	65				0	642	156	223	273	0
Arrive On Green	0.15	0.15	0.15				0.00	0.44	0.44	0.44	0.44	0.00
Sat Flow, veh/h	420	4976	145				0	1449	352	389	617	0
Grp Volume(v), veh/h	876	802	796				0	0	379	516	0	0
Grp Sat Flow(s),veh/h/ln	1842	1863	1837				0	0	1801	1006	0	0
Q Serve(g_s), s	45.0	42.7	43.1				0.0	0.0	14.8	29.5	0.0	0.0
Cycle Q Clear(g_c), s	45.0	42.7	43.1				0.0	0.0	14.8	44.3	0.0	0.0
Prop In Lane	0.23		0.08				0.00		0.20	0.41		0.00
Lane Grp Cap(c), veh/h	829	838	827				0	0	798	496	0	0
V/C Ratio(X)	1.06	0.96	0.96				0.00	0.00	0.48	1.04	0.00	0.00
Avail Cap(c_a), veh/h	829	838	827				0	0	798	496	0	0
HCM Platoon Ratio	0.33	0.33	0.33				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	0.00	0.59	1.00	0.00	0.00
Uniform Delay (d), s/veh	42.6	41.6	41.7				0.0	0.0	19.6	35.4	0.0	0.0
Incr Delay (d2), s/veh	47.4	22.2	23.5				0.0	0.0	0.2	51.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	33.3	26.6	26.7				0.0	0.0	6.6	19.7	0.0	0.0
Lane Grp Delay (d), s/veh	90.0	63.8	65.3				0.0	0.0	19.8	86.4	0.0	0.0
Lane Grp LOS	F	E	E						B	F		
Approach Vol, veh/h		2474						379			516	
Approach Delay, s/veh		73.5						19.8			86.4	
Approach LOS		E						B			F	

Timer												
Assigned Phs		6						4			8	
Phs Duration (G+Y+Rc), s		50.0						50.0			50.0	
Change Period (Y+Rc), s		5.0						5.7			5.7	
Max Green Setting (Gmax), s		45.0						44.3			44.3	
Max Q Clear Time (g_c+I1), s		47.0						16.8			46.3	
Green Ext Time (p_c), s		0.0						3.1			0.0	

Intersection Summary			
HCM 2010 Ctrl Delay		69.5	
HCM 2010 LOS		E	

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	210	2100	200	0	0	0	0	490	160	150	360	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	184.5	190.0				0.0	184.5	190.0	190.0	177.1	0.0
Lanes	0	3	0				0	2	0	0	2	0
Cap, veh/h	232	2465	238				0	962	312	216	580	0
Arrive On Green	0.18	0.18	0.18				0.00	0.36	0.35	0.35	0.36	0.00
Sat Flow, veh/h	429	4565	441				0	2671	865	400	1611	0
Grp Volume(v), veh/h	939	858	845				0	356	328	158	379	0
Grp Sat Flow(s),veh/h/ln	1823	1845	1767				0	1845	1692	400	1611	0
Q Serve(g_s), s	51.0	45.2	46.7				0.0	15.3	15.5	19.5	19.7	0.0
Cycle Q Clear(g_c), s	51.0	45.2	46.7				0.0	15.3	15.5	35.0	19.7	0.0
Prop In Lane	0.24		0.25				0.00		0.51	1.00		0.00
Lane Grp Cap(c), veh/h	985	996	954				0	664	609	212	580	0
V/C Ratio(X)	0.95	0.86	0.89				0.00	0.54	0.54	0.75	0.65	0.00
Avail Cap(c_a), veh/h	985	996	954				0	664	609	212	580	0
HCM Platoon Ratio	0.33	0.33	0.33				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.67	0.67	0.67				0.00	0.09	0.09	1.00	1.00	0.00
Uniform Delay (d), s/veh	39.9	37.5	38.1				0.0	25.4	25.6	41.0	26.8	0.0
Incr Delay (d2), s/veh	14.8	6.8	8.4				0.0	0.3	0.3	21.0	5.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	29.1	24.3	24.5				0.0	7.0	6.5	5.3	8.7	0.0
Lane Grp Delay (d), s/veh	54.6	44.2	46.5				0.0	25.7	26.0	62.1	32.4	0.0
Lane Grp LOS	D	D	D					C	C	E	C	
Approach Vol, veh/h		2643						684			537	
Approach Delay, s/veh		48.6						25.8			41.1	
Approach LOS		D						C			D	

Timer				
Assigned Phs	6	4	8
Phs Duration (G+Y+Rc), s	59.0	41.0	41.0
Change Period (Y+Rc), s	5.0	6.0	6.0
Max Green Setting (Gmax), s	54.0	35.0	35.0
Max Q Clear Time (g_c+I1), s	53.0	17.5	37.0
Green Ext Time (p_c), s	0.9	5.1	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	43.6
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	2420	50	0	0	0	0	0	0	30	40	0
Number	1	6	16							3	8	18
Initial Q (Qb), veh	0	0	0							0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00							1.00		1.00
Parking Bus Adj	1.00	1.00	1.00							1.00	1.00	1.00
Adj Sat Flow veh/h/ln	0.0	182.7	190.0							190.0	190.0	0.0
Lanes	0	3	0							0	1	0
Cap, veh/h	0	4066	84							52	49	0
Arrive On Green	0.00	0.25	0.25							0.14	0.14	0.00
Sat Flow, veh/h	0	5350	111							0	349	0
Grp Volume(v), veh/h	0	1736	864							74	0	0
Grp Sat Flow(s),veh/h/ln	0	1827	1807							349	0	0
Q Serve(g_s), s	0.0	42.2	42.5							0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	42.2	42.5							14.0	0.0	0.0
Prop In Lane	0.00		0.06							0.43		0.00
Lane Grp Cap(c), veh/h	0	2777	1374							100	0	0
V/C Ratio(X)	0.00	0.63	0.63							0.74	0.00	0.00
Avail Cap(c_a), veh/h	0	2777	1374							100	0	0
HCM Platoon Ratio	1.00	0.33	0.33							1.00	1.00	1.00
Upstream Filter(I)	0.00	0.09	0.09							1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	24.8	24.9							41.6	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.1	0.2							37.9	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0							0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.0	20.7	20.8							2.9	0.0	0.0
Lane Grp Delay (d), s/veh	0.0	24.9	25.1							79.5	0.0	0.0
Lane Grp LOS		C	C							E		
Approach Vol, veh/h		2600									74	
Approach Delay, s/veh		25.0									79.5	
Approach LOS		C									E	

Timer	
Assigned Phs	6
Phs Duration (G+Y+Rc), s	81.0
Change Period (Y+Rc), s	5.0
Max Green Setting (Gmax), s	76.0
Max Q Clear Time (g_c+I1), s	44.5
Green Ext Time (p_c), s	20.2

Intersection Summary	
HCM 2010 Ctrl Delay	26.5
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	150	2000	160	0	0	0	0	750	220	250	1020	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	184.5	190.0				0.0	184.5	190.0	184.5	184.5	0.0
Lanes	0	3	0				0	2	0	1	2	0
Cap, veh/h	157	2223	181				0	800	235	283	1594	0
Arrive On Green	0.16	0.16	0.16				0.00	0.29	0.28	0.12	0.43	0.00
Sat Flow, veh/h	334	4730	385				0	2741	806	1757	3689	0
Grp Volume(v), veh/h	865	791	775				0	531	490	263	1074	0
Grp Sat Flow(s),veh/h/ln	1828	1845	1777				0	1845	1702	1757	1845	0
Q Serve(g_s), s	47.0	42.2	43.0				0.0	28.6	28.6	10.7	23.3	0.0
Cycle Q Clear(g_c), s	47.0	42.2	43.0				0.0	28.6	28.6	10.7	23.3	0.0
Prop In Lane	0.18		0.22				0.00		0.47	1.00		0.00
Lane Grp Cap(c), veh/h	859	867	835				0	539	497	283	1594	0
V/C Ratio(X)	1.01	0.91	0.93				0.00	0.99	0.99	0.93	0.67	0.00
Avail Cap(c_a), veh/h	859	867	835				0	539	497	283	1594	0
HCM Platoon Ratio	0.33	0.33	0.33				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.71	0.71	0.71				0.00	0.86	0.86	1.00	1.00	0.00
Uniform Delay (d), s/veh	42.2	40.2	40.6				0.0	35.2	35.4	26.1	22.8	0.0
Incr Delay (d2), s/veh	27.5	11.8	13.8				0.0	32.7	34.2	35.4	2.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	29.7	23.9	23.8				0.0	18.0	16.9	9.5	11.0	0.0
Lane Grp Delay (d), s/veh	69.8	52.0	54.3				0.0	67.9	69.6	61.5	25.1	0.0
Lane Grp LOS	F	D	D					E	E	E	C	
Approach Vol, veh/h		2431						1021			1337	
Approach Delay, s/veh		59.1						68.7			32.2	
Approach LOS		E						E			C	

Timer					
Assigned Phs		6		4	3	8
Phs Duration (G+Y+Rc), s		52.0		33.0	15.0	48.0
Change Period (Y+Rc), s		5.0		4.8	3.0	4.8
Max Green Setting (Gmax), s		47.0		28.2	12.0	43.2
Max Q Clear Time (g_c+I1), s		49.0		30.6	12.7	25.3
Green Ext Time (p_c), s		0.0		0.0	0.0	2.7

Intersection Summary	
HCM 2010 Ctrl Delay	53.6
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	70	2210	30	0	0	0	0	80	100	0	90	50
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	186.3	190.0	190.0	186.3	190.0
Lanes	0	3	0				0	1	0	0	1	0
Cap, veh/h	114	3831	54				0	118	148	0	176	98
Arrive On Green	0.72	0.72	0.72				0.00	0.16	0.14	0.00	0.16	0.14
Sat Flow, veh/h	159	5332	76				0	754	942	0	1125	627
Grp Volume(v), veh/h	862	786	783				0	0	189	0	0	148
Grp Sat Flow(s),veh/h/ln	1855	1863	1849				0	0	1696	0	0	1752
Q Serve(g_s), s	19.4	16.3	16.4				0.0	0.0	8.4	0.0	0.0	6.2
Cycle Q Clear(g_c), s	19.4	16.3	16.4				0.0	0.0	8.4	0.0	0.0	6.2
Prop In Lane	0.09		0.04				0.00		0.56	0.00		0.36
Lane Grp Cap(c), veh/h	1333	1338	1329				0	0	266	0	0	274
V/C Ratio(X)	0.65	0.59	0.59				0.00	0.00	0.71	0.00	0.00	0.54
Avail Cap(c_a), veh/h	1333	1338	1329				0	0	708	0	0	731
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	0.00	0.80	0.00	0.00	1.00
Uniform Delay (d), s/veh	5.9	5.4	5.5				0.0	0.0	32.0	0.0	0.0	31.0
Incr Delay (d2), s/veh	2.4	1.9	1.9				0.0	0.0	2.1	0.0	0.0	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	7.8	6.6	6.6				0.0	0.0	3.7	0.0	0.0	2.8
Lane Grp Delay (d), s/veh	8.3	7.3	7.4				0.0	0.0	34.1	0.0	0.0	32.2
Lane Grp LOS	A	A	A						C			C
Approach Vol, veh/h		2432						189			148	
Approach Delay, s/veh		7.7						34.1			32.2	
Approach LOS		A						C			C	

Timer												
Assigned Phs		6						4			8	
Phs Duration (G+Y+Rc), s		62.0						17.3			17.3	
Change Period (Y+Rc), s		5.0						5.9			5.9	
Max Green Setting (Gmax), s		57.0						32.1			32.1	
Max Q Clear Time (g_c+I1), s		21.4						10.4			8.2	
Green Ext Time (p_c), s		18.3						1.0			1.0	

Intersection Summary												
HCM 2010 Ctrl Delay			10.8									
HCM 2010 LOS			B									

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	100	2000	80	0	0	0	0	1200	190	180	1230	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	11	12	10	11	12	12	12	12
Total Lost time (s)		2.5						5.5		3.0	5.5	
Lane Util. Factor		0.91						0.95		1.00	0.95	
Frt		0.99						0.98		1.00	1.00	
Flt Protected		1.00						1.00		0.95	1.00	
Satd. Flow (prot)		5046						3351		1770	3539	
Flt Permitted		1.00						1.00		0.10	1.00	
Satd. Flow (perm)		5046						3351		184	3539	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	105	2105	84	0	0	0	0	1263	200	189	1295	0
RTOR Reduction (vph)	0	4	0	0	0	0	0	12	0	0	0	0
Lane Group Flow (vph)	0	2290	0	0	0	0	0	1451	0	189	1295	0
Turn Type	Perm	NA						NA		pm+pt	NA	
Protected Phases		6						4		3	8	
Permitted Phases	6									8		
Actuated Green, G (s)		40.5						37.6		51.0	51.0	
Effective Green, g (s)		40.5						38.6		51.0	52.0	
Actuated g/C Ratio		0.40						0.38		0.51	0.52	
Clearance Time (s)		2.5						6.5		3.0	6.5	
Vehicle Extension (s)		3.0						3.0		3.0	3.0	
Lane Grp Cap (vph)		2033						1287		257	1831	
v/s Ratio Prot								c0.43		0.08	c0.37	
v/s Ratio Perm		0.45								0.30		
v/c Ratio		1.13						1.13		0.74	0.71	
Uniform Delay, d1		30.0						30.9		21.7	18.5	
Progression Factor		1.00						1.00		1.00	1.00	
Incremental Delay, d2		63.9						67.7		10.4	2.3	
Delay (s)		93.9						98.7		32.1	20.8	
Level of Service		F						F		C	C	
Approach Delay (s)		93.9			0.0			98.7			22.2	
Approach LOS		F			A			F			C	

Intersection Summary			
HCM 2000 Control Delay	74.9	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.08		
Actuated Cycle Length (s)	100.5	Sum of lost time (s)	11.0
Intersection Capacity Utilization	102.9%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Volume (veh/h)	50	1700	50	0	0	0	0	270	100	320	550	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	186.3	190.0	186.3	193.7	0.0
Lanes	0	3	0				0	2	0	1	1	0
Cap, veh/h	62	2216	68				0	699	252	530	885	0
Arrive On Green	0.42	0.42	0.42				0.00	0.27	0.27	0.16	0.46	0.00
Sat Flow, veh/h	146	5246	160				0	2614	944	1774	1937	0
Grp Volume(v), veh/h	673	615	607				0	200	189	337	579	0
Grp Sat Flow(s),veh/h/ln	1855	1863	1834				0	1863	1696	1774	1937	0
Q Serve(g_s), s	31.3	27.1	27.2				0.0	8.4	8.7	12.4	22.1	0.0
Cycle Q Clear(g_c), s	31.3	27.1	27.2				0.0	8.4	8.7	12.4	22.1	0.0
Prop In Lane	0.08		0.09				0.00		0.56	1.00		0.00
Lane Grp Cap(c), veh/h	784	787	775				0	498	453	530	885	0
V/C Ratio(X)	0.86	0.78	0.78				0.00	0.40	0.42	0.64	0.65	0.00
Avail Cap(c_a), veh/h	877	880	867				0	498	453	622	885	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.30	0.30	0.30				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	24.9	23.7	23.7				0.0	28.7	28.8	18.9	20.0	0.0
Incr Delay (d2), s/veh	2.5	1.3	1.3				0.0	2.4	2.8	1.7	3.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	14.6	12.4	12.2				0.0	4.2	4.0	5.5	11.2	0.0
Lane Grp Delay (d), s/veh	27.5	25.0	25.0				0.0	31.1	31.6	20.6	23.8	0.0
Lane Grp LOS	C	C	C					C	C	C	C	
Approach Vol, veh/h		1895						389			916	
Approach Delay, s/veh		25.9						31.3			22.6	
Approach LOS		C						C			C	

Timer												
Assigned Phs		6						4		3	8	
Phs Duration (G+Y+Rc), s		45.2						31.9		18.1	50.0	
Change Period (Y+Rc), s		5.0						6.5		3.0	6.5	
Max Green Setting (Gmax), s		45.0						20.5		20.0	43.5	
Max Q Clear Time (g_c+I1), s		33.3						10.7		14.4	24.1	
Green Ext Time (p_c), s		6.9						2.3		0.7	2.8	

Intersection Summary												
HCM 2010 Ctrl Delay			25.6									
HCM 2010 LOS			C									

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	150	0	40	0	0	0	0	1680	1630	220	2120	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	9	12	9	11	11	11	12	10	12	12	10	12
Total Lost time (s)	3.9		3.9					3.6	4.6	4.6	3.6	
Lane Util. Factor	1.00		1.00					0.91	0.91	0.97	0.95	
Frt	1.00		0.85					0.96	0.85	1.00	1.00	
Flt Protected	0.95		1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1593		1425					3039	1441	3433	3296	
Flt Permitted	0.95		1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1593		1425					3039	1441	3433	3296	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	158	0	42	0	0	0	0	1768	1716	232	2232	32
RTOR Reduction (vph)	0	0	30	0	0	0	0	28	390	0	1	0
Lane Group Flow (vph)	158	0	12	0	0	0	0	2375	691	232	2263	0
Turn Type	custom		custom					NA	Perm	Prot	NA	
Protected Phases			8					6		5	2	
Permitted Phases	8								6			
Actuated Green, G (s)	32.1		32.1					62.7	62.7	11.1	78.4	
Effective Green, g (s)	33.1		33.1					63.7	62.7	11.1	79.4	
Actuated g/C Ratio	0.28		0.28					0.53	0.52	0.09	0.66	
Clearance Time (s)	4.9		4.9					4.6	4.6	4.6	4.6	
Vehicle Extension (s)	2.5		2.5					2.5	2.5	3.0	2.5	
Lane Grp Cap (vph)	439		393					1613	752	317	2180	
v/s Ratio Prot			0.01					c0.78		0.07	c0.69	
v/s Ratio Perm	c0.10								0.48			
v/c Ratio	0.36		0.03					1.47	0.92	0.73	1.04	
Uniform Delay, d1	34.9		31.7					28.1	26.3	53.0	20.3	
Progression Factor	1.00		1.00					0.80	1.48	1.00	1.00	
Incremental Delay, d2	2.3		0.1					213.0	2.3	8.4	30.0	
Delay (s)	37.2		31.9					235.4	41.4	61.4	50.3	
Level of Service	D		C					F	D	E	D	
Approach Delay (s)		36.1			0.0			175.2			51.4	
Approach LOS		D			A			F			D	

Intersection Summary			
HCM 2000 Control Delay	120.7	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.11		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.1
Intersection Capacity Utilization	88.9%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1270	0	60	210	620	260	200	1680	0	0	2160	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	11	12	12	11	12	11	10	12	10	10	12
Total Lost time (s)	6.7		6.7	6.7	5.7		3.5	5.0			5.0	5.0
Lane Util. Factor	0.97		1.00	0.97	1.00		1.00	0.91			0.95	1.00
Frt	1.00		0.85	1.00	0.96		1.00	1.00			1.00	0.85
Flt Protected	0.95		1.00	0.95	1.00		0.95	1.00			1.00	1.00
Satd. Flow (prot)	3433		1583	3433	1721		1711	4746			3303	1583
Flt Permitted	0.11		1.00	0.95	1.00		0.12	1.00			1.00	1.00
Satd. Flow (perm)	388		1583	3433	1721		212	4746			3303	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	1337	0	63	221	653	274	211	1768	0	0	2274	105
RTOR Reduction (vph)	0	0	43	0	2	0	0	0	0	0	0	77
Lane Group Flow (vph)	1337	0	20	221	925	0	211	1768	0	0	2274	28
Turn Type	custom		custom	Split	NA		pm+pt	NA			NA	Perm
Protected Phases				2	2		7	4			8	
Permitted Phases	1		1				4					8
Actuated Green, G (s)	37.3		37.3	22.3	22.3		41.0	41.0			31.0	31.0
Effective Green, g (s)	37.3		37.3	22.3	23.3		40.5	42.0			32.0	32.0
Actuated g/C Ratio	0.31		0.31	0.19	0.19		0.34	0.35			0.27	0.27
Clearance Time (s)	6.7		6.7	6.7	6.7		3.0	6.0			6.0	6.0
Vehicle Extension (s)	2.5		2.5	2.5	2.5		2.0	2.5			2.5	2.5
Lane Grp Cap (vph)	120		492	637	334		152	1661			880	422
v/s Ratio Prot				0.06	c0.54		c0.07	0.37			c0.69	
v/s Ratio Perm	c3.45		0.01				0.39					0.02
v/c Ratio	11.14		0.04	0.35	2.77		1.39	1.06			2.58	0.07
Uniform Delay, d1	41.4		28.9	42.5	48.4		36.5	39.0			44.0	32.8
Progression Factor	1.00		1.00	1.00	1.00		1.00	1.00			0.70	0.74
Incremental Delay, d2	4580.2		0.2	1.5	805.1		209.9	41.5			713.8	0.1
Delay (s)	4621.5		29.0	44.0	853.5		246.4	80.5			744.6	24.5
Level of Service	F		C	D	F		F	F			F	C
Approach Delay (s)		4414.9			697.6			98.2			712.8	
Approach LOS		F			F			F			F	

Intersection Summary			
HCM 2000 Control Delay	1284.6	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	5.81		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	21.9
Intersection Capacity Utilization	171.1%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	40	900	50	50	80	0	0	60	40
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	186.3	190.0	190.0	186.3	0.0	0.0	186.3	190.0
Lanes				0	3	0	0	1	0	0	1	0
Cap, veh/h				156	3737	216	104	128	0	0	142	95
Arrive On Green				0.25	0.25	0.25	0.14	0.14	0.00	0.00	0.14	0.14
Sat Flow, veh/h				210	5027	290	364	939	0	0	1044	696
Grp Volume(v), veh/h				371	340	331	137	0	0	0	0	105
Grp Sat Flow(s),veh/h/ln				1852	1863	1812	1303	0	0	0	0	1740
Q Serve(g_s), s				14.8	13.4	13.4	4.8	0.0	0.0	0.0	0.0	5.1
Cycle Q Clear(g_c), s				14.8	13.4	13.4	9.9	0.0	0.0	0.0	0.0	5.1
Prop In Lane				0.11		0.16	0.39		0.00	0.00		0.40
Lane Grp Cap(c), veh/h				1377	1385	1347	232	0	0	0	0	237
V/C Ratio(X)				0.27	0.25	0.25	0.59	0.00	0.00	0.00	0.00	0.44
Avail Cap(c_a), veh/h				1377	1385	1347	380	0	0	0	0	399
HCM Platoon Ratio				0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.82	0.82	0.82	1.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				14.4	13.9	13.9	38.6	0.0	0.0	0.0	0.0	36.3
Incr Delay (d2), s/veh				0.4	0.3	0.4	2.4	0.0	0.0	0.0	0.0	1.3
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				7.6	7.0	6.8	3.2	0.0	0.0	0.0	0.0	2.3
Lane Grp Delay (d), s/veh				14.8	14.3	14.3	41.0	0.0	0.0	0.0	0.0	37.6
Lane Grp LOS				B	B	B	D					D
Approach Vol, veh/h					1042			137			105	
Approach Delay, s/veh					14.5			41.0			37.6	
Approach LOS					B			D			D	

Timer			
Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	73.0	18.5	18.5
Change Period (Y+Rc), s	5.0	6.0	6.0
Max Green Setting (Gmax), s	68.0	21.0	21.0
Max Q Clear Time (g_c+I1), s	16.8	11.9	7.1
Green Ext Time (p_c), s	4.9	0.6	0.7

Intersection Summary	
HCM 2010 Ctrl Delay	19.2
HCM 2010 LOS	B

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	150	880	100	90	1360	0	0	1190	80
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	186.3	190.0	186.3	186.3	0.0	0.0	186.3	190.0
Lanes				0	3	0	1	2	0	0	2	0
Cap, veh/h				294	1843	214	172	1751	0	0	1353	91
Arrive On Green				0.14	0.14	0.14	0.05	0.47	0.00	0.00	0.39	0.38
Sat Flow, veh/h				683	4285	498	1774	3725	0	0	3454	231
Grp Volume(v), veh/h				423	392	374	95	1432	0	0	675	662
Grp Sat Flow(s),veh/h/ln				1829	1863	1775	1774	1863	0	0	1863	1822
Q Serve(g_s), s				21.5	19.4	19.4	3.1	33.1	0.0	0.0	34.6	34.7
Cycle Q Clear(g_c), s				21.5	19.4	19.4	3.1	33.1	0.0	0.0	34.6	34.7
Prop In Lane				0.37		0.28	1.00		0.00	0.00		0.13
Lane Grp Cap(c), veh/h				786	801	763	172	1751	0	0	730	714
V/C Ratio(X)				0.54	0.49	0.49	0.55	0.82	0.00	0.00	0.92	0.93
Avail Cap(c_a), veh/h				786	801	763	246	1751	0	0	730	714
HCM Platoon Ratio				0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.98	0.98	0.98	1.00	1.00	0.00	0.00	0.64	0.64
Uniform Delay (d), s/veh				33.7	32.8	32.8	23.8	22.8	0.0	0.0	29.0	29.1
Incr Delay (d2), s/veh				2.6	2.1	2.2	2.8	4.4	0.0	0.0	13.8	14.4
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				11.2	10.2	9.8	2.6	15.8	0.0	0.0	18.5	18.3
Lane Grp Delay (d), s/veh				36.3	34.9	35.0	26.6	27.2	0.0	0.0	42.8	43.5
Lane Grp LOS				D	C	C	C	C			D	D
Approach Vol, veh/h					1189			1527			1337	
Approach Delay, s/veh					35.4			27.2			43.1	
Approach LOS					D			C			D	
Timer												
Assigned Phs					2		7	4			8	
Phs Duration (G+Y+Rc), s					48.0		7.8	52.0			44.2	
Change Period (Y+Rc), s					5.0		3.0	6.0			6.0	
Max Green Setting (Gmax), s					43.0		9.0	46.0			34.3	
Max Q Clear Time (g_c+I1), s					23.5		5.1	35.1			36.7	
Green Ext Time (p_c), s					5.2		0.1	8.0			0.0	
Intersection Summary												
HCM 2010 Ctrl Delay			34.8									
HCM 2010 LOS			C									
Notes												

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations			↑↑↑			↱
Volume (vph)	0	0	1130	0	0	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	12	11	12	12	11	12
Total Lost time (s)			5.0			4.3
Lane Util. Factor			0.91			1.00
Frt			1.00			0.86
Flt Protected			1.00			1.00
Satd. Flow (prot)			5187			1644
Flt Permitted			1.00			1.00
Satd. Flow (perm)			5187			1644
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	1189	0	0	42
RTOR Reduction (vph)	0	0	0	0	0	41
Lane Group Flow (vph)	0	0	1189	0	0	1
Heavy Vehicles (%)	2%	2%	0%	0%	2%	0%
Turn Type			NA			custom
Protected Phases			2			
Permitted Phases						8
Actuated Green, G (s)			87.7			3.0
Effective Green, g (s)			87.7			3.0
Actuated g/C Ratio			0.88			0.03
Clearance Time (s)			5.0			4.3
Vehicle Extension (s)			3.0			2.5
Lane Grp Cap (vph)			4548			49
v/s Ratio Prot			c0.23			
v/s Ratio Perm						c0.00
v/c Ratio			0.26			0.03
Uniform Delay, d1			1.0			47.1
Progression Factor			0.19			1.00
Incremental Delay, d2			0.1			0.2
Delay (s)			0.3			47.2
Level of Service			A			D
Approach Delay (s)		0.0	0.3		47.2	
Approach LOS		A	A		D	

Intersection Summary			
HCM 2000 Control Delay	1.9	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.25		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	9.3
Intersection Capacity Utilization	32.9%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	30	1040	70	100	80	0	0	90	50
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	190.0	190.0	190.0	195.9	0.0	0.0	195.1	190.0
Lanes				0	3	0	0	1	0	0	1	0
Cap, veh/h				96	3489	244	198	146	0	0	279	156
Arrive On Green				0.68	0.68	0.68	0.23	0.24	0.00	0.00	0.24	0.23
Sat Flow, veh/h				141	5130	358	597	616	0	0	1178	657
Grp Volume(v), veh/h				429	392	379	189	0	0	0	0	148
Grp Sat Flow(s),veh/h/ln				1893	1900	1837	1213	0	0	0	0	1835
Q Serve(g_s), s				9.4	8.3	8.3	9.5	0.0	0.0	0.0	0.0	6.7
Cycle Q Clear(g_c), s				9.4	8.3	8.3	16.2	0.0	0.0	0.0	0.0	6.7
Prop In Lane				0.07		0.19	0.56		0.00	0.00		0.36
Lane Grp Cap(c), veh/h				1287	1292	1249	331	0	0	0	0	435
V/C Ratio(X)				0.33	0.30	0.30	0.57	0.00	0.00	0.00	0.00	0.34
Avail Cap(c_a), veh/h				1287	1292	1249	331	0	0	0	0	435
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.88
Uniform Delay (d), s/veh				6.6	6.5	6.5	36.9	0.0	0.0	0.0	0.0	31.8
Incr Delay (d2), s/veh				0.7	0.6	0.6	7.0	0.0	0.0	0.0	0.0	1.9
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				4.1	3.6	3.5	5.2	0.0	0.0	0.0	0.0	3.4
Lane Grp Delay (d), s/veh				7.3	7.1	7.1	43.9	0.0	0.0	0.0	0.0	33.7
Lane Grp LOS				A	A	A	D					C
Approach Vol, veh/h					1201			189			148	
Approach Delay, s/veh					7.2			43.9			33.7	
Approach LOS					A			D			C	

Timer	
Assigned Phs	2 4 8
Phs Duration (G+Y+Rc), s	73.0 27.0 27.0
Change Period (Y+Rc), s	5.0 4.3 4.3
Max Green Setting (Gmax), s	68.0 22.7 22.7
Max Q Clear Time (g_c+I1), s	11.4 18.2 8.7
Green Ext Time (p_c), s	6.0 0.4 0.9

Intersection Summary	
HCM 2010 Ctrl Delay	14.2
HCM 2010 LOS	B

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	170	880	150	130	750	0	0	990	130
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	190.0	190.0	186.3	186.3	0.0	0.0	186.3	190.0
Lanes				0	3	0	1	2	0	0	2	1
Cap, veh/h				326	1806	316	247	1724	0	0	1352	569
Arrive On Green				0.44	0.44	0.44	0.07	0.46	0.00	0.00	0.36	0.35
Sat Flow, veh/h				738	4084	715	1774	3725	0	0	3725	1615
Grp Volume(v), veh/h				452	419	392	137	789	0	0	1042	137
Grp Sat Flow(s),veh/h/ln				1863	1900	1774	1774	1863	0	0	1863	1615
Q Serve(g_s), s				16.6	14.6	14.7	4.3	13.4	0.0	0.0	22.9	5.6
Cycle Q Clear(g_c), s				16.6	14.6	14.7	4.3	13.4	0.0	0.0	22.9	5.6
Prop In Lane				0.40		0.40	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				824	840	785	247	1724	0	0	1352	569
V/C Ratio(X)				0.55	0.50	0.50	0.55	0.46	0.00	0.00	0.77	0.24
Avail Cap(c_a), veh/h				824	840	785	300	2018	0	0	1535	648
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.60	0.60
Uniform Delay (d), s/veh				19.0	18.5	18.5	20.4	17.0	0.0	0.0	26.1	21.3
Incr Delay (d2), s/veh				2.6	2.1	2.3	1.9	0.2	0.0	0.0	1.3	0.1
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				8.0	7.1	6.7	2.0	6.0	0.0	0.0	10.8	2.3
Lane Grp Delay (d), s/veh				21.6	20.6	20.8	22.3	17.2	0.0	0.0	27.4	21.4
Lane Grp LOS				C	C	C	C	B			C	C
Approach Vol, veh/h					1263			926			1179	
Approach Delay, s/veh					21.0			17.9			26.7	
Approach LOS					C			B			C	
Timer												
Assigned Phs					2		7	4			8	
Phs Duration (G+Y+Rc), s					46.0		9.2	46.7			37.4	
Change Period (Y+Rc), s					5.0		3.0	4.8			4.8	
Max Green Setting (Gmax), s					41.0		9.0	49.2			37.2	
Max Q Clear Time (g_c+I1), s					18.6		6.3	15.4			24.9	
Green Ext Time (p_c), s					5.9		0.1	13.3			7.7	
Intersection Summary												
HCM 2010 Ctrl Delay			22.2									
HCM 2010 LOS			C									
Notes												

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	90	900	90	170	560	0	0	410	130
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	190.0	190.0	190.0	186.3	0.0	0.0	187.2	190.0
Lanes				0	3	0	0	2	0	0	2	0
Cap, veh/h				277	2943	304	174	503	0	0	773	243
Arrive On Green				0.21	0.21	0.21	0.27	0.28	0.00	0.00	0.28	0.27
Sat Flow, veh/h				440	4671	482	382	1779	0	0	2733	858
Grp Volume(v), veh/h				406	374	358	218	550	0	0	295	274
Grp Sat Flow(s),veh/h/ln				1878	1900	1815	465	1695	0	0	1872	1720
Q Serve(g_s), s				18.4	16.7	16.7	13.6	28.3	0.0	0.0	13.4	13.7
Cycle Q Clear(g_c), s				18.4	16.7	16.7	27.3	28.3	0.0	0.0	13.4	13.7
Prop In Lane				0.23		0.27	0.82		0.00	0.00		0.50
Lane Grp Cap(c), veh/h				1183	1197	1143	192	480	0	0	530	487
V/C Ratio(X)				0.34	0.31	0.31	1.13	1.15	0.00	0.00	0.56	0.56
Avail Cap(c_a), veh/h				1183	1197	1143	192	480	0	0	530	487
HCM Platoon Ratio				0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.96	0.96	0.96	1.00	1.00	0.00	0.00	0.44	0.44
Uniform Delay (d), s/veh				22.0	21.2	21.3	45.1	35.9	0.0	0.0	30.5	30.8
Incr Delay (d2), s/veh				0.8	0.7	0.7	105.3	87.8	0.0	0.0	0.6	0.7
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				9.6	8.7	8.4	10.6	23.7	0.0	0.0	6.4	6.0
Lane Grp Delay (d), s/veh				22.7	21.9	21.9	150.3	123.7	0.0	0.0	31.1	31.5
Lane Grp LOS				C	C	C	F	F			C	C
Approach Vol, veh/h					1137			768			569	
Approach Delay, s/veh					22.2			131.2			31.3	
Approach LOS					C			F			C	

Timer	
Assigned Phs	2 4 8
Phs Duration (G+Y+Rc), s	68.0 32.0 32.0
Change Period (Y+Rc), s	5.0 4.7 4.7
Max Green Setting (Gmax), s	63.0 27.3 27.3
Max Q Clear Time (g_c+I1), s	20.4 30.3 15.7
Green Ext Time (p_c), s	5.5 0.0 4.7

Intersection Summary	
HCM 2010 Ctrl Delay	58.1
HCM 2010 LOS	E

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	40	1040	0	40	0	0	0	70	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	10	12	12	12	12	12	11	12	12	11	12
Total Lost time (s)					5.0		4.3				4.3	4.3
Lane Util. Factor					0.91		1.00				1.00	1.00
Frt					1.00		1.00				1.00	0.85
Flt Protected					1.00		0.95				1.00	1.00
Satd. Flow (prot)					5076		1805				1801	1615
Flt Permitted					1.00		0.71				1.00	1.00
Satd. Flow (perm)					5076		1347				1801	1615
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	42	1095	0	42	0	0	0	74	105
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	81
Lane Group Flow (vph)	0	0	0	0	1137	0	42	0	0	0	74	24
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	0%	2%	2%	2%	2%	0%
Turn Type				Perm	NA		custom				NA	Perm
Protected Phases					2						8	
Permitted Phases				2			4					8
Actuated Green, G (s)					68.0		22.7				22.7	22.7
Effective Green, g (s)					68.0		22.7				22.7	22.7
Actuated g/C Ratio					0.68		0.23				0.23	0.23
Clearance Time (s)					5.0		4.3				4.3	4.3
Vehicle Extension (s)					3.0		3.0				3.0	3.0
Lane Grp Cap (vph)					3451		305				408	366
v/s Ratio Prot											c0.04	
v/s Ratio Perm					0.22		0.03					0.01
v/c Ratio					0.33		0.14				0.18	0.07
Uniform Delay, d1					6.6		30.8				31.2	30.3
Progression Factor					0.34		1.00				1.00	1.00
Incremental Delay, d2					0.2		0.9				0.2	0.1
Delay (s)					2.5		31.8				31.4	30.4
Level of Service					A		C				C	C
Approach Delay (s)		0.0			2.5			31.8			30.8	
Approach LOS		A			A			C			C	

Intersection Summary			
HCM 2000 Control Delay	7.1	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.29		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	9.3
Intersection Capacity Utilization	41.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	60	900	90	70	310	0	0	280	100
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	186.3	190.0	190.0	186.3	0.0	0.0	186.3	190.0
Lanes				0	3	0	0	1	0	0	1	0
Cap, veh/h				141	2259	234	114	476	0	0	541	193
Arrive On Green				0.16	0.16	0.16	0.41	0.41	0.00	0.00	0.41	0.41
Sat Flow, veh/h				294	4707	487	173	1154	0	0	1313	467
Grp Volume(v), veh/h				396	363	347	400	0	0	0	0	400
Grp Sat Flow(s),veh/h/ln				1848	1863	1777	1327	0	0	0	0	1780
Q Serve(g_s), s				19.4	17.5	17.6	11.9	0.0	0.0	0.0	0.0	17.0
Cycle Q Clear(g_c), s				19.4	17.5	17.6	28.9	0.0	0.0	0.0	0.0	17.0
Prop In Lane				0.16		0.27	0.18		0.00	0.00		0.26
Lane Grp Cap(c), veh/h				887	894	853	590	0	0	0	0	733
V/C Ratio(X)				0.45	0.41	0.41	0.68	0.00	0.00	0.00	0.00	0.55
Avail Cap(c_a), veh/h				887	894	853	590	0	0	0	0	733
HCM Platoon Ratio				0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.95	0.95	0.95	1.00	0.00	0.00	0.00	0.00	0.09
Uniform Delay (d), s/veh				30.0	29.2	29.3	25.8	0.0	0.0	0.0	0.0	22.3
Incr Delay (d2), s/veh				1.5	1.3	1.4	6.2	0.0	0.0	0.0	0.0	0.3
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				10.0	9.1	8.8	9.7	0.0	0.0	0.0	0.0	7.5
Lane Grp Delay (d), s/veh				31.6	30.6	30.6	31.9	0.0	0.0	0.0	0.0	22.6
Lane Grp LOS				C	C	C	C					C
Approach Vol, veh/h					1105			400			400	
Approach Delay, s/veh					30.9			31.9			22.6	
Approach LOS					C			C			C	

Timer	
Assigned Phs	2 4 8
Phs Duration (G+Y+Rc), s	53.0 47.0 47.0
Change Period (Y+Rc), s	5.0 5.8 5.8
Max Green Setting (Gmax), s	48.0 41.2 41.2
Max Q Clear Time (g_c+I1), s	21.4 30.9 19.0
Green Ext Time (p_c), s	5.1 2.1 2.6

Intersection Summary	
HCM 2010 Ctrl Delay	29.4
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	0	950	140	110	250	0	0	0	0
Number				5	2	12	7	4	14			
Initial Q (Qb), veh				0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00			
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow veh/h/ln				0.0	186.3	190.0	190.0	186.3	0.0			
Lanes				0	3	0	0	1	0			
Cap, veh/h				0	2542	373	39	64	0			
Arrive On Green				0.00	0.18	0.18	0.38	0.38	0.00			
Sat Flow, veh/h				0	4766	699	0	168	0			
Grp Volume(v), veh/h				0	781	366	379	0	0			
Grp Sat Flow(s),veh/h/ln				0	1863	1739	168	0	0			
Q Serve(g_s), s				0.0	22.3	22.3	0.0	0.0	0.0			
Cycle Q Clear(g_c), s				0.0	22.3	22.3	46.0	0.0	0.0			
Prop In Lane				0.00		0.40	0.31		0.00			
Lane Grp Cap(c), veh/h				0	1987	928	103	0	0			
V/C Ratio(X)				0.00	0.39	0.39	3.66	0.00	0.00			
Avail Cap(c_a), veh/h				0	1987	928	103	0	0			
HCM Platoon Ratio				1.00	0.33	0.33	1.00	1.00	1.00			
Upstream Filter(I)				0.00	0.90	0.90	1.00	0.00	0.00			
Uniform Delay (d), s/veh				0.0	32.2	32.3	32.7	0.0	0.0			
Incr Delay (d2), s/veh				0.0	0.5	1.1	1221.5	0.0	0.0			
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0			
%ile Back of Q (50%), veh/ln				0.0	11.4	10.8	37.1	0.0	0.0			
Lane Grp Delay (d), s/veh				0.0	32.8	33.4	1254.2	0.0	0.0			
Lane Grp LOS					C	C	F					
Approach Vol, veh/h					1147			379				
Approach Delay, s/veh					33.0			1254.2				
Approach LOS					C			F				

Timer	
Assigned Phs	2
Phs Duration (G+Y+Rc), s	69.0
Change Period (Y+Rc), s	5.0
Max Green Setting (Gmax), s	64.0
Max Q Clear Time (g_c+I1), s	24.3
Green Ext Time (p_c), s	10.1

Intersection Summary	
HCM 2010 Ctrl Delay	336.3
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↑↑↑↑						↑↑	↱
Volume (veh/h)	0	0	0	0	700	0	0	0	0	0	300	360
Number				5	2	12				3	8	18
Initial Q (Qb), veh				0	0	0				0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00				1.00		1.00
Parking Bus Adj				1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow veh/h/ln				0.0	167.6	0.0				0.0	167.6	167.6
Lanes				0	3	0				0	2	1
Cap, veh/h				0	3159	0				0	938	399
Arrive On Green				0.00	0.21	0.00				0.00	0.28	0.28
Sat Flow, veh/h				0	5029	0				0	3353	1425
Grp Volume(v), veh/h				0	737	0				0	316	379
Grp Sat Flow(s),veh/h/ln				0	1676	0				0	1676	1425
Q Serve(g_s), s				0.0	14.6	0.0				0.0	8.9	31.2
Cycle Q Clear(g_c), s				0.0	14.6	0.0				0.0	8.9	31.2
Prop In Lane				0.00		0.00				0.00		1.00
Lane Grp Cap(c), veh/h				0	3159	0				0	938	399
V/C Ratio(X)				0.00	0.23	0.00				0.00	0.34	0.95
Avail Cap(c_a), veh/h				0	3159	0				0	955	406
HCM Platoon Ratio				1.00	0.33	1.00				1.00	1.00	1.00
Upstream Filter(I)				0.00	1.00	0.00				0.00	0.09	0.09
Uniform Delay (d), s/veh				0.0	23.4	0.0				0.0	34.2	42.2
Incr Delay (d2), s/veh				0.0	0.2	0.0				0.0	0.0	5.5
Initial Q Delay(d3),s/veh				0.0	0.0	0.0				0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				0.0	6.7	0.0				0.0	3.8	11.9
Lane Grp Delay (d), s/veh				0.0	23.6	0.0				0.0	34.2	47.7
Lane Grp LOS					C						C	D
Approach Vol, veh/h					737						695	
Approach Delay, s/veh					23.6						41.6	
Approach LOS					C						D	

Timer	
Assigned Phs	2
Phs Duration (G+Y+Rc), s	80.0
Change Period (Y+Rc), s	5.0
Max Green Setting (Gmax), s	75.0
Max Q Clear Time (g_c+I1), s	16.6
Green Ext Time (p_c), s	6.2

Intersection Summary	
HCM 2010 Ctrl Delay	32.3
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	0	2400	230	100	250	0	0	0	170
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					5.0		4.7	4.7				4.7
Lane Util. Factor					0.91		1.00	1.00				1.00
Frt					0.99		1.00	1.00				0.86
Flt Protected					1.00		0.95	1.00				1.00
Satd. Flow (prot)					4517		1593	1676				1450
Flt Permitted					1.00		0.95	1.00				1.00
Satd. Flow (perm)					4517		1593	1676				1450
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	0	2526	242	105	263	0	0	0	179
RTOR Reduction (vph)	0	0	0	0	9	0	13	0	0	0	0	13
Lane Group Flow (vph)	0	0	0	0	2759	0	92	263	0	0	0	166
Turn Type					NA		Perm	NA				custom
Protected Phases					2			4				
Permitted Phases							4					8
Actuated Green, G (s)					80.0		30.3	30.3				30.3
Effective Green, g (s)					80.0		30.3	30.3				30.3
Actuated g/C Ratio					0.67		0.25	0.25				0.25
Clearance Time (s)					5.0		4.7	4.7				4.7
Vehicle Extension (s)					3.0		3.0	3.0				2.5
Lane Grp Cap (vph)					3011		402	423				366
v/s Ratio Prot					c0.61			c0.16				
v/s Ratio Perm							0.06					0.11
v/c Ratio					0.92		0.23	0.62				0.45
Uniform Delay, d1					17.1		35.6	39.8				37.8
Progression Factor					0.46		1.00	1.00				0.87
Incremental Delay, d2					0.5		1.3	6.7				0.2
Delay (s)					8.4		36.9	46.5				33.0
Level of Service					A		D	D				C
Approach Delay (s)		0.0			8.4			43.8			33.0	
Approach LOS		A			A			D			C	

Intersection Summary			
HCM 2000 Control Delay	13.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	9.7
Intersection Capacity Utilization	87.1%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	120	2400	130	290	720	0	0	360	130
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				171.0	166.0	171.0	166.0	166.0	0.0	0.0	166.0	171.0
Lanes				0	3	0	1	2	0	0	2	0
Cap, veh/h				123	2607	144	297	1071	0	0	345	123
Arrive On Green				0.19	0.19	0.19	0.15	0.32	0.00	0.00	0.15	0.15
Sat Flow, veh/h				210	4470	247	1581	3320	0	0	2339	834
Grp Volume(v), veh/h				990	902	898	305	758	0	0	267	249
Grp Sat Flow(s),veh/h/ln				1650	1660	1617	1581	1660	0	0	1660	1513
Q Serve(g_s), s				70.0	64.1	65.9	18.0	24.0	0.0	0.0	17.7	17.7
Cycle Q Clear(g_c), s				70.0	64.1	65.9	18.0	24.0	0.0	0.0	17.7	17.7
Prop In Lane				0.13		0.15	1.00		0.00	0.00		0.55
Lane Grp Cap(c), veh/h				962	968	943	297	1071	0	0	245	223
V/C Ratio(X)				1.03	0.93	0.95	1.03	0.71	0.00	0.00	1.09	1.11
Avail Cap(c_a), veh/h				962	968	943	297	1071	0	0	245	223
HCM Platoon Ratio				0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.09	0.09	0.09	1.00	1.00	0.00	0.00	0.99	0.99
Uniform Delay (d), s/veh				48.5	46.1	46.8	37.1	35.7	0.0	0.0	51.2	51.2
Incr Delay (d2), s/veh				17.3	2.1	3.0	59.2	4.0	0.0	0.0	84.0	93.8
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				35.9	29.4	29.6	14.5	10.8	0.0	0.0	13.3	12.8
Lane Grp Delay (d), s/veh				65.8	48.2	49.8	96.2	39.6	0.0	0.0	135.1	145.0
Lane Grp LOS				F	D	D	F	D			F	F
Approach Vol, veh/h					2789			1063			516	
Approach Delay, s/veh					54.9			55.9			139.9	
Approach LOS					D			E			F	

Timer												
Assigned Phs					2		7	4			8	
Phs Duration (G+Y+Rc), s					75.0		21.0	45.0			24.0	
Change Period (Y+Rc), s					5.0		3.0	6.3			6.3	
Max Green Setting (Gmax), s					70.0		18.0	38.7			17.7	
Max Q Clear Time (g_c+I1), s					72.0		20.0	26.0			19.7	
Green Ext Time (p_c), s					0.0		0.0	3.0			0.0	

Intersection Summary	
HCM 2010 Ctrl Delay	65.2
HCM 2010 LOS	E

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	250	2100	0	0	0	0	0	940	400
Number				5	2	12				3	8	18
Initial Q (Qb), veh				0	0	0				0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00				1.00		1.00
Parking Bus Adj				1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow veh/h/ln				171.0	166.0	0.0				0.0	166.0	171.0
Lanes				0	3	0				0	2	0
Cap, veh/h				60	1586	0				0	878	368
Arrive On Green				0.17	0.17	0.00				0.00	0.40	0.40
Sat Flow, veh/h				0	3022	0				0	2223	932
Grp Volume(v), veh/h				263	2211	0				0	735	675
Grp Sat Flow(s),veh/h/ln				0	1511	0				0	1660	1496
Q Serve(g_s), s				0.0	63.0	0.0				0.0	47.4	47.4
Cycle Q Clear(g_c), s				63.0	63.0	0.0				0.0	47.4	47.4
Prop In Lane				1.00		0.00				0.00		0.62
Lane Grp Cap(c), veh/h				60	1586	0				0	656	591
V/C Ratio(X)				4.38	1.39	0.00				0.00	1.12	1.14
Avail Cap(c_a), veh/h				60	1586	0				0	656	591
HCM Platoon Ratio				0.33	0.33	1.00				1.00	1.00	1.00
Upstream Filter(I)				0.43	0.43	0.00				0.00	0.09	0.09
Uniform Delay (d), s/veh				81.1	49.6	0.0				0.0	36.3	36.3
Incr Delay (d2), s/veh				1538.9	178.9	0.0				0.0	56.3	66.5
Initial Q Delay(d3),s/veh				0.0	0.0	0.0				0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				27.6	65.2	0.0				0.0	30.1	28.8
Lane Grp Delay (d), s/veh				1620.0	228.5	0.0				0.0	92.6	102.8
Lane Grp LOS				F	F						F	F
Approach Vol, veh/h					2474						1410	
Approach Delay, s/veh					376.4						97.5	
Approach LOS					F						F	

Timer		
Assigned Phs	2	8
Phs Duration (G+Y+Rc), s	68.0	52.0
Change Period (Y+Rc), s	5.0	4.6
Max Green Setting (Gmax), s	63.0	47.4
Max Q Clear Time (g_c+I1), s	65.0	49.4
Green Ext Time (p_c), s	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	275.2
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	0	2000	170	360	720	0	0	0	0
Number				5	2	12	7	4	14			
Initial Q (Qb), veh				0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00			
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow veh/h/ln				0.0	166.0	171.0	171.0	166.0	0.0			
Lanes				0	3	0	0	3	0			
Cap, veh/h				0	2643	223	60	1017	0			
Arrive On Green				0.00	0.58	0.58	0.34	0.34	0.00			
Sat Flow, veh/h				0	4532	382	0	3022	0			
Grp Volume(v), veh/h				0	1537	747	379	758	0			
Grp Sat Flow(s),veh/h/ln				0	1660	1593	0	1511	0			
Q Serve(g_s), s				0.0	43.1	44.2	0.0	26.7	0.0			
Cycle Q Clear(g_c), s				0.0	43.1	44.2	40.4	26.7	0.0			
Prop In Lane				0.00		0.24	1.00		0.00			
Lane Grp Cap(c), veh/h				0	1937	929	60	1017	0			
V/C Ratio(X)				0.00	0.79	0.80	6.32	0.75	0.00			
Avail Cap(c_a), veh/h				0	1937	929	60	1017	0			
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)				0.00	0.09	0.09	1.00	1.00	0.00			
Uniform Delay (d), s/veh				0.0	19.4	19.6	60.0	35.2	0.0			
Incr Delay (d2), s/veh				0.0	0.3	0.7	2427.6	3.0	0.0			
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0			
%ile Back of Q (50%), veh/ln				0.0	17.2	16.8	42.3	10.6	0.0			
Lane Grp Delay (d), s/veh				0.0	19.7	20.3	2487.6	38.3	0.0			
Lane Grp LOS					B	C	F	D				
Approach Vol, veh/h					2284			1137				
Approach Delay, s/veh					19.9			854.7				
Approach LOS					B			F				

Timer	
Assigned Phs	2	4
Phs Duration (G+Y+Rc), s	75.0	45.0
Change Period (Y+Rc), s	5.0	4.6
Max Green Setting (Gmax), s	70.0	40.4
Max Q Clear Time (g_c+I1), s	46.2	42.4
Green Ext Time (p_c), s	18.5	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	297.4
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	280	810	200	780	1200	250	850	1110	520
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.7	6.7	6.7	5.0	6.2		5.0	6.2	6.2
Lane Util. Factor				0.95	0.95	1.00	0.97	0.95		0.97	0.95	1.00
Frt				1.00	1.00	0.85	1.00	0.97		1.00	1.00	0.85
Flt Protected				0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)				1498	1575	1411	3060	3073		3060	3154	1411
Flt Permitted				0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)				1498	1575	1411	3060	3073		3060	3154	1411
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	295	853	211	821	1263	263	895	1168	547
RTOR Reduction (vph)	0	0	0	0	0	68	0	13	0	0	0	44
Lane Group Flow (vph)	0	0	0	265	883	143	821	1513	0	895	1168	503
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type				Perm	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases					4		1	6		5	2	
Permitted Phases				4		4						2
Actuated Green, G (s)				51.3	51.3	51.3	21.0	46.8		24.0	49.8	49.8
Effective Green, g (s)				51.3	51.3	51.3	21.0	46.8		24.0	49.8	49.8
Actuated g/C Ratio				0.37	0.37	0.37	0.15	0.33		0.17	0.36	0.36
Clearance Time (s)				6.7	6.7	6.7	5.0	6.2		5.0	6.2	6.2
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)				548	577	517	459	1027		524	1121	501
v/s Ratio Prot							0.27	c0.49		c0.29	c0.37	
v/s Ratio Perm				0.18	0.56	0.10						0.36
v/c Ratio				0.48	1.53	0.28	1.79	1.47		1.71	1.04	1.00
Uniform Delay, d1				34.2	44.4	31.3	59.5	46.6		58.0	45.1	45.1
Progression Factor				1.00	1.00	1.00	1.00	1.00		1.15	0.88	0.85
Incremental Delay, d2				0.7	247.3	0.3	363.6	218.4		319.4	22.0	13.1
Delay (s)				34.8	291.7	31.6	423.1	265.0		386.0	61.4	51.5
Level of Service				C	F	C	F	F		F	E	D
Approach Delay (s)		0.0			201.2			320.3			170.6	
Approach LOS		A			F			F			F	

Intersection Summary			
HCM 2000 Control Delay	232.8	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.54		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	17.9
Intersection Capacity Utilization	126.5%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	440	30	1080	80	0	110	0	1550	10	30	1900	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.7	6.7	6.7	6.7		6.7		6.2		3.5	6.2	
Lane Util. Factor	0.95	0.95	1.00	1.00		1.00		0.91		1.00	0.95	
Frt	1.00	1.00	0.85	1.00		0.85		1.00		1.00	1.00	
Flt Protected	0.95	0.96	1.00	0.95		1.00		1.00		0.95	1.00	
Satd. Flow (prot)	1498	1511	1411	1577		1411		4528		1577	3154	
Flt Permitted	0.95	0.96	1.00	0.60		1.00		1.00		0.09	1.00	
Satd. Flow (perm)	1498	1511	1411	991		1411		4528		143	3154	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	463	32	1137	84	0	116	0	1632	11	32	2000	0
RTOR Reduction (vph)	0	0	79	0	0	87	0	0	0	0	0	0
Lane Group Flow (vph)	245	250	1058	84	0	29	0	1643	0	32	2000	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Split	NA	Perm	custom		custom		NA		pm+pt	NA	
Protected Phases	3	3						6		5	2	
Permitted Phases			3	4		4				2		
Actuated Green, G (s)	28.3	28.3	28.3	15.1		15.1		80.8		87.0	87.0	
Effective Green, g (s)	28.3	28.3	28.3	15.1		15.1		80.8		87.0	87.0	
Actuated g/C Ratio	0.19	0.19	0.19	0.10		0.10		0.54		0.58	0.58	
Clearance Time (s)	6.7	6.7	6.7	6.7		6.7		6.2		3.5	6.2	
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0		3.0		3.0	3.0	
Lane Grp Cap (vph)	282	285	266	99		142		2439		108	1829	
v/s Ratio Prot	0.16	0.17						0.36		0.01	c0.63	
v/s Ratio Perm			c0.75	c0.08		0.02				0.17		
v/c Ratio	0.87	0.88	3.98	0.85		0.20		0.67		0.30	1.09	
Uniform Delay, d1	59.0	59.2	60.9	66.3		61.9		25.0		17.5	31.5	
Progression Factor	1.00	1.00	1.00	1.00		1.00		0.19		1.00	1.00	
Incremental Delay, d2	23.5	24.7	1349.3	45.5		0.7		0.1		1.5	51.5	
Delay (s)	82.5	83.9	1410.2	111.8		62.6		5.0		19.0	83.0	
Level of Service	F	F	F	F		E		A		B	F	
Approach Delay (s)		1007.7			83.3			5.0			82.0	
Approach LOS		F			F			A			F	

Intersection Summary			
HCM 2000 Control Delay	333.4	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.74		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	23.1
Intersection Capacity Utilization	151.7%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	990	1520	0	0	0	0	0	1190	200	0	0	0
Number	1	6	16				7	4	14			
Initial Q (Qb), veh	0	0	0				0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00			
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00			
Adj Sat Flow veh/h/ln	171.0	166.0	0.0				0.0	166.0	166.0			
Lanes	0	3	0				0	2	1			
Cap, veh/h	55	1650	0				0	1272	541			
Arrive On Green	0.18	0.18	0.00				0.00	0.38	0.38			
Sat Flow, veh/h	0	3022	0				0	3320	1411			
Grp Volume(v), veh/h	1042	1600	0				0	1253	211			
Grp Sat Flow(s),veh/h/ln	0	1511	0				0	1660	1411			
Q Serve(g_s), s	0.0	68.4	0.0				0.0	48.6	14.1			
Cycle Q Clear(g_c), s	71.0	68.4	0.0				0.0	48.6	14.1			
Prop In Lane	1.00		0.00				0.00		1.00			
Lane Grp Cap(c), veh/h	55	1650	0				0	1272	541			
V/C Ratio(X)	18.81	0.97	0.00				0.00	0.99	0.39			
Avail Cap(c_a), veh/h	55	1650	0				0	1272	541			
HCM Platoon Ratio	0.33	0.33	1.00				1.00	1.00	1.00			
Upstream Filter(I)	0.09	0.09	0.00				0.00	0.09	0.09			
Uniform Delay (d), s/veh	88.8	52.2	0.0				0.0	39.7	29.1			
Incr Delay (d2), s/veh	8019.3	2.6	0.0				0.0	4.8	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0			
%ile Back of Q (50%), veh/ln	125.3	28.6	0.0				0.0	21.4	5.1			
Lane Grp Delay (d), s/veh	8108.1	54.8	0.0				0.0	44.5	29.1			
Lane Grp LOS	F	D						D	C			
Approach Vol, veh/h		2642						1464				
Approach Delay, s/veh		3231.0						42.3				
Approach LOS		F						D				

Timer	
Assigned Phs	6
Phs Duration (G+Y+Rc), s	76.0
Change Period (Y+Rc), s	5.0
Max Green Setting (Gmax), s	71.0
Max Q Clear Time (g_c+I1), s	73.0
Green Ext Time (p_c), s	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	2094.1
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1800	450	0	0	0	0	0	0	490	990	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0								4.6	4.6	
Lane Util. Factor		0.91								0.95	0.95	
Frt		0.97								1.00	1.00	
Flt Protected		1.00								0.95	1.00	
Satd. Flow (prot)		4396								1498	1573	
Flt Permitted		1.00								0.95	1.00	
Satd. Flow (perm)		4396								1498	1573	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	1895	474	0	0	0	0	0	0	516	1042	0
RTOR Reduction (vph)	0	33	0	0	0	0	0	0	0	8	8	0
Lane Group Flow (vph)	0	2336	0	0	0	0	0	0	0	456	1086	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type		NA								Perm	NA	
Protected Phases		6									8	
Permitted Phases										8		
Actuated Green, G (s)		53.0								67.4	67.4	
Effective Green, g (s)		53.0								67.4	67.4	
Actuated g/C Ratio		0.41								0.52	0.52	
Clearance Time (s)		5.0								4.6	4.6	
Vehicle Extension (s)		3.0								3.0	3.0	
Lane Grp Cap (vph)		1792								776	815	
v/s Ratio Prot		c0.53										
v/s Ratio Perm										0.30	0.69	
v/c Ratio		1.30								0.59	1.33	
Uniform Delay, d1		38.5								21.7	31.3	
Progression Factor		0.73								1.00	1.00	
Incremental Delay, d2		137.0								1.1	157.9	
Delay (s)		165.2								22.8	189.2	
Level of Service		F								C	F	
Approach Delay (s)		165.2			0.0			0.0			139.7	
Approach LOS		F			A			A			F	

Intersection Summary			
HCM 2000 Control Delay	155.1	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.32		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	9.6
Intersection Capacity Utilization	108.5%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	640	1800	460	0	0	0	0	650	110	190	380	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	171.0	166.0	171.0				0.0	166.0	171.0	166.0	166.0	0.0
Lanes	0	3	0				0	2	0	1	2	0
Cap, veh/h	594	1804	445				0	626	106	189	1108	0
Arrive On Green	0.20	0.20	0.20				0.00	0.23	0.23	0.08	0.33	0.00
Sat Flow, veh/h	1002	3045	751				0	2769	469	1581	3320	0
Grp Volume(v), veh/h	1083	985	985				0	410	390	200	400	0
Grp Sat Flow(s),veh/h/ln	1610	1660	1528				0	1660	1577	1581	1660	0
Q Serve(g_s), s	77.0	77.0	77.0				0.0	29.4	29.4	11.0	11.9	0.0
Cycle Q Clear(g_c), s	77.0	77.0	77.0				0.0	29.4	29.4	11.0	11.9	0.0
Prop In Lane	0.62		0.49				0.00		0.30	1.00		0.00
Lane Grp Cap(c), veh/h	954	983	905				0	375	357	189	1108	0
V/C Ratio(X)	1.14	1.00	1.09				0.00	1.09	1.09	1.06	0.36	0.00
Avail Cap(c_a), veh/h	954	983	905				0	375	357	189	1108	0
HCM Platoon Ratio	0.33	0.33	0.33				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.09				0.00	0.87	0.87	1.00	1.00	0.00
Uniform Delay (d), s/veh	52.3	52.3	52.3				0.0	50.3	50.3	38.9	32.8	0.0
Incr Delay (d2), s/veh	62.2	9.0	42.0				0.0	70.5	72.1	81.4	0.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	50.1	37.2	42.5				0.0	20.0	19.1	11.0	5.1	0.0
Lane Grp Delay (d), s/veh	114.5	61.3	94.3				0.0	120.8	122.4	120.3	33.7	0.0
Lane Grp LOS	F	F	F					F	F	F	C	
Approach Vol, veh/h		3053						800			600	
Approach Delay, s/veh		90.8						121.6			62.6	
Approach LOS		F						F			E	

Timer					
Assigned Phs		6		4		3	8
Phs Duration (G+Y+Rc), s		82.0		34.0		14.0	48.0
Change Period (Y+Rc), s		5.0		4.6		3.0	4.6
Max Green Setting (Gmax), s		77.0		29.4		11.0	43.4
Max Q Clear Time (g_c+I1), s		79.0		31.4		13.0	13.9
Green Ext Time (p_c), s		0.0		0.0		0.0	9.3

Intersection Summary	
HCM 2010 Ctrl Delay	92.6
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	300	2420	210	0	0	0	0	260	410	0	0	0
Number	1	6	16				7	4	14			
Initial Q (Qb), veh	0	0	0				0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00			
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00			
Adj Sat Flow veh/h/ln	171.0	166.0	171.0				0.0	166.0	171.0			
Lanes	0	3	0				0	1	0			
Cap, veh/h	55	1499	128				0	222	351			
Arrive On Green	0.18	0.18	0.18				0.00	0.13	0.13			
Sat Flow, veh/h	0	2746	235				0	582	917			
Grp Volume(v), veh/h	316	1384	1384				0	0	706			
Grp Sat Flow(s),veh/h/ln	0	1511	1469				0	0	1498			
Q Serve(g_s), s	0.0	71.0	71.0				0.0	0.0	49.7			
Cycle Q Clear(g_c), s	71.0	71.0	71.0				0.0	0.0	49.7			
Prop In Lane	1.00		0.16				0.00		0.61			
Lane Grp Cap(c), veh/h	55	825	803				0	0	573			
V/C Ratio(X)	5.71	1.68	1.72				0.00	0.00	1.23			
Avail Cap(c_a), veh/h	55	825	803				0	0	573			
HCM Platoon Ratio	0.33	0.33	0.33				1.00	0.33	0.33			
Upstream Filter(I)	1.00	1.00	1.00				0.00	0.00	0.40			
Uniform Delay (d), s/veh	88.8	53.3	53.3				0.0	0.0	56.8			
Incr Delay (d2), s/veh	2156.2	310.1	331.3				0.0	0.0	110.9			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0			
%ile Back of Q (50%), veh/ln	35.1	100.2	102.2				0.0	0.0	38.0			
Lane Grp Delay (d), s/veh	2245.0	363.4	384.6				0.0	0.0	167.7			
Lane Grp LOS	F	F	F						F			
Approach Vol, veh/h		3084						706				
Approach Delay, s/veh		565.7						167.7				
Approach LOS		F						F				

Timer	
Assigned Phs	6
Phs Duration (G+Y+Rc), s	76.0
Change Period (Y+Rc), s	5.0
Max Green Setting (Gmax), s	71.0
Max Q Clear Time (g_c+I1), s	73.0
Green Ext Time (p_c), s	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	491.6
HCM 2010 LOS	F

Notes

Movement	EBT	EBR	SBL	SBT	SBR	SWL2	SWL
Lane Configurations							
Volume (vph)	2450	210	190	580	39	1000	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0			7.0		7.0	
Lane Util. Factor	0.91			0.95		0.97	
Frt	0.99			0.99		1.00	
Flt Protected	1.00			0.99		0.95	
Satd. Flow (prot)	4523			3126		3090	
Flt Permitted	1.00			0.99		0.95	
Satd. Flow (perm)	4523			3126		3090	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	2579	221	200	611	41	1053	0
RTOR Reduction (vph)	7	0	0	3	0	155	0
Lane Group Flow (vph)	2793	0	0	849	0	898	0
Turn Type	NA		Perm	NA		Perm	
Protected Phases	6			9			8
Permitted Phases			9			8	
Actuated Green, G (s)	56.0			27.0		28.0	
Effective Green, g (s)	56.0			27.0		28.0	
Actuated g/C Ratio	0.43			0.21		0.22	
Clearance Time (s)	5.0			7.0		7.0	
Vehicle Extension (s)	3.0			3.0		3.0	
Lane Grp Cap (vph)	1948			649		665	
v/s Ratio Prot	c0.62						
v/s Ratio Perm				0.27		c0.29	
v/c Ratio	1.43			1.31		1.35	
Uniform Delay, d1	37.0			51.5		51.0	
Progression Factor	1.00			1.00		1.00	
Incremental Delay, d2	198.1			149.5		167.3	
Delay (s)	235.1			201.0		218.3	
Level of Service	F			F		F	
Approach Delay (s)	235.1			201.0			218.3
Approach LOS	F			F			F

Intersection Summary			
HCM 2000 Control Delay	225.2	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.38		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	19.0
Intersection Capacity Utilization	130.6%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	220	2300	60	0	0	0	0	220	50	140	190	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	186.3	190.0	190.0	193.7	0.0
Lanes	0	3	0				0	1	0	0	1	0
Cap, veh/h	250	2793	74				0	511	117	185	227	0
Arrive On Green	0.19	0.19	0.19				0.00	0.35	0.35	0.35	0.35	0.00
Sat Flow, veh/h	444	4967	132				0	1468	335	409	652	0
Grp Volume(v), veh/h	962	878	875				0	0	285	347	0	0
Grp Sat Flow(s),veh/h/ln	1841	1863	1839				0	0	1804	1061	0	0
Q Serve(g_s), s	61.3	54.2	54.8				0.0	0.0	14.6	24.6	0.0	0.0
Cycle Q Clear(g_c), s	61.3	54.2	54.8				0.0	0.0	14.6	39.1	0.0	0.0
Prop In Lane	0.24		0.07				0.00		0.19	0.42		0.00
Lane Grp Cap(c), veh/h	1035	1047	1034				0	0	627	412	0	0
V/C Ratio(X)	0.93	0.84	0.85				0.00	0.00	0.45	0.84	0.00	0.00
Avail Cap(c_a), veh/h	1035	1047	1034				0	0	640	423	0	0
HCM Platoon Ratio	0.33	0.33	0.33				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	0.00	0.09	1.00	0.00	0.00
Uniform Delay (d), s/veh	46.2	43.3	43.5				0.0	0.0	30.1	42.8	0.0	0.0
Incr Delay (d2), s/veh	15.5	8.0	8.5				0.0	0.0	0.0	13.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	35.4	30.0	30.1				0.0	0.0	6.7	12.0	0.0	0.0
Lane Grp Delay (d), s/veh	61.7	51.3	52.1				0.0	0.0	30.1	56.4	0.0	0.0
Lane Grp LOS	E	D	D						C	E		
Approach Vol, veh/h		2716						285			347	
Approach Delay, s/veh		55.2						30.1			56.4	
Approach LOS		E						C			E	

Timer												
Assigned Phs		6						4			8	
Phs Duration (G+Y+Rc), s		72.0						47.2			47.2	
Change Period (Y+Rc), s		5.0						5.7			5.7	
Max Green Setting (Gmax), s		67.0						42.3			42.3	
Max Q Clear Time (g_c+I1), s		63.3						16.6			41.1	
Green Ext Time (p_c), s		3.3						2.0			0.3	

Intersection Summary			
HCM 2010 Ctrl Delay			53.2
HCM 2010 LOS			D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	200	2280	100	0	0	0	0	500	160	200	580	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	184.5	190.0				0.0	184.5	190.0	190.0	177.1	0.0
Lanes	0	3	0				0	2	0	0	2	0
Cap, veh/h	200	2429	108				0	1119	356	243	687	0
Arrive On Green	0.17	0.17	0.17				0.00	0.42	0.41	0.41	0.42	0.00
Sat Flow, veh/h	400	4859	217				0	2685	854	446	1648	0
Grp Volume(v), veh/h	963	879	874				0	361	333	228	594	0
Grp Sat Flow(s),veh/h/ln	1825	1845	1806				0	1845	1694	483	1611	0
Q Serve(g_s), s	60.0	56.6	57.7				0.0	17.0	17.2	31.8	40.8	0.0
Cycle Q Clear(g_c), s	60.0	56.6	57.7				0.0	17.0	17.2	49.0	40.8	0.0
Prop In Lane	0.22		0.12				0.00		0.50	0.92		0.00
Lane Grp Cap(c), veh/h	912	922	903				0	769	706	255	671	0
V/C Ratio(X)	1.06	0.95	0.97				0.00	0.47	0.47	0.90	0.88	0.00
Avail Cap(c_a), veh/h	912	922	903				0	769	706	255	671	0
HCM Platoon Ratio	0.33	0.33	0.33				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.58	0.58	0.58				0.00	0.09	0.09	1.00	1.00	0.00
Uniform Delay (d), s/veh	50.1	48.7	49.1				0.0	25.4	25.6	46.0	32.3	0.0
Incr Delay (d2), s/veh	39.0	13.9	16.4				0.0	0.2	0.2	35.0	15.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	39.5	31.9	32.4				0.0	7.9	7.3	9.6	19.3	0.0
Lane Grp Delay (d), s/veh	89.1	62.6	65.5				0.0	25.6	25.8	80.9	48.0	0.0
Lane Grp LOS	F	E	E					C	C	F	D	
Approach Vol, veh/h		2716						694			822	
Approach Delay, s/veh		72.9						25.7			57.2	
Approach LOS		E						C			E	

Timer			
Assigned Phs	6	4	8
Phs Duration (G+Y+Rc), s	65.0	55.0	55.0
Change Period (Y+Rc), s	5.0	6.0	6.0
Max Green Setting (Gmax), s	60.0	49.0	49.0
Max Q Clear Time (g_c+I1), s	62.0	19.2	51.0
Green Ext Time (p_c), s	0.0	7.9	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	62.1
HCM 2010 LOS	E

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	2510	80	0	0	0	0	0	0	30	50	0
Number	1	6	16							3	8	18
Initial Q (Qb), veh	0	0	0							0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00							1.00		1.00
Parking Bus Adj	1.00	1.00	1.00							1.00	1.00	1.00
Adj Sat Flow veh/h/ln	0.0	182.7	190.0							190.0	190.0	0.0
Lanes	0	3	0							0	1	0
Cap, veh/h	0	3875	122							41	52	0
Arrive On Green	0.00	0.24	0.24							0.18	0.18	0.00
Sat Flow, veh/h	0	5285	167							0	284	0
Grp Volume(v), veh/h	0	1820	906							85	0	0
Grp Sat Flow(s),veh/h/ln	0	1827	1798							284	0	0
Q Serve(g_s), s	0.0	54.2	55.0							0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	54.2	55.0							22.0	0.0	0.0
Prop In Lane	0.00		0.09							0.38		0.00
Lane Grp Cap(c), veh/h	0	2679	1318							93	0	0
V/C Ratio(X)	0.00	0.68	0.69							0.91	0.00	0.00
Avail Cap(c_a), veh/h	0	2679	1318							93	0	0
HCM Platoon Ratio	1.00	0.33	0.33							1.00	1.00	1.00
Upstream Filter(I)	0.00	0.12	0.12							1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	32.7	33.0							47.5	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.2	0.4							70.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0							0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.0	26.8	26.9							4.5	0.0	0.0
Lane Grp Delay (d), s/veh	0.0	32.8	33.3							118.3	0.0	0.0
Lane Grp LOS		C	C							F		
Approach Vol, veh/h		2726									85	
Approach Delay, s/veh		33.0									118.3	
Approach LOS		C									F	

Timer	
Assigned Phs	6
Phs Duration (G+Y+Rc), s	93.0
Change Period (Y+Rc), s	5.0
Max Green Setting (Gmax), s	88.0
Max Q Clear Time (g_c+I1), s	57.0
Green Ext Time (p_c), s	21.3

Intersection Summary	
HCM 2010 Ctrl Delay	35.6
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	140	2150	110	0	0	0	0	630	200	240	900	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	184.5	190.0				0.0	184.5	190.0	184.5	184.5	0.0
Lanes	0	3	0				0	2	0	1	2	0
Cap, veh/h	152	2499	131				0	739	235	286	1513	0
Arrive On Green	0.17	0.17	0.17				0.00	0.28	0.27	0.12	0.41	0.00
Sat Flow, veh/h	300	4916	258				0	2685	854	1757	3689	0
Grp Volume(v), veh/h	897	819	810				0	455	419	253	947	0
Grp Sat Flow(s),veh/h/ln	1830	1845	1799				0	1845	1694	1757	1845	0
Q Serve(g_s), s	58.4	52.0	52.8				0.0	28.5	28.6	12.1	24.4	0.0
Cycle Q Clear(g_c), s	58.4	52.0	52.8				0.0	28.5	28.6	12.1	24.4	0.0
Prop In Lane	0.16		0.14				0.00		0.50	1.00		0.00
Lane Grp Cap(c), veh/h	930	938	915				0	508	466	286	1513	0
V/C Ratio(X)	0.96	0.87	0.89				0.00	0.90	0.90	0.89	0.63	0.00
Avail Cap(c_a), veh/h	930	938	915				0	508	466	298	1513	0
HCM Platoon Ratio	0.33	0.33	0.33				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.58	0.58	0.58				0.00	0.89	0.89	1.00	1.00	0.00
Uniform Delay (d), s/veh	48.9	46.2	46.5				0.0	41.8	42.1	29.8	28.1	0.0
Incr Delay (d2), s/veh	15.5	6.9	7.7				0.0	19.3	20.7	25.2	2.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	33.0	27.8	27.7				0.0	16.1	15.0	9.9	11.7	0.0
Lane Grp Delay (d), s/veh	64.3	53.1	54.2				0.0	61.2	62.8	55.0	30.1	0.0
Lane Grp LOS	E	D	D					E	E	D	C	
Approach Vol, veh/h		2526						874			1200	
Approach Delay, s/veh		57.4						62.0			35.3	
Approach LOS		E						E			D	

Timer					
Assigned Phs		6		4		3	8
Phs Duration (G+Y+Rc), s		66.0		36.8		17.2	54.0
Change Period (Y+Rc), s		5.0		4.8		3.0	4.8
Max Green Setting (Gmax), s		61.0		31.2		15.0	49.2
Max Q Clear Time (g_c+I1), s		60.4		30.6		14.1	26.4
Green Ext Time (p_c), s		0.5		0.3		0.1	2.2

Intersection Summary	
HCM 2010 Ctrl Delay	52.5
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	110	2260	30	0	0	0	0	80	80	140	90	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	186.3	190.0	190.0	186.3	0.0
Lanes	0	3	0				0	1	0	0	1	0
Cap, veh/h	154	3362	47				0	231	231	212	123	0
Arrive On Green	0.21	0.21	0.21				0.00	0.27	0.26	0.26	0.27	0.00
Sat Flow, veh/h	240	5251	73				0	856	856	592	456	0
Grp Volume(v), veh/h	895	817	815				0	0	168	242	0	0
Grp Sat Flow(s),veh/h/ln	1851	1863	1850				0	0	1712	1049	0	0
Q Serve(g_s), s	50.1	44.6	44.8				0.0	0.0	8.8	17.0	0.0	0.0
Cycle Q Clear(g_c), s	50.1	44.6	44.8				0.0	0.0	8.8	25.8	0.0	0.0
Prop In Lane	0.13		0.04				0.00		0.50	0.61		0.00
Lane Grp Cap(c), veh/h	1185	1193	1185				0	0	462	326	0	0
V/C Ratio(X)	0.76	0.69	0.69				0.00	0.00	0.36	0.74	0.00	0.00
Avail Cap(c_a), veh/h	1185	1193	1185				0	0	613	450	0	0
HCM Platoon Ratio	0.33	0.33	0.33				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	0.00	0.87	1.00	0.00	0.00
Uniform Delay (d), s/veh	35.4	33.2	33.3				0.0	0.0	32.8	42.0	0.0	0.0
Incr Delay (d2), s/veh	4.5	3.2	3.3				0.0	0.0	0.3	3.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	26.7	23.6	23.6				0.0	0.0	3.9	7.1	0.0	0.0
Lane Grp Delay (d), s/veh	39.9	36.4	36.6				0.0	0.0	33.1	45.5	0.0	0.0
Lane Grp LOS	D	D	D						C	D		
Approach Vol, veh/h		2527						168			242	
Approach Delay, s/veh		37.7						33.1			45.5	
Approach LOS		D						C			D	

Timer												
Assigned Phs		6						4			8	
Phs Duration (G+Y+Rc), s		75.6						34.7			34.7	
Change Period (Y+Rc), s		5.0						5.9			5.9	
Max Green Setting (Gmax), s		70.6						38.5			38.5	
Max Q Clear Time (g_c+I1), s		52.1						10.8			27.8	
Green Ext Time (p_c), s		12.9						1.3			1.0	

Intersection Summary												
HCM 2010 Ctrl Delay			38.1									
HCM 2010 LOS			D									

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	150	2100	70	0	0	0	0	720	150	60	1200	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	186.3	190.0	186.3	186.3	0.0
Lanes	0	3	0				0	2	0	1	2	0
Cap, veh/h	157	2348	81				0	1159	242	223	1661	0
Arrive On Green	0.15	0.15	0.15				0.00	0.39	0.38	0.03	0.45	0.00
Sat Flow, veh/h	337	5031	173				0	2992	624	1774	3725	0
Grp Volume(v), veh/h	866	792	785				0	472	444	63	1263	0
Grp Sat Flow(s),veh/h/ln	1846	1863	1832				0	1863	1753	1774	1863	0
Q Serve(g_s), s	56.0	50.2	50.6				0.0	24.9	25.0	2.5	34.1	0.0
Cycle Q Clear(g_c), s	56.0	50.2	50.6				0.0	24.9	25.0	2.5	34.1	0.0
Prop In Lane	0.18		0.09				0.00		0.36	1.00		0.00
Lane Grp Cap(c), veh/h	861	869	855				0	722	679	223	1661	0
V/C Ratio(X)	1.01	0.91	0.92				0.00	0.65	0.65	0.28	0.76	0.00
Avail Cap(c_a), veh/h	861	869	855				0	722	679	306	1661	0
HCM Platoon Ratio	0.33	0.33	0.33				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.50	0.50	0.50				0.00	0.87	0.87	1.00	1.00	0.00
Uniform Delay (d), s/veh	50.8	48.3	48.5				0.0	30.2	30.3	23.7	27.9	0.0
Incr Delay (d2), s/veh	23.0	8.7	9.4				0.0	1.8	2.0	0.7	3.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	33.5	27.5	27.4				0.0	12.0	11.4	1.1	16.6	0.0
Lane Grp Delay (d), s/veh	73.8	57.0	57.9				0.0	32.0	32.3	24.3	31.2	0.0
Lane Grp LOS	F	E	E					C	C	C	C	
Approach Vol, veh/h		2443						916			1326	
Approach Delay, s/veh		63.2						32.1			30.9	
Approach LOS		E						C			C	

Timer					
Assigned Phs		6		4		3	8
Phs Duration (G+Y+Rc), s		61.0		52.0		7.0	59.0
Change Period (Y+Rc), s		5.0		6.5		3.0	6.5
Max Green Setting (Gmax), s		56.0		39.9		9.6	52.5
Max Q Clear Time (g_c+I1), s		58.0		27.0		4.5	36.1
Green Ext Time (p_c), s		0.0		8.6		0.1	10.2

Intersection Summary	
HCM 2010 Ctrl Delay	48.0
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Volume (veh/h)	170	1900	50	0	0	0	0	240	100	320	340	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	186.3	190.0	186.3	193.7	0.0
Lanes	0	3	0				0	2	0	1	1	0
Cap, veh/h	216	2581	70				0	466	188	446	724	0
Arrive On Green	0.52	0.52	0.52				0.00	0.18	0.18	0.16	0.37	0.00
Sat Flow, veh/h	417	4990	136				0	2527	1019	1774	1937	0
Grp Volume(v), veh/h	790	725	718				0	185	173	337	358	0
Grp Sat Flow(s),veh/h/ln	1842	1863	1839				0	1863	1683	1774	1937	0
Q Serve(g_s), s	38.3	32.5	32.7				0.0	9.5	9.9	15.7	15.0	0.0
Cycle Q Clear(g_c), s	38.3	32.5	32.7				0.0	9.5	9.9	15.7	15.0	0.0
Prop In Lane	0.23		0.07				0.00		0.61	1.00		0.00
Lane Grp Cap(c), veh/h	953	964	951				0	344	311	446	724	0
V/C Ratio(X)	0.83	0.75	0.75				0.00	0.54	0.56	0.76	0.49	0.00
Avail Cap(c_a), veh/h	1203	1217	1201				0	344	311	446	724	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.23	0.23	0.23				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	21.5	20.1	20.2				0.0	39.0	39.2	27.3	25.4	0.0
Incr Delay (d2), s/veh	1.0	0.5	0.5				0.0	5.9	7.1	7.2	2.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	17.1	14.6	14.5				0.0	5.1	4.9	7.8	7.7	0.0
Lane Grp Delay (d), s/veh	22.5	20.6	20.7				0.0	44.9	46.2	34.5	27.8	0.0
Lane Grp LOS	C	C	C					D	D	C	C	
Approach Vol, veh/h		2232						358			695	
Approach Delay, s/veh		21.3						45.5			31.1	
Approach LOS		C						D			C	

Timer					
Assigned Phs		6		4	3	8
Phs Duration (G+Y+Rc), s		59.6		26.0	20.0	46.0
Change Period (Y+Rc), s		5.0		6.5	3.0	6.5
Max Green Setting (Gmax), s		69.0		19.5	17.0	39.5
Max Q Clear Time (g_c+I1), s		40.3		11.9	17.7	17.0
Green Ext Time (p_c), s		14.4		1.4	0.0	1.9

Intersection Summary	
HCM 2010 Ctrl Delay	26.0
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	120	0	20	0	0	0	0	1600	1520	450	1680	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	9	12	9	11	11	11	12	10	12	12	10	12
Total Lost time (s)	3.9		3.9					3.6	4.6	4.6	3.6	
Lane Util. Factor	1.00		1.00					0.91	0.91	0.97	0.95	
Frt	1.00		0.85					0.96	0.85	1.00	1.00	
Flt Protected	0.95		1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1593		1425					3041	1441	3433	3303	
Flt Permitted	0.95		1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1593		1425					3041	1441	3433	3303	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	126	0	21	0	0	0	0	1684	1600	474	1768	0
RTOR Reduction (vph)	0	0	19	0	0	0	0	25	161	0	0	0
Lane Group Flow (vph)	126	0	2	0	0	0	0	2251	847	474	1768	0
Turn Type	custom		custom					NA	Perm	Prot	NA	
Protected Phases			8					6		5	2	
Permitted Phases	8								6			
Actuated Green, G (s)	13.1		13.1					84.4	84.4	18.4	107.4	
Effective Green, g (s)	14.1		14.1					85.4	84.4	18.4	108.4	
Actuated g/C Ratio	0.11		0.11					0.66	0.65	0.14	0.83	
Clearance Time (s)	4.9		4.9					4.6	4.6	4.6	4.6	
Vehicle Extension (s)	2.5		2.5					2.5	2.5	3.0	2.5	
Lane Grp Cap (vph)	172		154					1997	935	485	2754	
v/s Ratio Prot			0.00					c0.74		c0.14	0.54	
v/s Ratio Perm	c0.08								0.59			
v/c Ratio	0.73		0.01					1.13	0.91	0.98	0.64	
Uniform Delay, d1	56.1		51.7					22.3	19.4	55.6	3.9	
Progression Factor	1.00		1.00					0.80	0.65	1.00	1.00	
Incremental Delay, d2	23.9		0.2					57.9	1.6	34.6	1.2	
Delay (s)	80.0		51.9					75.7	14.2	90.2	5.0	
Level of Service	F		D					E	B	F	A	
Approach Delay (s)		76.0			0.0			56.8			23.0	
Approach LOS		E			A			E			C	

Intersection Summary			
HCM 2000 Control Delay	44.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.06		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	12.1
Intersection Capacity Utilization	90.4%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1060	0	50	260	270	370	190	1430	0	0	1420	150
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	11	12	12	11	12	11	10	12	10	10	12
Total Lost time (s)	6.7		6.7	6.7	5.7		3.5	5.0			5.0	5.0
Lane Util. Factor	0.97		1.00	0.97	1.00		1.00	0.91			0.95	1.00
Frt	1.00		0.85	1.00	0.91		1.00	1.00			1.00	0.85
Flt Protected	0.95		1.00	0.95	1.00		0.95	1.00			1.00	1.00
Satd. Flow (prot)	3433		1583	3433	1645		1711	4746			3303	1583
Flt Permitted	0.09		1.00	0.95	1.00		0.12	1.00			1.00	1.00
Satd. Flow (perm)	319		1583	3433	1645		218	4746			3303	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	1116	0	53	274	284	389	200	1505	0	0	1495	158
RTOR Reduction (vph)	0	0	35	0	6	0	0	0	0	0	0	85
Lane Group Flow (vph)	1116	0	18	274	667	0	200	1505	0	0	1495	73
Turn Type	custom		custom	Split	NA		pm+pt	NA			NA	Perm
Protected Phases				2	2		7	4			8	
Permitted Phases	1		1				4					8
Actuated Green, G (s)	45.3		45.3	25.3	25.3		40.0	40.0			30.0	30.0
Effective Green, g (s)	45.3		45.3	25.3	26.3		39.5	41.0			31.0	31.0
Actuated g/C Ratio	0.35		0.35	0.19	0.20		0.30	0.32			0.24	0.24
Clearance Time (s)	6.7		6.7	6.7	6.7		3.0	6.0			6.0	6.0
Vehicle Extension (s)	2.5		2.5	2.5	2.5		2.0	2.5			2.5	2.5
Lane Grp Cap (vph)	111		551	668	332		140	1496			787	377
v/s Ratio Prot				0.08	c0.41		c0.07	0.32			c0.45	
v/s Ratio Perm	c3.50		0.01				0.36					0.05
v/c Ratio	10.05		0.03	0.41	2.01		1.43	1.01			1.90	0.19
Uniform Delay, d1	42.4		27.9	45.8	51.9		42.1	44.5			49.5	39.5
Progression Factor	1.00		1.00	1.00	1.00		1.00	1.00			0.92	0.83
Incremental Delay, d2	4092.3		0.1	1.9	464.1		229.0	24.7			408.5	0.9
Delay (s)	4134.6		28.0	47.7	516.0		271.0	69.2			454.2	33.8
Level of Service	F		C	D	F		F	E			F	C
Approach Delay (s)		3948.4			380.5			92.9			414.0	
Approach LOS		F			F			F			F	

Intersection Summary			
HCM 2000 Control Delay	1063.0	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	5.33		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	21.9
Intersection Capacity Utilization	132.5%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	30	700	50	50	50	0	0	100	60
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	186.3	190.0	190.0	186.3	0.0	0.0	186.3	190.0
Lanes				0	3	0	0	1	0	0	1	0
Cap, veh/h				149	3657	270	102	87	0	0	176	106
Arrive On Green				0.24	0.24	0.24	0.16	0.16	0.00	0.00	0.16	0.16
Sat Flow, veh/h				202	4946	366	328	536	0	0	1092	655
Grp Volume(v), veh/h				293	268	261	106	0	0	0	0	168
Grp Sat Flow(s),veh/h/ln				1853	1863	1798	865	0	0	0	0	1747
Q Serve(g_s), s				14.0	12.7	12.8	5.3	0.0	0.0	0.0	0.0	9.9
Cycle Q Clear(g_c), s				14.0	12.7	12.8	15.2	0.0	0.0	0.0	0.0	9.9
Prop In Lane				0.11		0.20	0.50		0.00	0.00		0.37
Lane Grp Cap(c), veh/h				1370	1377	1330	188	0	0	0	0	282
V/C Ratio(X)				0.21	0.19	0.20	0.56	0.00	0.00	0.00	0.00	0.60
Avail Cap(c_a), veh/h				1370	1377	1330	309	0	0	0	0	425
HCM Platoon Ratio				0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.78	0.78	0.78	1.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				16.2	15.7	15.7	46.5	0.0	0.0	0.0	0.0	43.1
Incr Delay (d2), s/veh				0.3	0.2	0.3	2.6	0.0	0.0	0.0	0.0	2.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				7.1	6.5	6.3	3.1	0.0	0.0	0.0	0.0	4.6
Lane Grp Delay (d), s/veh				16.5	16.0	16.0	49.2	0.0	0.0	0.0	0.0	45.2
Lane Grp LOS				B	B	B	D					D
Approach Vol, veh/h					822			106			168	
Approach Delay, s/veh					16.2			49.2			45.2	
Approach LOS					B			D			D	

Timer	
Assigned Phs	2 4 8
Phs Duration (G+Y+Rc), s	87.0 23.9 23.9
Change Period (Y+Rc), s	5.0 6.0 6.0
Max Green Setting (Gmax), s	82.0 27.0 27.0
Max Q Clear Time (g_c+I1), s	16.0 17.2 11.9
Green Ext Time (p_c), s	3.6 0.7 0.9

Intersection Summary	
HCM 2010 Ctrl Delay	23.8
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	280	670	190	100	780	0	0	1290	100
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	186.3	190.0	186.3	186.3	0.0	0.0	186.3	190.0
Lanes				0	3	0	1	2	0	0	2	0
Cap, veh/h				506	1307	377	164	1894	0	0	1487	115
Arrive On Green				0.13	0.13	0.13	0.05	0.51	0.00	0.00	0.44	0.43
Sat Flow, veh/h				1240	3201	922	1774	3725	0	0	3416	263
Grp Volume(v), veh/h				428	403	369	105	821	0	0	738	725
Grp Sat Flow(s),veh/h/ln				1801	1863	1700	1774	1863	0	0	1863	1816
Q Serve(g_s), s				26.8	24.2	24.3	3.8	16.7	0.0	0.0	44.5	45.0
Cycle Q Clear(g_c), s				26.8	24.2	24.3	3.8	16.7	0.0	0.0	44.5	45.0
Prop In Lane				0.69		0.54	1.00		0.00	0.00		0.14
Lane Grp Cap(c), veh/h				735	761	694	164	1894	0	0	811	791
V/C Ratio(X)				0.58	0.53	0.53	0.64	0.43	0.00	0.00	0.91	0.92
Avail Cap(c_a), veh/h				735	761	694	227	1894	0	0	811	791
HCM Platoon Ratio				0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.97	0.97	0.97	1.00	1.00	0.00	0.00	0.50	0.50
Uniform Delay (d), s/veh				42.3	41.2	41.2	27.7	18.6	0.0	0.0	31.7	31.9
Incr Delay (d2), s/veh				3.3	2.6	2.8	4.1	0.7	0.0	0.0	9.2	9.9
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				13.8	12.8	11.7	3.5	7.7	0.0	0.0	22.8	22.5
Lane Grp Delay (d), s/veh				45.6	43.7	44.0	31.8	19.3	0.0	0.0	40.9	41.8
Lane Grp LOS				D	D	D	C	B			D	D
Approach Vol, veh/h					1200			926			1463	
Approach Delay, s/veh					44.5			20.7			41.3	
Approach LOS					D			C			D	

Timer												
Assigned Phs					2		7	4			8	
Phs Duration (G+Y+Rc), s					54.0		8.8	66.0			57.2	
Change Period (Y+Rc), s					5.0		3.0	6.0			6.0	
Max Green Setting (Gmax), s					49.0		10.0	60.0			47.3	
Max Q Clear Time (g_c+I1), s					28.8		5.8	18.7			47.0	
Green Ext Time (p_c), s					5.4		0.1	12.5			0.3	

Intersection Summary		
HCM 2010 Ctrl Delay		37.1
HCM 2010 LOS		D

Notes

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations			↑↑↑			↱
Volume (vph)	0	0	1140	0	0	70
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	12	11	12	12	11	12
Total Lost time (s)			5.0			4.3
Lane Util. Factor			0.91			1.00
Frt			1.00			0.86
Flt Protected			1.00			1.00
Satd. Flow (prot)			5187			1644
Flt Permitted			1.00			1.00
Satd. Flow (perm)			5187			1644
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	1200	0	0	74
RTOR Reduction (vph)	0	0	0	0	0	71
Lane Group Flow (vph)	0	0	1200	0	0	3
Heavy Vehicles (%)	2%	2%	0%	0%	2%	0%
Turn Type			NA			custom
Protected Phases			2			
Permitted Phases						8
Actuated Green, G (s)			106.3			4.4
Effective Green, g (s)			106.3			4.4
Actuated g/C Ratio			0.89			0.04
Clearance Time (s)			5.0			4.3
Vehicle Extension (s)			3.0			2.5
Lane Grp Cap (vph)			4594			60
v/s Ratio Prot			c0.23			
v/s Ratio Perm						c0.00
v/c Ratio			0.26			0.05
Uniform Delay, d1			1.0			55.8
Progression Factor			0.68			1.00
Incremental Delay, d2			0.1			0.2
Delay (s)			0.8			56.0
Level of Service			A			E
Approach Delay (s)		0.0	0.8		56.0	
Approach LOS	.	A	A		E	

Intersection Summary			
HCM 2000 Control Delay	4.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.25		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	9.3
Intersection Capacity Utilization	34.1%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	30	900	110	80	80	0	0	90	140
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	190.0	190.0	190.0	195.6	0.0	0.0	196.1	190.0
Lanes				0	3	0	0	1	0	0	1	0
Cap, veh/h				100	3134	397	166	154	0	0	195	302
Arrive On Green				0.65	0.65	0.65	0.27	0.28	0.00	0.00	0.28	0.27
Sat Flow, veh/h				154	4821	610	430	549	0	0	695	1076
Grp Volume(v), veh/h				394	360	341	168	0	0	0	0	242
Grp Sat Flow(s),veh/h/ln				1892	1900	1792	979	0	0	0	0	1771
Q Serve(g_s), s				11.0	9.8	9.9	9.9	0.0	0.0	0.0	0.0	13.7
Cycle Q Clear(g_c), s				11.0	9.8	9.9	23.7	0.0	0.0	0.0	0.0	13.7
Prop In Lane				0.08		0.34	0.50		0.00	0.00		0.61
Lane Grp Cap(c), veh/h				1230	1235	1165	312	0	0	0	0	497
V/C Ratio(X)				0.32	0.29	0.29	0.54	0.00	0.00	0.00	0.00	0.49
Avail Cap(c_a), veh/h				1230	1235	1165	312	0	0	0	0	497
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.37
Uniform Delay (d), s/veh				9.3	9.1	9.1	42.7	0.0	0.0	0.0	0.0	36.2
Incr Delay (d2), s/veh				0.7	0.6	0.6	6.5	0.0	0.0	0.0	0.0	1.3
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				5.1	4.5	4.3	5.5	0.0	0.0	0.0	0.0	6.4
Lane Grp Delay (d), s/veh				10.0	9.7	9.7	49.2	0.0	0.0	0.0	0.0	37.5
Lane Grp LOS				A	A	A	D					D
Approach Vol, veh/h					1095			168			242	
Approach Delay, s/veh					9.8			49.2			37.5	
Approach LOS					A			D			D	

Timer	
Assigned Phs	2 4 8
Phs Duration (G+Y+Rc), s	83.0 37.0 37.0
Change Period (Y+Rc), s	5.0 4.3 4.3
Max Green Setting (Gmax), s	78.0 32.7 32.7
Max Q Clear Time (g_c+I1), s	13.0 25.7 15.7
Green Ext Time (p_c), s	5.3 0.8 1.2

Intersection Summary	
HCM 2010 Ctrl Delay	18.6
HCM 2010 LOS	B

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	220	750	130	120	640	0	0	940	170
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	190.0	190.0	186.3	186.3	0.0	0.0	186.3	190.0
Lanes				0	3	0	1	2	0	0	2	1
Cap, veh/h				532	1946	344	210	1530	0	0	1189	501
Arrive On Green				0.51	0.51	0.51	0.06	0.41	0.00	0.00	0.32	0.31
Sat Flow, veh/h				1041	3813	675	1774	3725	0	0	3725	1615
Grp Volume(v), veh/h				412	385	362	126	674	0	0	989	179
Grp Sat Flow(s),veh/h/ln				1848	1900	1781	1774	1863	0	0	1863	1615
Q Serve(g_s), s				15.7	13.9	13.9	5.2	14.5	0.0	0.0	27.5	9.6
Cycle Q Clear(g_c), s				15.7	13.9	13.9	5.2	14.5	0.0	0.0	27.5	9.6
Prop In Lane				0.56		0.38	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				943	970	909	210	1530	0	0	1189	501
V/C Ratio(X)				0.44	0.40	0.40	0.60	0.44	0.00	0.00	0.83	0.36
Avail Cap(c_a), veh/h				943	970	909	302	1809	0	0	1275	538
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.67	0.67
Uniform Delay (d), s/veh				17.2	16.8	16.8	27.3	23.7	0.0	0.0	35.2	29.9
Incr Delay (d2), s/veh				1.5	1.2	1.3	2.7	0.2	0.0	0.0	3.1	0.3
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				7.4	6.7	6.4	3.8	6.8	0.0	0.0	13.6	4.0
Lane Grp Delay (d), s/veh				18.7	18.0	18.1	30.0	23.9	0.0	0.0	38.4	30.2
Lane Grp LOS				B	B	B	C	C			D	C
Approach Vol, veh/h					1158			800			1168	
Approach Delay, s/veh					18.3			24.8			37.1	
Approach LOS					B			C			D	

Timer												
Assigned Phs					2		7	4			8	
Phs Duration (G+Y+Rc), s					62.0		10.2	49.7			39.4	
Change Period (Y+Rc), s					5.0		3.0	4.8			4.8	
Max Green Setting (Gmax), s					57.0		13.0	53.2			37.2	
Max Q Clear Time (g_c+I1), s					17.7		7.2	16.5			29.5	
Green Ext Time (p_c), s					5.7		0.2	12.3			5.2	

Intersection Summary		
HCM 2010 Ctrl Delay		27.0
HCM 2010 LOS		C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	210	740	130	200	540	0	0	580	130
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	190.0	190.0	190.0	186.3	0.0	0.0	186.9	190.0
Lanes				0	3	0	0	2	0	0	2	0
Cap, veh/h				564	2139	384	202	626	0	0	1093	244
Arrive On Green				0.18	0.18	0.18	0.36	0.37	0.00	0.00	0.37	0.36
Sat Flow, veh/h				1010	3831	687	386	1695	0	0	2960	662
Grp Volume(v), veh/h				405	378	355	211	568	0	0	385	363
Grp Sat Flow(s),veh/h/ln				1849	1900	1779	386	1695	0	0	1869	1753
Q Serve(g_s), s				23.1	20.8	20.9	23.5	38.1	0.0	0.0	19.7	19.8
Cycle Q Clear(g_c), s				23.1	20.8	20.9	43.3	38.1	0.0	0.0	19.7	19.8
Prop In Lane				0.55		0.39	1.00		0.00	0.00		0.38
Lane Grp Cap(c), veh/h				1033	1061	993	199	626	0	0	690	647
V/C Ratio(X)				0.39	0.36	0.36	1.06	0.91	0.00	0.00	0.56	0.56
Avail Cap(c_a), veh/h				1033	1061	993	199	626	0	0	690	647
HCM Platoon Ratio				0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.97	0.97	0.97	1.00	1.00	0.00	0.00	0.09	0.09
Uniform Delay (d), s/veh				31.0	30.1	30.1	51.5	35.9	0.0	0.0	30.1	30.3
Incr Delay (d2), s/veh				1.1	0.9	1.0	80.4	19.3	0.0	0.0	0.1	0.1
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				11.9	11.0	10.3	10.7	19.6	0.0	0.0	9.2	8.8
Lane Grp Delay (d), s/veh				32.1	31.0	31.1	131.8	55.2	0.0	0.0	30.2	30.4
Lane Grp LOS				C	C	C	F	E			C	C
Approach Vol, veh/h					1137			779			748	
Approach Delay, s/veh					31.4			76.0			30.3	
Approach LOS					C			E			C	

Timer			
Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	72.0	48.0	48.0
Change Period (Y+Rc), s	5.0	4.7	4.7
Max Green Setting (Gmax), s	67.0	43.3	43.3
Max Q Clear Time (g_c+I1), s	25.1	45.3	21.8
Green Ext Time (p_c), s	5.6	0.0	7.2

Intersection Summary	
HCM 2010 Ctrl Delay	44.1
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	70	1010	0	50	0	0	0	70	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	10	12	12	12	12	12	11	12	12	11	12
Total Lost time (s)					5.0		4.3				4.3	4.3
Lane Util. Factor					0.91		1.00				1.00	1.00
Frt					1.00		1.00				1.00	0.85
Flt Protected					1.00		0.95				1.00	1.00
Satd. Flow (prot)					5069		1805				1801	1615
Flt Permitted					1.00		0.71				1.00	1.00
Satd. Flow (perm)					5069		1347				1801	1615
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	74	1063	0	53	0	0	0	74	84
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	68
Lane Group Flow (vph)	0	0	0	0	1137	0	53	0	0	0	74	16
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	0%	2%	2%	2%	2%	0%
Turn Type				Perm	NA		custom				NA	Perm
Protected Phases					2						8	
Permitted Phases				2			4					8
Actuated Green, G (s)					88.0		22.7				22.7	22.7
Effective Green, g (s)					88.0		22.7				22.7	22.7
Actuated g/C Ratio					0.73		0.19				0.19	0.19
Clearance Time (s)					5.0		4.3				4.3	4.3
Vehicle Extension (s)					3.0		3.0				3.0	3.0
Lane Grp Cap (vph)					3717		254				340	305
v/s Ratio Prot											c0.04	
v/s Ratio Perm					0.22		0.04					0.01
v/c Ratio					0.31		0.21				0.22	0.05
Uniform Delay, d1					5.5		41.1				41.1	39.8
Progression Factor					0.66		1.00				1.00	1.00
Incremental Delay, d2					0.2		1.9				0.3	0.1
Delay (s)					3.9		42.9				41.5	39.9
Level of Service					A		D				D	D
Approach Delay (s)		0.0			3.9			42.9			40.6	
Approach LOS		A			A			D			D	

Intersection Summary			
HCM 2000 Control Delay	9.7	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.29		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	9.3
Intersection Capacity Utilization	40.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	90	810	90	100	210	0	0	190	70
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	186.3	190.0	190.0	186.3	0.0	0.0	186.3	190.0
Lanes				0	3	0	0	1	0	0	1	0
Cap, veh/h				285	2732	313	125	234	0	0	392	145
Arrive On Green				0.20	0.20	0.20	0.30	0.30	0.00	0.00	0.30	0.30
Sat Flow, veh/h				469	4491	514	284	775	0	0	1298	480
Grp Volume(v), veh/h				373	343	328	326	0	0	0	0	274
Grp Sat Flow(s),veh/h/ln				1839	1863	1772	1059	0	0	0	0	1778
Q Serve(g_s), s				20.8	18.8	18.9	20.9	0.0	0.0	0.0	0.0	15.3
Cycle Q Clear(g_c), s				20.8	18.8	18.9	36.2	0.0	0.0	0.0	0.0	15.3
Prop In Lane				0.26		0.29	0.32		0.00	0.00		0.27
Lane Grp Cap(c), veh/h				1119	1133	1078	359	0	0	0	0	536
V/C Ratio(X)				0.33	0.30	0.30	0.91	0.00	0.00	0.00	0.00	0.51
Avail Cap(c_a), veh/h				1119	1133	1078	359	0	0	0	0	536
HCM Platoon Ratio				0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.94	0.94	0.94	1.00	0.00	0.00	0.00	0.00	0.16
Uniform Delay (d), s/veh				27.1	26.3	26.3	45.8	0.0	0.0	0.0	0.0	34.6
Incr Delay (d2), s/veh				0.8	0.6	0.7	29.0	0.0	0.0	0.0	0.0	0.5
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				10.6	9.7	9.3	13.0	0.0	0.0	0.0	0.0	7.0
Lane Grp Delay (d), s/veh				27.9	26.9	27.0	74.8	0.0	0.0	0.0	0.0	35.1
Lane Grp LOS				C	C	C	E					D
Approach Vol, veh/h					1043			326			274	
Approach Delay, s/veh					27.3			74.8			35.1	
Approach LOS					C			E			D	

Timer												
Assigned Phs					2			4			8	
Phs Duration (G+Y+Rc), s					78.0			42.0			42.0	
Change Period (Y+Rc), s					5.0			5.8			5.8	
Max Green Setting (Gmax), s					73.0			36.2			36.2	
Max Q Clear Time (g_c+I1), s					22.8			38.2			17.3	
Green Ext Time (p_c), s					5.0			0.0			1.8	

Intersection Summary												
HCM 2010 Ctrl Delay			38.0									
HCM 2010 LOS			D									

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	0	880	180	140	330	0	0	0	0
Number				5	2	12	7	4	14			
Initial Q (Qb), veh				0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00			
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow veh/h/ln				0.0	186.3	190.0	190.0	186.3	0.0			
Lanes				0	3	0	0	1	0			
Cap, veh/h				0	2532	515	36	29	0			
Arrive On Green				0.00	0.19	0.19	0.36	0.36	0.00			
Sat Flow, veh/h				0	4510	917	0	80	0			
Grp Volume(v), veh/h				0	764	351	494	0	0			
Grp Sat Flow(s),veh/h/ln				0	1863	1701	80	0	0			
Q Serve(g_s), s				0.0	23.3	23.4	0.0	0.0	0.0			
Cycle Q Clear(g_c), s				0.0	23.3	23.4	47.0	0.0	0.0			
Prop In Lane				0.00		0.54	0.30		0.00			
Lane Grp Cap(c), veh/h				0	2092	955	65	0	0			
V/C Ratio(X)				0.00	0.37	0.37	7.61	0.00	0.00			
Avail Cap(c_a), veh/h				0	2092	955	65	0	0			
HCM Platoon Ratio				1.00	0.33	0.33	1.00	1.00	1.00			
Upstream Filter(I)				0.00	0.78	0.78	1.00	0.00	0.00			
Uniform Delay (d), s/veh				0.0	32.7	32.8	44.5	0.0	0.0			
Incr Delay (d2), s/veh				0.0	0.4	0.8	3004.0	0.0	0.0			
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0			
%ile Back of Q (50%), veh/ln				0.0	11.9	11.0	55.6	0.0	0.0			
Lane Grp Delay (d), s/veh				0.0	33.1	33.6	3048.4	0.0	0.0			
Lane Grp LOS					C	C	F					
Approach Vol, veh/h					1115			494				
Approach Delay, s/veh					33.3			3048.4				
Approach LOS					C			F				

Timer	
Assigned Phs	2 4
Phs Duration (G+Y+Rc), s	78.0 52.0
Change Period (Y+Rc), s	5.0 5.0
Max Green Setting (Gmax), s	73.0 47.0
Max Q Clear Time (g_c+I1), s	25.4 49.0
Green Ext Time (p_c), s	10.1 0.0

Intersection Summary	
HCM 2010 Ctrl Delay	959.0
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↑↑↑						↑↑	↱
Volume (veh/h)	0	0	0	0	550	0	0	0	0	0	110	620
Number				5	2	12				3	8	18
Initial Q (Qb), veh				0	0	0				0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00				1.00		1.00
Parking Bus Adj				1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow veh/h/ln				0.0	167.6	0.0				0.0	167.6	167.6
Lanes				0	3	0				0	2	1
Cap, veh/h				0	2040	0				0	1609	684
Arrive On Green				0.00	0.13	0.00				0.00	0.48	0.48
Sat Flow, veh/h				0	5029	0				0	3353	1425
Grp Volume(v), veh/h				0	579	0				0	116	653
Grp Sat Flow(s),veh/h/ln				0	1676	0				0	1676	1425
Q Serve(g_s), s				0.0	10.0	0.0				0.0	1.8	42.3
Cycle Q Clear(g_c), s				0.0	10.0	0.0				0.0	1.8	42.3
Prop In Lane				0.00		0.00				0.00		1.00
Lane Grp Cap(c), veh/h				0	2040	0				0	1609	684
V/C Ratio(X)				0.00	0.28	0.00				0.00	0.07	0.95
Avail Cap(c_a), veh/h				0	2040	0				0	2790	1186
HCM Platoon Ratio				1.00	0.33	1.00				1.00	1.00	1.00
Upstream Filter(I)				0.00	1.00	0.00				0.00	0.09	0.09
Uniform Delay (d), s/veh				0.0	29.1	0.0				0.0	13.5	24.0
Incr Delay (d2), s/veh				0.0	0.3	0.0				0.0	0.0	0.8
Initial Q Delay(d3),s/veh				0.0	0.0	0.0				0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				0.0	4.6	0.0				0.0	0.7	14.5
Lane Grp Delay (d), s/veh				0.0	29.4	0.0				0.0	13.5	24.8
Lane Grp LOS					C						B	C
Approach Vol, veh/h					579						769	
Approach Delay, s/veh					29.4						23.1	
Approach LOS					C						C	

Timer	
Assigned Phs	2	8
Phs Duration (G+Y+Rc), s	44.0	52.1
Change Period (Y+Rc), s	5.0	6.0
Max Green Setting (Gmax), s	39.0	80.0
Max Q Clear Time (g_c+I1), s	12.0	44.3
Green Ext Time (p_c), s	4.3	1.9

Intersection Summary	
HCM 2010 Ctrl Delay	25.8
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	0	2370	360	140	410	0	0	0	240
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					5.0		4.7	4.7				4.7
Lane Util. Factor					0.91		1.00	1.00				1.00
Frt					0.98		1.00	1.00				0.86
Flt Protected					1.00		0.95	1.00				1.00
Satd. Flow (prot)					4486		1593	1676				1450
Flt Permitted					1.00		0.95	1.00				1.00
Satd. Flow (perm)					4486		1593	1676				1450
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	0	2495	379	147	432	0	0	0	253
RTOR Reduction (vph)	0	0	0	0	15	0	12	0	0	0	0	12
Lane Group Flow (vph)	0	0	0	0	2859	0	135	432	0	0	0	241
Turn Type					NA		Perm	NA				custom
Protected Phases					2			4				
Permitted Phases							4					8
Actuated Green, G (s)					81.0		39.3	39.3				39.3
Effective Green, g (s)					81.0		39.3	39.3				39.3
Actuated g/C Ratio					0.62		0.30	0.30				0.30
Clearance Time (s)					5.0		4.7	4.7				4.7
Vehicle Extension (s)					3.0		3.0	3.0				2.5
Lane Grp Cap (vph)					2795		481	506				438
v/s Ratio Prot					c0.64			c0.26				
v/s Ratio Perm							0.08					0.17
v/c Ratio					1.02		0.28	0.85				0.55
Uniform Delay, d1					24.5		34.6	42.6				38.0
Progression Factor					0.61		1.00	1.00				0.65
Incremental Delay, d2					12.4		1.5	16.6				0.1
Delay (s)					27.3		36.0	59.2				24.7
Level of Service					C		D	E				C
Approach Delay (s)		0.0			27.3			53.3			24.7	
Approach LOS		A			C			D			C	

Intersection Summary			
HCM 2000 Control Delay	31.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	9.7
Intersection Capacity Utilization	96.9%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	130	2200	120	300	570	0	0	420	340
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				171.0	166.0	171.0	166.0	166.0	0.0	0.0	166.0	171.0
Lanes				0	3	0	1	2	0	0	2	0
Cap, veh/h				127	2284	127	286	1320	0	0	389	314
Arrive On Green				0.17	0.17	0.17	0.15	0.40	0.00	0.00	0.23	0.23
Sat Flow, veh/h				246	4432	246	1581	3320	0	0	1704	1374
Grp Volume(v), veh/h				916	836	827	316	600	0	0	431	369
Grp Sat Flow(s),veh/h/ln				1648	1660	1617	1581	1660	0	0	1660	1418
Q Serve(g_s), s				67.0	65.2	66.4	19.0	17.3	0.0	0.0	29.7	29.7
Cycle Q Clear(g_c), s				67.0	65.2	66.4	19.0	17.3	0.0	0.0	29.7	29.7
Prop In Lane				0.15		0.15	1.00		0.00	0.00		0.97
Lane Grp Cap(c), veh/h				849	856	833	286	1320	0	0	379	324
V/C Ratio(X)				1.08	0.98	0.99	1.10	0.45	0.00	0.00	1.14	1.14
Avail Cap(c_a), veh/h				849	856	833	286	1320	0	0	379	324
HCM Platoon Ratio				0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.09	0.09	0.09	1.00	1.00	0.00	0.00	0.93	0.93
Uniform Delay (d), s/veh				53.9	53.2	53.7	38.3	28.8	0.0	0.0	50.2	50.2
Incr Delay (d2), s/veh				37.8	5.3	7.8	83.7	1.1	0.0	0.0	86.9	92.1
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				38.9	30.6	30.9	16.4	7.5	0.0	0.0	21.9	19.2
Lane Grp Delay (d), s/veh				91.7	58.5	61.5	122.0	29.9	0.0	0.0	137.0	142.2
Lane Grp LOS				F	E	E	F	C			F	F
Approach Vol, veh/h					2579			916			800	
Approach Delay, s/veh					71.3			61.7			139.4	
Approach LOS					E			E			F	

Timer												
Assigned Phs					2		7	4			8	
Phs Duration (G+Y+Rc), s					72.0		22.0	58.0			36.0	
Change Period (Y+Rc), s					5.0		3.0	6.3			6.3	
Max Green Setting (Gmax), s					67.0		19.0	51.7			29.7	
Max Q Clear Time (g_c+I1), s					69.0		21.0	19.3			31.7	
Green Ext Time (p_c), s					0.0		0.0	4.0			0.0	

Intersection Summary												
HCM 2010 Ctrl Delay			81.9									
HCM 2010 LOS			F									

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	430	2000	0	0	0	0	0	1060	390
Number				5	2	12				3	8	18
Initial Q (Qb), veh				0	0	0				0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00				1.00		1.00
Parking Bus Adj				1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow veh/h/ln				171.0	166.0	0.0				0.0	166.0	171.0
Lanes				0	3	0				0	2	0
Cap, veh/h				55	1464	0				0	1029	371
Arrive On Green				0.16	0.16	0.00				0.00	0.44	0.44
Sat Flow, veh/h				0	3022	0				0	2331	841
Grp Volume(v), veh/h				453	2105	0				0	788	739
Grp Sat Flow(s),veh/h/ln				0	1511	0				0	1660	1512
Q Serve(g_s), s				0.0	63.0	0.0				0.0	57.4	57.4
Cycle Q Clear(g_c), s				63.0	63.0	0.0				0.0	57.4	57.4
Prop In Lane				1.00		0.00				0.00		0.56
Lane Grp Cap(c), veh/h				55	1464	0				0	733	668
V/C Ratio(X)				8.18	1.44	0.00				0.00	1.07	1.11
Avail Cap(c_a), veh/h				55	1464	0				0	733	668
HCM Platoon Ratio				0.33	0.33	1.00				1.00	1.00	1.00
Upstream Filter(I)				0.09	0.09	0.00				0.00	0.09	0.09
Uniform Delay (d), s/veh				86.1	54.6	0.0				0.0	36.3	36.3
Incr Delay (d2), s/veh				3233.9	197.3	0.0				0.0	36.7	50.6
Initial Q Delay(d3),s/veh				0.0	0.0	0.0				0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				51.7	66.0	0.0				0.0	31.5	31.3
Lane Grp Delay (d), s/veh				3320.1	251.9	0.0				0.0	73.0	86.9
Lane Grp LOS				F	F						F	F
Approach Vol, veh/h					2558						1527	
Approach Delay, s/veh					795.2						79.7	
Approach LOS					F						E	

Timer	
Assigned Phs	2	8
Phs Duration (G+Y+Rc), s	68.0	62.0
Change Period (Y+Rc), s	5.0	4.6
Max Green Setting (Gmax), s	63.0	57.4
Max Q Clear Time (g_c+I1), s	65.0	59.4
Green Ext Time (p_c), s	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	527.7
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	0	1900	450	720	1090	0	0	0	0
Number				5	2	12	7	4	14			
Initial Q (Qb), veh				0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00			
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow veh/h/ln				0.0	166.0	171.0	171.0	166.0	0.0			
Lanes				0	3	0	0	3	0			
Cap, veh/h				0	2024	461	55	1241	0			
Arrive On Green				0.00	0.52	0.52	0.41	0.41	0.00			
Sat Flow, veh/h				0	3928	895	0	3022	0			
Grp Volume(v), veh/h				0	1678	796	758	1147	0			
Grp Sat Flow(s),veh/h/ln				0	1660	1502	0	1511	0			
Q Serve(g_s), s				0.0	64.4	67.0	0.0	46.9	0.0			
Cycle Q Clear(g_c), s				0.0	64.4	67.0	53.4	46.9	0.0			
Prop In Lane				0.00		0.60	1.00		0.00			
Lane Grp Cap(c), veh/h				0	1711	774	55	1241	0			
V/C Ratio(X)				0.00	0.98	1.03	13.69	0.92	0.00			
Avail Cap(c_a), veh/h				0	1711	774	55	1241	0			
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)				0.00	0.09	0.09	1.00	1.00	0.00			
Uniform Delay (d), s/veh				0.0	30.9	31.5	65.0	36.4	0.0			
Incr Delay (d2), s/veh				0.0	3.4	17.9	5743.6	11.6	0.0			
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0			
%ile Back of Q (50%), veh/ln				0.0	27.2	28.6	90.2	19.8	0.0			
Lane Grp Delay (d), s/veh				0.0	34.3	49.4	5808.6	48.0	0.0			
Lane Grp LOS					C	F	F	D				
Approach Vol, veh/h					2474			1905				
Approach Delay, s/veh					39.2			2340.1				
Approach LOS					D			F				

Timer	
Assigned Phs	2	4
Phs Duration (G+Y+Rc), s	72.0	58.0
Change Period (Y+Rc), s	5.0	4.6
Max Green Setting (Gmax), s	67.0	53.4
Max Q Clear Time (g_c+I1), s	69.0	55.4
Green Ext Time (p_c), s	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	1040.2
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	450	640	210	870	1380	210	850	1700	810
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.7	6.7	6.7	5.0	6.2		5.0	6.2	6.2
Lane Util. Factor				0.95	0.95	1.00	0.97	0.95		0.97	0.95	1.00
Frt				1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85
Flt Protected				0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)				1498	1572	1411	3060	3092		3060	3154	1411
Flt Permitted				0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)				1498	1572	1411	3060	3092		3060	3154	1411
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	474	674	221	916	1453	221	895	1789	853
RTOR Reduction (vph)	0	0	0	0	0	81	0	8	0	0	0	38
Lane Group Flow (vph)	0	0	0	427	721	140	916	1666	0	895	1789	815
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type				Perm	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases					4		1	6		5	2	
Permitted Phases				4		4						2
Actuated Green, G (s)				46.3	46.3	46.3	27.0	58.8		27.0	58.8	58.8
Effective Green, g (s)				46.3	46.3	46.3	27.0	58.8		27.0	58.8	58.8
Actuated g/C Ratio				0.31	0.31	0.31	0.18	0.39		0.18	0.39	0.39
Clearance Time (s)				6.7	6.7	6.7	5.0	6.2		5.0	6.2	6.2
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)				462	485	435	550	1212		550	1236	553
v/s Ratio Prot							c0.30	0.54		0.29	0.57	
v/s Ratio Perm				0.28	0.46	0.10						c0.58
v/c Ratio				0.92	1.49	0.32	1.67	1.37		1.63	1.45	1.47
Uniform Delay, d1				50.2	51.9	39.8	61.5	45.6		61.5	45.6	45.6
Progression Factor				1.00	1.00	1.00	1.00	1.00		1.13	0.94	0.93
Incremental Delay, d2				24.2	229.8	0.4	307.4	173.9		283.0	201.8	213.9
Delay (s)				74.4	281.6	40.2	368.9	219.5		352.3	244.5	256.3
Level of Service				E	F	D	F	F		F	F	F
Approach Delay (s)		0.0			178.0			272.3			274.6	
Approach LOS		A			F			F			F	

Intersection Summary			
HCM 2000 Control Delay	256.2	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.52		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	17.9
Intersection Capacity Utilization	135.6%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	750	360	1170	60	0	60	0	1550	340	270	2300	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.7	6.7	6.7	6.7		6.7		6.2		3.0	6.2	
Lane Util. Factor	0.95	0.95	1.00	1.00		1.00		0.91		1.00	0.95	
Frt	1.00	1.00	0.85	1.00		0.85		0.97		1.00	1.00	
Flt Protected	0.95	0.98	1.00	0.95		1.00		1.00		0.95	1.00	
Satd. Flow (prot)	1498	1549	1411	1577		1411		4410		1577	3154	
Flt Permitted	0.95	0.98	1.00	0.43		1.00		1.00		0.07	1.00	
Satd. Flow (perm)	1498	1549	1411	711		1411		4410		115	3154	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	789	379	1232	63	0	63	0	1632	358	284	2421	0
RTOR Reduction (vph)	0	0	81	0	0	56	0	25	0	0	0	0
Lane Group Flow (vph)	576	592	1151	63	0	7	0	1965	0	284	2421	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Split	NA	Perm	custom		custom		NA		pm+pt	NA	
Protected Phases	3	3						6		5	2	
Permitted Phases			3	4		4				2		
Actuated Green, G (s)	29.3	29.3	29.3	14.9		14.9		54.8		76.2	76.2	
Effective Green, g (s)	29.3	29.3	29.3	14.9		14.9		54.8		76.2	76.2	
Actuated g/C Ratio	0.21	0.21	0.21	0.11		0.11		0.39		0.54	0.54	
Clearance Time (s)	6.7	6.7	6.7	6.7		6.7		6.2		3.0	6.2	
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0		3.0		3.0	3.0	
Lane Grp Cap (vph)	313	324	295	75		150		1726		254	1716	
v/s Ratio Prot	0.38	0.38						0.45		0.15	c0.77	
v/s Ratio Perm			c0.82	c0.09		0.00				0.46		
v/c Ratio	1.84	1.83	3.90	0.84		0.04		1.14		1.12	1.41	
Uniform Delay, d1	55.4	55.4	55.4	61.4		56.2		42.6		46.8	31.9	
Progression Factor	1.00	1.00	1.00	1.00		1.00		0.26		1.00	1.00	
Incremental Delay, d2	390.3	384.1	1314.4	52.9		0.1		63.1		91.9	188.4	
Delay (s)	445.7	439.5	1369.8	114.3		56.3		74.3		138.7	220.3	
Level of Service	F	F	F	F		E		E		F	F	
Approach Delay (s)		918.5			85.3			74.3			211.7	
Approach LOS		F			F			E			F	

Intersection Summary			
HCM 2000 Control Delay	406.6	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.99		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	22.6
Intersection Capacity Utilization	168.9%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	560	2400	0	0	0	0	0	890	140	0	0	0
Number	1	6	16				7	4	14			
Initial Q (Qb), veh	0	0	0				0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00			
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00			
Adj Sat Flow veh/h/ln	171.0	166.0	0.0				0.0	166.0	166.0			
Lanes	0	3	0				0	2	1			
Cap, veh/h	48	1954	0				0	969	412			
Arrive On Green	0.21	0.21	0.00				0.00	0.29	0.29			
Sat Flow, veh/h	0	3022	0				0	3320	1411			
Grp Volume(v), veh/h	589	2526	0				0	937	147			
Grp Sat Flow(s),veh/h/ln	0	1511	0				0	1660	1411			
Q Serve(g_s), s	0.0	97.0	0.0				0.0	41.8	12.3			
Cycle Q Clear(g_c), s	97.0	97.0	0.0				0.0	41.8	12.3			
Prop In Lane	1.00		0.00				0.00		1.00			
Lane Grp Cap(c), veh/h	48	1954	0				0	969	412			
V/C Ratio(X)	12.27	1.29	0.00				0.00	0.97	0.36			
Avail Cap(c_a), veh/h	48	1954	0				0	970	412			
HCM Platoon Ratio	0.33	0.33	1.00				1.00	1.00	1.00			
Upstream Filter(I)	0.09	0.09	0.00				0.00	0.09	0.09			
Uniform Delay (d), s/veh	107.5	59.0	0.0				0.0	52.4	42.0			
Incr Delay (d2), s/veh	5075.0	132.1	0.0				0.0	3.7	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0			
%ile Back of Q (50%), veh/ln	69.6	75.8	0.0				0.0	18.6	4.5			
Lane Grp Delay (d), s/veh	5182.5	191.0	0.0				0.0	56.1	42.0			
Lane Grp LOS	F	F						E	D			
Approach Vol, veh/h		3115						1084				
Approach Delay, s/veh		1134.8						54.2				
Approach LOS		F						D				

Timer	
Assigned Phs	6
Phs Duration (G+Y+Rc), s	102.0
Change Period (Y+Rc), s	5.0
Max Green Setting (Gmax), s	97.0
Max Q Clear Time (g_c+I1), s	99.0
Green Ext Time (p_c), s	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	855.9
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	2510	720	0	0	0	0	0	0	660	790	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0								4.6	4.6	
Lane Util. Factor		0.91								0.95	0.95	
Frt		0.97								1.00	1.00	
Flt Protected		1.00								0.95	1.00	
Satd. Flow (prot)		4381								1498	1571	
Flt Permitted		1.00								0.95	1.00	
Satd. Flow (perm)		4381								1498	1571	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	2642	758	0	0	0	0	0	0	695	832	0
RTOR Reduction (vph)	0	32	0	0	0	0	0	0	0	9	9	0
Lane Group Flow (vph)	0	3368	0	0	0	0	0	0	0	616	893	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type		NA								Perm	NA	
Protected Phases		6									8	
Permitted Phases										8		
Actuated Green, G (s)		80.0								60.4	60.4	
Effective Green, g (s)		80.0								60.4	60.4	
Actuated g/C Ratio		0.53								0.40	0.40	
Clearance Time (s)		5.0								4.6	4.6	
Vehicle Extension (s)		3.0								3.0	3.0	
Lane Grp Cap (vph)		2336								603	632	
v/s Ratio Prot		c0.77										
v/s Ratio Perm										0.41	0.57	
v/c Ratio		1.44								1.02	1.41	
Uniform Delay, d1		35.0								44.8	44.8	
Progression Factor		0.79								1.00	1.00	
Incremental Delay, d2		199.0								42.2	195.1	
Delay (s)		226.8								87.0	239.9	
Level of Service		F								F	F	
Approach Delay (s)		226.8			0.0			0.0			177.4	
Approach LOS		F			A			A			F	

Intersection Summary			
HCM 2000 Control Delay	211.5	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.43		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	9.6
Intersection Capacity Utilization	125.9%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	960	2710	440	0	0	0	0	860	110	180	290	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	171.0	166.0	171.0				0.0	166.0	171.0	166.0	166.0	0.0
Lanes	0	3	0				0	2	0	1	2	0
Cap, veh/h	657	2019	322				0	662	85	153	1049	0
Arrive On Green	0.20	0.20	0.20				0.00	0.23	0.23	0.07	0.32	0.00
Sat Flow, veh/h	1059	3257	520				0	2885	370	1581	3320	0
Grp Volume(v), veh/h	1534	1396	1396				0	521	500	189	305	0
Grp Sat Flow(s),veh/h/ln	1607	1660	1568				0	1660	1595	1581	1660	0
Q Serve(g_s), s	93.0	93.0	93.0				0.0	34.4	34.4	10.0	10.4	0.0
Cycle Q Clear(g_c), s	93.0	93.0	93.0				0.0	34.4	34.4	10.0	10.4	0.0
Prop In Lane	0.66		0.33				0.00		0.23	1.00		0.00
Lane Grp Cap(c), veh/h	996	1029	972				0	381	366	153	1049	0
V/C Ratio(X)	1.54	1.36	1.44				0.00	1.37	1.37	1.23	0.29	0.00
Avail Cap(c_a), veh/h	996	1029	972				0	381	366	153	1049	0
HCM Platoon Ratio	0.33	0.33	0.33				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.09				0.00	0.20	0.20	1.00	1.00	0.00
Uniform Delay (d), s/veh	59.7	59.7	59.7				0.0	57.8	57.8	46.6	38.6	0.0
Incr Delay (d2), s/veh	243.4	161.0	196.7				0.0	168.8	169.0	148.3	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	108.1	88.1	92.8				0.0	32.8	31.5	6.3	4.6	0.0
Lane Grp Delay (d), s/veh	303.0	220.7	256.4				0.0	226.6	226.8	194.8	39.3	0.0
Lane Grp LOS	F	F	F					F	F	F	D	
Approach Vol, veh/h		4327						1021			494	
Approach Delay, s/veh		261.4						226.7			98.8	
Approach LOS		F						F			F	

Timer				
Assigned Phs	6	4	3	8
Phs Duration (G+Y+Rc), s	98.0	39.0	13.0	52.0
Change Period (Y+Rc), s	5.0	4.6	3.0	4.6
Max Green Setting (Gmax), s	93.0	34.4	10.0	47.4
Max Q Clear Time (g_c+I1), s	95.0	36.4	12.0	12.4
Green Ext Time (p_c), s	0.0	0.0	0.0	11.3

Intersection Summary	
HCM 2010 Ctrl Delay	241.6
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	230	3250	230	0	0	0	0	320	510	0	0	0
Number	1	6	16				7	4	14			
Initial Q (Qb), veh	0	0	0				0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00			
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00			
Adj Sat Flow veh/h/ln	171.0	166.0	171.0				0.0	166.0	171.0			
Lanes	0	3	0				0	1	0			
Cap, veh/h	48	1675	117				0	195	311			
Arrive On Green	0.20	0.20	0.20				0.00	0.11	0.11			
Sat Flow, veh/h	0	2792	195				0	578	920			
Grp Volume(v), veh/h	242	1832	1832				0	0	874			
Grp Sat Flow(s),veh/h/ln	0	1511	1476				0	0	1498			
Q Serve(g_s), s	0.0	90.0	90.0				0.0	0.0	50.7			
Cycle Q Clear(g_c), s	90.0	90.0	90.0				0.0	0.0	50.7			
Prop In Lane	1.00		0.13				0.00		0.61			
Lane Grp Cap(c), veh/h	48	906	886				0	0	506			
V/C Ratio(X)	5.04	2.02	2.07				0.00	0.00	1.73			
Avail Cap(c_a), veh/h	48	906	886				0	0	506			
HCM Platoon Ratio	0.33	0.33	0.33				1.00	0.33	0.33			
Upstream Filter(I)	1.00	1.00	1.00				0.00	0.00	0.17			
Uniform Delay (d), s/veh	105.2	60.1	60.2				0.0	0.0	66.6			
Incr Delay (d2), s/veh	1864.4	463.1	484.3				0.0	0.0	328.3			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0			
%ile Back of Q (50%), veh/ln	26.8	153.6	155.4				0.0	0.0	67.0			
Lane Grp Delay (d), s/veh	1969.5	523.3	544.5				0.0	0.0	395.0			
Lane Grp LOS	F	F	F						F			
Approach Vol, veh/h		3905						874				
Approach Delay, s/veh		622.8						395.0				
Approach LOS		F						F				
Timer												
Assigned Phs		6						4				
Phs Duration (G+Y+Rc), s		95.0						55.0				
Change Period (Y+Rc), s		5.0						4.3				
Max Green Setting (Gmax), s		90.0						50.7				
Max Q Clear Time (g_c+I1), s		92.0						52.7				
Green Ext Time (p_c), s		0.0						0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			581.2									
HCM 2010 LOS			F									
Notes												

Movement	EBT	EBR	SBL	SBT	SWL2	SWL
Lane Configurations						
Volume (vph)	3140	390	370	430	1500	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0			7.0	7.0	
Lane Util. Factor	0.91			0.95	0.97	
Frt	0.98			1.00	1.00	
Flt Protected	1.00			0.98	0.95	
Satd. Flow (prot)	4501			3113	3090	
Flt Permitted	1.00			0.98	0.95	
Satd. Flow (perm)	4501			3113	3090	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	3305	411	389	453	1579	0
RTOR Reduction (vph)	10	0	0	0	47	0
Lane Group Flow (vph)	3706	0	0	842	1532	0
Turn Type	NA		Perm	NA	Perm	
Protected Phases	6			9		8
Permitted Phases			9		8	
Actuated Green, G (s)	63.0			27.0	41.0	
Effective Green, g (s)	63.0			27.0	41.0	
Actuated g/C Ratio	0.42			0.18	0.27	
Clearance Time (s)	5.0			7.0	7.0	
Vehicle Extension (s)	3.0			3.0	3.0	
Lane Grp Cap (vph)	1890			560	844	
v/s Ratio Prot	c0.82					
v/s Ratio Perm				0.27	c0.50	
v/c Ratio	1.96			1.50	1.81	
Uniform Delay, d1	43.5			61.5	54.5	
Progression Factor	1.00			1.00	1.00	
Incremental Delay, d2	434.2			235.8	371.4	
Delay (s)	477.7			297.3	425.9	
Level of Service	F			F	F	
Approach Delay (s)	477.7			297.3		425.9
Approach LOS	F			F		F

Intersection Summary			
HCM 2000 Control Delay	439.6	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.82		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	19.0
Intersection Capacity Utilization	165.6%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	230	2880	70	0	0	0	0	360	90	240	350	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	186.3	190.0	190.0	193.7	0.0
Lanes	0	3	0				0	1	0	0	1	0
Cap, veh/h	182	2445	61				0	623	156	167	186	0
Arrive On Green	0.16	0.16	0.16				0.00	0.43	0.43	0.43	0.43	0.00
Sat Flow, veh/h	376	5045	126				0	1439	361	295	430	0
Grp Volume(v), veh/h	1187	1080	1080				0	0	474	621	0	0
Grp Sat Flow(s),veh/h/ln	1844	1863	1840				0	0	1799	725	0	0
Q Serve(g_s), s	63.0	63.0	63.0				0.0	0.0	26.4	29.9	0.0	0.0
Cycle Q Clear(g_c), s	63.0	63.0	63.0				0.0	0.0	26.4	56.3	0.0	0.0
Prop In Lane	0.20		0.07				0.00		0.20	0.41		0.00
Lane Grp Cap(c), veh/h	894	903	892				0	0	779	353	0	0
V/C Ratio(X)	1.33	1.20	1.21				0.00	0.00	0.61	1.76	0.00	0.00
Avail Cap(c_a), veh/h	894	903	892				0	0	779	353	0	0
HCM Platoon Ratio	0.33	0.33	0.33				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	0.00	0.09	1.00	0.00	0.00
Uniform Delay (d), s/veh	54.6	54.6	54.6				0.0	0.0	28.4	51.7	0.0	0.0
Incr Delay (d2), s/veh	155.6	99.4	105.5				0.0	0.0	0.1	353.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	70.2	56.8	57.6				0.0	0.0	11.9	46.6	0.0	0.0
Lane Grp Delay (d), s/veh	210.2	154.0	160.1				0.0	0.0	28.5	404.9	0.0	0.0
Lane Grp LOS	F	F	F						C	F		
Approach Vol, veh/h		3348						474			621	
Approach Delay, s/veh		175.9						28.5			404.9	
Approach LOS		F						C			F	

Timer												
Assigned Phs		6						4			8	
Phs Duration (G+Y+Rc), s		68.0						62.0			62.0	
Change Period (Y+Rc), s		5.0						5.7			5.7	
Max Green Setting (Gmax), s		63.0						56.3			56.3	
Max Q Clear Time (g_c+I1), s		65.0						28.4			58.3	
Green Ext Time (p_c), s		0.0						4.1			0.0	

Intersection Summary												
HCM 2010 Ctrl Delay			192.2									
HCM 2010 LOS			F									

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	250	2530	240	0	0	0	0	610	210	180	450	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	184.5	190.0				0.0	184.5	190.0	190.0	177.1	0.0
Lanes	0	3	0				0	2	0	0	2	0
Cap, veh/h	236	2534	241				0	970	334	152	595	0
Arrive On Green	0.18	0.18	0.18				0.00	0.37	0.36	0.36	0.37	0.00
Sat Flow, veh/h	425	4574	436				0	2626	903	263	1611	0
Grp Volume(v), veh/h	1127	1026	1026				0	451	412	189	474	0
Grp Sat Flow(s),veh/h/ln	1823	1845	1768				0	1845	1685	263	1611	0
Q Serve(g_s), s	72.0	72.0	72.0				0.0	26.5	26.6	20.4	34.2	0.0
Cycle Q Clear(g_c), s	72.0	72.0	72.0				0.0	26.5	26.6	47.0	34.2	0.0
Prop In Lane	0.23		0.25				0.00		0.54	1.00		0.00
Lane Grp Cap(c), veh/h	1010	1022	979				0	681	622	150	595	0
V/C Ratio(X)	1.12	1.00	1.05				0.00	0.66	0.66	1.26	0.80	0.00
Avail Cap(c_a), veh/h	1010	1022	979				0	681	622	150	595	0
HCM Platoon Ratio	0.33	0.33	0.33				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.53	0.53	0.53				0.00	0.09	0.09	1.00	1.00	0.00
Uniform Delay (d), s/veh	53.1	53.1	53.1				0.0	34.2	34.5	58.2	36.6	0.0
Incr Delay (d2), s/veh	60.2	21.5	34.7				0.0	0.5	0.5	158.1	10.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	52.5	42.2	44.0				0.0	12.5	11.5	11.7	15.7	0.0
Lane Grp Delay (d), s/veh	113.3	74.6	87.9				0.0	34.7	35.0	216.4	47.3	0.0
Lane Grp LOS	F	F	F					C	C	F	D	
Approach Vol, veh/h		3179						863			663	
Approach Delay, s/veh		92.6						34.8			95.5	
Approach LOS		F						C			F	

Timer												
Assigned Phs		6						4			8	
Phs Duration (G+Y+Rc), s		77.0						53.0			53.0	
Change Period (Y+Rc), s		5.0						6.0			6.0	
Max Green Setting (Gmax), s		72.0						47.0			47.0	
Max Q Clear Time (g_c+I1), s		74.0						28.6			49.0	
Green Ext Time (p_c), s		0.0						6.8			0.0	

Intersection Summary												
HCM 2010 Ctrl Delay			82.4									
HCM 2010 LOS			F									

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	2950	60	0	0	0	0	0	0	40	50	0
Number	1	6	16							3	8	18
Initial Q (Qb), veh	0	0	0							0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00							1.00		1.00
Parking Bus Adj	1.00	1.00	1.00							1.00	1.00	1.00
Adj Sat Flow veh/h/ln	0.0	182.7	190.0							190.0	190.0	0.0
Lanes	0	3	0							0	1	0
Cap, veh/h	0	4365	88							40	36	0
Arrive On Green	0.00	0.27	0.27							0.11	0.11	0.00
Sat Flow, veh/h	0	5354	108							0	337	0
Grp Volume(v), veh/h	0	2112	1056							95	0	0
Grp Sat Flow(s),veh/h/ln	0	1827	1808							337	0	0
Q Serve(g_s), s	0.0	67.9	68.8							0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	67.9	68.8							14.0	0.0	0.0
Prop In Lane	0.00		0.06							0.44		0.00
Lane Grp Cap(c), veh/h	0	2979	1474							76	0	0
V/C Ratio(X)	0.00	0.71	0.72							1.25	0.00	0.00
Avail Cap(c_a), veh/h	0	2979	1474							76	0	0
HCM Platoon Ratio	1.00	0.33	0.33							1.00	1.00	1.00
Upstream Filter(I)	0.00	0.09	0.09							1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	33.6	33.9							58.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.1	0.3							183.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0							0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.0	33.6	33.8							6.5	0.0	0.0
Lane Grp Delay (d), s/veh	0.0	33.7	34.2							242.2	0.0	0.0
Lane Grp LOS		C	C							F		
Approach Vol, veh/h		3168									95	
Approach Delay, s/veh		33.9									242.2	
Approach LOS		C									F	

Timer	
Assigned Phs	8
Phs Duration (G+Y+Rc), s	19.0
Change Period (Y+Rc), s	5.0
Max Green Setting (Gmax), s	14.0
Max Q Clear Time (g_c+I1), s	16.0
Green Ext Time (p_c), s	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	39.9
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	190	2410	200	0	0	0	0	930	290	310	1260	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	184.5	190.0				0.0	184.5	190.0	184.5	184.5	0.0
Lanes	0	3	0				0	2	0	1	2	0
Cap, veh/h	164	2207	185				0	878	272	258	1680	0
Arrive On Green	0.15	0.15	0.15				0.00	0.32	0.32	0.12	0.46	0.00
Sat Flow, veh/h	350	4704	394				0	2704	838	1757	3689	0
Grp Volume(v), veh/h	1045	951	951				0	666	618	326	1326	0
Grp Sat Flow(s),veh/h/ln	1827	1845	1775				0	1845	1697	1757	1845	0
Q Serve(g_s), s	61.0	61.0	61.0				0.0	42.2	42.2	15.0	39.7	0.0
Cycle Q Clear(g_c), s	61.0	61.0	61.0				0.0	42.2	42.2	15.0	39.7	0.0
Prop In Lane	0.19		0.22				0.00		0.49	1.00		0.00
Lane Grp Cap(c), veh/h	857	866	833				0	599	551	258	1680	0
V/C Ratio(X)	1.22	1.10	1.14				0.00	1.11	1.12	1.26	0.79	0.00
Avail Cap(c_a), veh/h	857	866	833				0	599	551	258	1680	0
HCM Platoon Ratio	0.33	0.33	0.33				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.55	0.55	0.55				0.00	0.78	0.78	1.00	1.00	0.00
Uniform Delay (d), s/veh	54.9	54.9	54.9				0.0	43.9	44.1	40.5	30.1	0.0
Incr Delay (d2), s/veh	104.7	54.8	72.3				0.0	67.9	72.5	145.6	3.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	55.2	43.7	46.1				0.0	31.1	29.3	19.2	19.1	0.0
Lane Grp Delay (d), s/veh	159.6	109.8	127.3				0.0	111.8	116.6	186.1	34.0	0.0
Lane Grp LOS	F	F	F					F	F	F	C	
Approach Vol, veh/h		2948						1284			1652	
Approach Delay, s/veh		133.1						114.1			64.0	
Approach LOS		F						F			E	

Timer					
Assigned Phs		6		4	3	8
Phs Duration (G+Y+Rc), s		66.0		46.0	18.0	64.0
Change Period (Y+Rc), s		5.0		4.8	3.0	4.8
Max Green Setting (Gmax), s		61.0		41.2	15.0	59.2
Max Q Clear Time (g_c+I1), s		63.0		44.2	17.0	41.7
Green Ext Time (p_c), s		0.0		0.0	0.0	3.6

Intersection Summary	
HCM 2010 Ctrl Delay	109.5
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	80	2620	40	0	0	0	0	90	120	60	100	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	186.3	190.0	190.0	186.3	0.0
Lanes	0	3	0				0	1	0	0	1	0
Cap, veh/h	106	3722	58				0	162	215	97	147	0
Arrive On Green	0.23	0.23	0.23				0.00	0.22	0.21	0.21	0.22	0.00
Sat Flow, veh/h	152	5330	83				0	728	965	258	661	0
Grp Volume(v), veh/h	1023	931	930				0	0	221	168	0	0
Grp Sat Flow(s),veh/h/ln	1855	1863	1848				0	0	1692	919	0	0
Q Serve(g_s), s	64.6	57.4	57.9				0.0	0.0	14.6	9.4	0.0	0.0
Cycle Q Clear(g_c), s	64.6	57.4	57.9				0.0	0.0	14.6	24.0	0.0	0.0
Prop In Lane	0.08		0.05				0.00		0.57	0.37		0.00
Lane Grp Cap(c), veh/h	1295	1301	1290				0	0	376	237	0	0
V/C Ratio(X)	0.79	0.72	0.72				0.00	0.00	0.59	0.71	0.00	0.00
Avail Cap(c_a), veh/h	1295	1301	1290				0	0	450	302	0	0
HCM Platoon Ratio	0.33	0.33	0.33				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	0.00	0.09	1.00	0.00	0.00
Uniform Delay (d), s/veh	39.3	36.5	36.7				0.0	0.0	43.6	49.1	0.0	0.0
Incr Delay (d2), s/veh	5.0	3.4	3.5				0.0	0.0	0.1	4.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	34.6	30.5	30.6				0.0	0.0	6.4	5.6	0.0	0.0
Lane Grp Delay (d), s/veh	44.3	39.9	40.3				0.0	0.0	43.7	53.7	0.0	0.0
Lane Grp LOS	D	D	D						D	D		
Approach Vol, veh/h		2884						221			168	
Approach Delay, s/veh		41.6						43.7			53.7	
Approach LOS		D						D			D	

Timer			
Assigned Phs	6	4	8
Phs Duration (G+Y+Rc), s	92.0	32.6	32.6
Change Period (Y+Rc), s	5.0	5.9	5.9
Max Green Setting (Gmax), s	87.0	32.1	32.1
Max Q Clear Time (g_c+I1), s	66.6	16.6	26.0
Green Ext Time (p_c), s	16.0	1.1	0.7

Intersection Summary	
HCM 2010 Ctrl Delay	42.3
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	130	2600	100	0	0	0	0	1490	230	260	1480	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	11	12	10	11	12	12	12	12
Total Lost time (s)		2.5						5.5		3.0	5.5	
Lane Util. Factor		0.91						0.95		1.00	0.95	
Frt		0.99						0.98		1.00	1.00	
Flt Protected		1.00						1.00		0.95	1.00	
Satd. Flow (prot)		5047						3353		1770	3539	
Flt Permitted		1.00						1.00		0.08	1.00	
Satd. Flow (perm)		5047						3353		145	3539	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	137	2737	105	0	0	0	0	1568	242	274	1558	0
RTOR Reduction (vph)	0	3	0	0	0	0	0	9	0	0	0	0
Lane Group Flow (vph)	0	2976	0	0	0	0	0	1801	0	274	1558	0
Turn Type	Perm	NA						NA		pm+pt	NA	
Protected Phases		6						4		3	8	
Permitted Phases	6									8		
Actuated Green, G (s)		56.5						48.5		64.5	64.5	
Effective Green, g (s)		56.5						49.5		64.5	65.5	
Actuated g/C Ratio		0.43						0.38		0.50	0.50	
Clearance Time (s)		2.5						6.5		3.0	6.5	
Vehicle Extension (s)		3.0						3.0		3.0	3.0	
Lane Grp Cap (vph)		2193						1276		234	1783	
v/s Ratio Prot								c0.54		c0.12	0.44	
v/s Ratio Perm		0.59								0.46		
v/c Ratio		1.36						1.41		1.17	0.87	
Uniform Delay, d1		36.8						40.2		40.4	28.6	
Progression Factor		0.58						0.59		1.00	1.00	
Incremental Delay, d2		161.0						185.7		112.8	6.3	
Delay (s)		182.2						209.3		153.2	34.9	
Level of Service		F						F		F	C	
Approach Delay (s)		182.2			0.0			209.3			52.6	
Approach LOS		F			A			F			D	

Intersection Summary			
HCM 2000 Control Delay	153.7	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.36		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	129.3%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Volume (veh/h)	60	2050	60	0	0	0	0	330	120	680	400	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	186.3	190.0	186.3	193.7	0.0
Lanes	0	3	0				0	2	0	1	1	0
Cap, veh/h	64	2343	70				0	414	148	585	902	0
Arrive On Green	0.45	0.45	0.45				0.00	0.16	0.16	0.28	0.47	0.00
Sat Flow, veh/h	144	5251	158				0	2623	937	1774	1937	0
Grp Volume(v), veh/h	811	740	733				0	245	228	716	421	0
Grp Sat Flow(s),veh/h/ln	1856	1863	1835				0	1863	1697	1774	1937	0
Q Serve(g_s), s	55.9	47.5	47.9				0.0	16.6	17.0	37.0	19.3	0.0
Cycle Q Clear(g_c), s	55.9	47.5	47.9				0.0	16.6	17.0	37.0	19.3	0.0
Prop In Lane	0.08		0.09				0.00		0.55	1.00		0.00
Lane Grp Cap(c), veh/h	828	831	819				0	294	268	585	902	0
V/C Ratio(X)	0.98	0.89	0.89				0.00	0.83	0.85	1.22	0.47	0.00
Avail Cap(c_a), veh/h	828	831	819				0	294	268	585	902	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.09				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	35.4	33.1	33.2				0.0	53.1	53.3	34.3	23.7	0.0
Incr Delay (d2), s/veh	5.7	1.3	1.4				0.0	23.3	27.5	115.5	1.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	27.7	22.7	22.5				0.0	9.9	9.6	38.6	9.8	0.0
Lane Grp Delay (d), s/veh	41.1	34.4	34.6				0.0	76.4	80.8	149.8	25.5	0.0
Lane Grp LOS	D	C	C					E	F	F	C	
Approach Vol, veh/h		2284						473			1137	
Approach Delay, s/veh		36.8						78.5			103.8	
Approach LOS		D						E			F	

Timer					
Assigned Phs		6		4		3	8
Phs Duration (G+Y+Rc), s		63.0		27.0		40.0	67.0
Change Period (Y+Rc), s		5.0		6.5		3.0	6.5
Max Green Setting (Gmax), s		58.0		20.5		37.0	60.5
Max Q Clear Time (g_c+I1), s		57.9		19.0		39.0	21.3
Green Ext Time (p_c), s		0.1		0.5		0.0	2.5

Intersection Summary	
HCM 2010 Ctrl Delay	61.4
HCM 2010 LOS	E

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	180	0	50	0	0	0	0	2080	2010	270	2620	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	9	12	9	11	11	11	12	10	12	12	10	12
Total Lost time (s)	3.9		3.9					3.6	4.6	4.6	3.6	
Lane Util. Factor	1.00		1.00					0.91	0.91	0.97	0.95	
Frt	1.00		0.85					0.96	0.85	1.00	1.00	
Flt Protected	0.95		1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1593		1425					3039	1441	3433	3296	
Flt Permitted	0.95		1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1593		1425					3039	1441	3433	3296	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	189	0	53	0	0	0	0	2189	2116	284	2758	42
RTOR Reduction (vph)	0	0	38	0	0	0	0	28	389	0	1	0
Lane Group Flow (vph)	189	0	15	0	0	0	0	2944	944	284	2799	0
Turn Type	custom		custom					NA	Perm	Prot	NA	
Protected Phases			8					6		5	2	
Permitted Phases	8								6			
Actuated Green, G (s)	32.1		32.1					62.4	62.4	11.4	78.4	
Effective Green, g (s)	33.1		33.1					63.4	62.4	11.4	79.4	
Actuated g/C Ratio	0.28		0.28					0.53	0.52	0.10	0.66	
Clearance Time (s)	4.9		4.9					4.6	4.6	4.6	4.6	
Vehicle Extension (s)	2.5		2.5					2.5	2.5	3.0	2.5	
Lane Grp Cap (vph)	439		393					1605	749	326	2180	
v/s Ratio Prot			0.01					c0.97		0.08	c0.85	
v/s Ratio Perm	c0.12								0.66			
v/c Ratio	0.43		0.04					1.83	1.26	0.87	1.28	
Uniform Delay, d1	35.7		31.8					28.3	28.8	53.6	20.3	
Progression Factor	1.00		1.00					0.69	1.09	1.00	1.00	
Incremental Delay, d2	3.1		0.2					375.7	118.3	21.6	131.4	
Delay (s)	38.8		32.0					395.3	149.7	75.1	151.7	
Level of Service	D		C					F	F	E	F	
Approach Delay (s)		37.3			0.0			319.3			144.7	
Approach LOS		D			A			F			F	

Intersection Summary			
HCM 2000 Control Delay	239.7	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.37		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.1
Intersection Capacity Utilization	107.1%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1570	0	80	260	740	310	240	2080	0	0	2520	130
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	11	12	12	11	12	11	10	12	10	10	12
Total Lost time (s)	6.7		6.7	6.7	5.7		3.5	5.0			5.0	5.0
Lane Util. Factor	0.97		1.00	0.97	1.00		1.00	0.91			0.95	1.00
Frt	1.00		0.85	1.00	0.96		1.00	1.00			1.00	0.85
Flt Protected	0.95		1.00	0.95	1.00		0.95	1.00			1.00	1.00
Satd. Flow (prot)	3433		1583	3433	1721		1711	4746			3303	1583
Flt Permitted	0.11		1.00	0.95	1.00		0.12	1.00			1.00	1.00
Satd. Flow (perm)	388		1583	3433	1721		212	4746			3303	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	1653	0	84	274	779	326	253	2189	0	0	2653	137
RTOR Reduction (vph)	0	0	58	0	0	0	0	0	0	0	0	89
Lane Group Flow (vph)	1653	0	26	274	1105	0	253	2189	0	0	2653	48
Turn Type	custom		custom	Split	NA		pm+pt	NA			NA	Perm
Protected Phases				2	2		7	4			8	
Permitted Phases	1		1				4					8
Actuated Green, G (s)	37.3		37.3	22.3	22.3		41.0	41.0			31.0	31.0
Effective Green, g (s)	37.3		37.3	22.3	23.3		40.5	42.0			32.0	32.0
Actuated g/C Ratio	0.31		0.31	0.19	0.19		0.34	0.35			0.27	0.27
Clearance Time (s)	6.7		6.7	6.7	6.7		3.0	6.0			6.0	6.0
Vehicle Extension (s)	2.5		2.5	2.5	2.5		2.0	2.5			2.5	2.5
Lane Grp Cap (vph)	120		492	637	334		152	1661			880	422
v/s Ratio Prot				0.08	c0.64		c0.09	0.46			c0.80	
v/s Ratio Perm	c4.27		0.02				0.47					0.03
v/c Ratio	13.78		0.05	0.43	3.31		1.66	1.32			3.01	0.11
Uniform Delay, d1	41.4		29.0	43.2	48.4		36.5	39.0			44.0	33.3
Progression Factor	1.00		1.00	1.00	1.00		1.00	1.00			1.07	1.56
Incremental Delay, d2	5764.9		0.2	2.1	1046.4		326.2	147.4			906.9	0.0
Delay (s)	5806.2		29.2	45.3	1094.8		362.7	186.4			954.2	51.9
Level of Service	F		C	D	F		F	F			F	D
Approach Delay (s)		5526.9			886.3			204.7			909.8	
Approach LOS		F			F			F			F	

Intersection Summary			
HCM 2000 Control Delay	1660.4	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	7.09		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	21.9
Intersection Capacity Utilization	201.2%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	50	1090	60	70	100	0	0	80	50
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	186.3	190.0	190.0	186.3	0.0	0.0	186.3	190.0
Lanes				0	3	0	0	1	0	0	1	0
Cap, veh/h				161	3709	210	107	135	0	0	188	119
Arrive On Green				0.24	0.24	0.24	0.18	0.18	0.00	0.00	0.18	0.18
Sat Flow, veh/h				218	5024	285	385	763	0	0	1069	675
Grp Volume(v), veh/h				450	412	401	179	0	0	0	0	137
Grp Sat Flow(s),veh/h/ln				1852	1863	1812	1148	0	0	0	0	1744
Q Serve(g_s), s				25.7	23.2	23.2	11.4	0.0	0.0	0.0	0.0	9.0
Cycle Q Clear(g_c), s				25.7	23.2	23.2	20.5	0.0	0.0	0.0	0.0	9.0
Prop In Lane				0.12		0.16	0.41		0.00	0.00		0.39
Lane Grp Cap(c), veh/h				1367	1375	1338	242	0	0	0	0	307
V/C Ratio(X)				0.33	0.30	0.30	0.74	0.00	0.00	0.00	0.00	0.45
Avail Cap(c_a), veh/h				1367	1375	1338	258	0	0	0	0	325
HCM Platoon Ratio				0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.71	0.71	0.71	1.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				22.5	21.5	21.5	53.7	0.0	0.0	0.0	0.0	47.4
Incr Delay (d2), s/veh				0.5	0.4	0.4	10.1	0.0	0.0	0.0	0.0	1.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				13.2	11.9	11.6	6.6	0.0	0.0	0.0	0.0	4.2
Lane Grp Delay (d), s/veh				22.9	21.9	21.9	63.8	0.0	0.0	0.0	0.0	48.4
Lane Grp LOS				C	C	C	E					D
Approach Vol, veh/h					1263			179			137	
Approach Delay, s/veh					22.3			63.8			48.4	
Approach LOS					C			E			D	

Timer	
Assigned Phs	2 4 8
Phs Duration (G+Y+Rc), s	100.0 28.7 28.7
Change Period (Y+Rc), s	5.0 6.0 6.0
Max Green Setting (Gmax), s	95.0 24.0 24.0
Max Q Clear Time (g_c+I1), s	27.7 22.5 11.0
Green Ext Time (p_c), s	6.5 0.2 1.0

Intersection Summary	
HCM 2010 Ctrl Delay	29.3
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	180	1060	120	110	1700	0	0	1480	100
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	186.3	190.0	186.3	186.3	0.0	0.0	186.3	190.0
Lanes				0	3	0	1	2	0	0	2	0
Cap, veh/h				298	1881	218	148	1805	0	0	1413	95
Arrive On Green				0.14	0.14	0.14	0.05	0.48	0.00	0.00	0.41	0.40
Sat Flow, veh/h				679	4291	497	1774	3725	0	0	3453	231
Grp Volume(v), veh/h				509	472	450	116	1789	0	0	836	827
Grp Sat Flow(s),veh/h/ln				1829	1863	1775	1774	1863	0	0	1863	1822
Q Serve(g_s), s				34.1	30.7	30.7	4.8	61.9	0.0	0.0	53.2	53.2
Cycle Q Clear(g_c), s				34.1	30.7	30.7	4.8	61.9	0.0	0.0	53.2	53.2
Prop In Lane				0.37		0.28	1.00		0.00	0.00		0.13
Lane Grp Cap(c), veh/h				802	817	778	148	1805	0	0	762	746
V/C Ratio(X)				0.64	0.58	0.58	0.78	0.99	0.00	0.00	1.10	1.11
Avail Cap(c_a), veh/h				802	817	778	178	1805	0	0	762	746
HCM Platoon Ratio				0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.97	0.97	0.97	1.00	1.00	0.00	0.00	0.37	0.37
Uniform Delay (d), s/veh				45.8	44.4	44.4	30.9	33.2	0.0	0.0	38.4	38.5
Incr Delay (d2), s/veh				3.7	2.9	3.0	17.0	19.1	0.0	0.0	51.7	56.7
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				17.8	16.2	15.5	4.6	33.4	0.0	0.0	35.9	36.2
Lane Grp Delay (d), s/veh				49.5	47.2	47.4	47.9	52.4	0.0	0.0	90.1	95.2
Lane Grp LOS				D	D	D	D	D			F	F
Approach Vol, veh/h					1431			1905			1663	
Approach Delay, s/veh					48.1			52.1			92.6	
Approach LOS					D			D			F	

Timer												
Assigned Phs					2		7	4			8	
Phs Duration (G+Y+Rc), s					62.0		9.8	68.0			58.2	
Change Period (Y+Rc), s					5.0		3.0	6.0			6.0	
Max Green Setting (Gmax), s					57.0		9.0	62.0			50.3	
Max Q Clear Time (g_c+I1), s					36.1		6.8	63.9			55.2	
Green Ext Time (p_c), s					6.7		0.1	0.0			0.0	

Intersection Summary		
HCM 2010 Ctrl Delay		64.4
HCM 2010 LOS		E

Notes

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations			↑↑↑			↱
Volume (vph)	0	0	1310	0	0	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	12	11	12	12	11	12
Total Lost time (s)			5.0			4.3
Lane Util. Factor			0.91			1.00
Frt			1.00			0.86
Flt Protected			1.00			1.00
Satd. Flow (prot)			5187			1644
Flt Permitted			1.00			1.00
Satd. Flow (perm)			5187			1644
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	1379	0	0	53
RTOR Reduction (vph)	0	0	0	0	0	51
Lane Group Flow (vph)	0	0	1379	0	0	2
Heavy Vehicles (%)	2%	2%	0%	0%	2%	0%
Turn Type			NA			custom
Protected Phases			2			
Permitted Phases						8
Actuated Green, G (s)			116.5			4.2
Effective Green, g (s)			116.5			4.2
Actuated g/C Ratio			0.90			0.03
Clearance Time (s)			5.0			4.3
Vehicle Extension (s)			3.0			2.5
Lane Grp Cap (vph)			4648			53
v/s Ratio Prot			c0.27			
v/s Ratio Perm						c0.00
v/c Ratio			0.30			0.03
Uniform Delay, d1			1.0			60.9
Progression Factor			0.30			1.00
Incremental Delay, d2			0.1			0.2
Delay (s)			0.4			61.1
Level of Service			A			E
Approach Delay (s)		0.0	0.4		61.1	
Approach LOS		A	A		E	

Intersection Summary			
HCM 2000 Control Delay	2.7	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.29		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	9.3
Intersection Capacity Utilization	36.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	40	1260	80	120	90	0	0	100	60
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	190.0	190.0	190.0	195.9	0.0	0.0	195.2	190.0
Lanes				0	3	0	0	1	0	0	1	0
Cap, veh/h				114	3837	251	133	76	0	0	217	130
Arrive On Green				0.75	0.75	0.75	0.18	0.19	0.00	0.00	0.19	0.18
Sat Flow, veh/h				153	5143	337	471	400	0	0	1144	686
Grp Volume(v), veh/h				519	474	459	221	0	0	0	0	168
Grp Sat Flow(s),veh/h/ln				1892	1900	1841	871	0	0	0	0	1830
Q Serve(g_s), s				12.5	11.0	11.0	13.0	0.0	0.0	0.0	0.0	10.7
Cycle Q Clear(g_c), s				12.5	11.0	11.0	23.7	0.0	0.0	0.0	0.0	10.7
Prop In Lane				0.08		0.18	0.57		0.00	0.00		0.37
Lane Grp Cap(c), veh/h				1412	1418	1373	202	0	0	0	0	348
V/C Ratio(X)				0.37	0.33	0.33	1.09	0.00	0.00	0.00	0.00	0.48
Avail Cap(c_a), veh/h				1412	1418	1373	202	0	0	0	0	348
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.09
Uniform Delay (d), s/veh				5.8	5.6	5.6	58.6	0.0	0.0	0.0	0.0	47.1
Incr Delay (d2), s/veh				0.7	0.6	0.7	90.3	0.0	0.0	0.0	0.0	0.4
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				5.3	4.7	4.6	12.0	0.0	0.0	0.0	0.0	5.1
Lane Grp Delay (d), s/veh				6.5	6.2	6.2	148.9	0.0	0.0	0.0	0.0	47.6
Lane Grp LOS				A	A	A	F					D
Approach Vol, veh/h					1452			221			168	
Approach Delay, s/veh					6.3			148.9			47.6	
Approach LOS					A			F			D	

Timer			
Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	102.0	28.0	28.0
Change Period (Y+Rc), s	5.0	4.3	4.3
Max Green Setting (Gmax), s	97.0	23.7	23.7
Max Q Clear Time (g_c+I1), s	14.5	25.7	12.7
Green Ext Time (p_c), s	8.0	0.0	0.9

Intersection Summary	
HCM 2010 Ctrl Delay	27.2
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	210	1060	180	160	930	0	0	1230	160
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	190.0	190.0	186.3	186.3	0.0	0.0	186.3	190.0
Lanes				0	3	0	1	2	0	0	2	1
Cap, veh/h				335	1810	315	206	1810	0	0	1452	617
Arrive On Green				0.44	0.44	0.44	0.07	0.49	0.00	0.00	0.39	0.38
Sat Flow, veh/h				754	4075	709	1774	3725	0	0	3725	1615
Grp Volume(v), veh/h				546	507	473	168	979	0	0	1295	168
Grp Sat Flow(s),veh/h/ln				1862	1900	1775	1774	1863	0	0	1863	1615
Q Serve(g_s), s				29.0	25.5	25.5	7.0	23.1	0.0	0.0	41.0	9.0
Cycle Q Clear(g_c), s				29.0	25.5	25.5	7.0	23.1	0.0	0.0	41.0	9.0
Prop In Lane				0.40		0.40	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				827	844	788	206	1810	0	0	1452	617
V/C Ratio(X)				0.66	0.60	0.60	0.82	0.54	0.00	0.00	0.89	0.27
Avail Cap(c_a), veh/h				827	844	788	246	1927	0	0	1484	630
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.39	0.39
Uniform Delay (d), s/veh				27.5	26.6	26.6	29.1	22.6	0.0	0.0	36.0	26.9
Incr Delay (d2), s/veh				4.1	3.1	3.4	16.2	0.3	0.0	0.0	3.0	0.1
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				14.6	13.0	12.2	6.4	10.7	0.0	0.0	19.9	3.7
Lane Grp Delay (d), s/veh				31.7	29.7	29.9	45.3	22.9	0.0	0.0	39.0	27.0
Lane Grp LOS				C	C	C	D	C			D	C
Approach Vol, veh/h					1526			1147			1463	
Approach Delay, s/veh					30.5			26.1			37.6	
Approach LOS					C			C			D	

Timer												
Assigned Phs					2		7	4			8	
Phs Duration (G+Y+Rc), s					61.0		12.1	65.1			52.9	
Change Period (Y+Rc), s					5.0		3.0	4.8			4.8	
Max Green Setting (Gmax), s					56.0		12.0	64.2			49.2	
Max Q Clear Time (g_c+I1), s					31.0		9.0	25.1			43.0	
Green Ext Time (p_c), s					7.8		0.2	19.6			5.2	

Intersection Summary		
HCM 2010 Ctrl Delay		31.8
HCM 2010 LOS		C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	110	1090	110	200	690	0	0	510	170
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	190.0	190.0	190.0	186.3	0.0	0.0	187.2	190.0
Lanes				0	3	0	0	2	0	0	2	0
Cap, veh/h				286	3014	314	131	486	0	0	772	256
Arrive On Green				0.21	0.21	0.21	0.28	0.29	0.00	0.00	0.29	0.28
Sat Flow, veh/h				442	4664	486	263	1695	0	0	2692	894
Grp Volume(v), veh/h				493	453	433	211	726	0	0	373	343
Grp Sat Flow(s),veh/h/ln				1878	1900	1814	263	1695	0	0	1872	1714
Q Serve(g_s), s				29.4	26.5	26.5	13.0	37.3	0.0	0.0	23.0	23.3
Cycle Q Clear(g_c), s				29.4	26.5	26.5	36.3	37.3	0.0	0.0	23.0	23.3
Prop In Lane				0.24		0.27	1.00		0.00	0.00		0.52
Lane Grp Cap(c), veh/h				1213	1228	1172	129	486	0	0	537	492
V/C Ratio(X)				0.41	0.37	0.37	1.64	1.49	0.00	0.00	0.69	0.70
Avail Cap(c_a), veh/h				1213	1228	1172	129	486	0	0	537	492
HCM Platoon Ratio				0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.94	0.94	0.94	1.00	1.00	0.00	0.00	0.09	0.09
Uniform Delay (d), s/veh				29.6	28.5	28.5	60.9	46.3	0.0	0.0	41.3	41.6
Incr Delay (d2), s/veh				1.0	0.8	0.8	319.4	232.4	0.0	0.0	0.4	0.4
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				15.3	13.9	13.3	15.8	47.6	0.0	0.0	11.1	10.3
Lane Grp Delay (d), s/veh				30.6	29.3	29.4	380.4	278.8	0.0	0.0	41.6	42.0
Lane Grp LOS				C	C	C	F	F			D	D
Approach Vol, veh/h					1379			937			716	
Approach Delay, s/veh					29.8			301.6			41.8	
Approach LOS					C			F			D	

Timer	
Assigned Phs	2 4 8
Phs Duration (G+Y+Rc), s	89.0 41.0 41.0
Change Period (Y+Rc), s	5.0 4.7 4.7
Max Green Setting (Gmax), s	84.0 36.3 36.3
Max Q Clear Time (g_c+I1), s	31.4 39.3 25.3
Green Ext Time (p_c), s	7.4 0.0 5.8

Intersection Summary	
HCM 2010 Ctrl Delay	116.6
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	50	1260	0	50	0	0	0	80	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	10	12	12	12	12	12	11	12	12	11	12
Total Lost time (s)					5.0		4.3				4.3	4.3
Lane Util. Factor					0.91		1.00				1.00	1.00
Frt					1.00		1.00				1.00	0.85
Flt Protected					1.00		0.95				1.00	1.00
Satd. Flow (prot)					5076		1805				1801	1615
Flt Permitted					1.00		0.67				1.00	1.00
Satd. Flow (perm)					5076		1279				1801	1615
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	53	1326	0	53	0	0	0	84	126
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	87
Lane Group Flow (vph)	0	0	0	0	1379	0	53	0	0	0	84	39
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	0%	2%	2%	2%	2%	0%
Turn Type				Perm	NA		custom				NA	Perm
Protected Phases					2						8	
Permitted Phases				2			4					8
Actuated Green, G (s)					98.0		22.7				22.7	22.7
Effective Green, g (s)					98.0		22.7				22.7	22.7
Actuated g/C Ratio					0.75		0.17				0.17	0.17
Clearance Time (s)					5.0		4.3				4.3	4.3
Vehicle Extension (s)					3.0		3.0				3.0	3.0
Lane Grp Cap (vph)					3826		223				314	282
v/s Ratio Prot											c0.05	
v/s Ratio Perm					0.27		0.04					0.02
v/c Ratio					0.36		0.24				0.27	0.14
Uniform Delay, d1					5.4		46.2				46.5	45.4
Progression Factor					0.33		1.00				1.00	1.00
Incremental Delay, d2					0.2		2.5				0.5	0.2
Delay (s)					2.0		48.7				46.9	45.6
Level of Service					A		D				D	D
Approach Delay (s)		0.0			2.0			48.7			46.1	
Approach LOS		A			A			D			D	

Intersection Summary			
HCM 2000 Control Delay	9.2	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.34		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	9.3
Intersection Capacity Utilization	47.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	70	1100	110	90	380	0	0	340	120
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	186.3	190.0	190.0	186.3	0.0	0.0	186.3	190.0
Lanes				0	3	0	0	1	0	0	1	0
Cap, veh/h				163	2721	281	61	187	0	0	448	158
Arrive On Green				0.19	0.19	0.19	0.34	0.34	0.00	0.00	0.34	0.34
Sat Flow, veh/h				283	4717	488	82	549	0	0	1317	464
Grp Volume(v), veh/h				483	443	422	495	0	0	0	0	484
Grp Sat Flow(s),veh/h/ln				1849	1863	1777	631	0	0	0	0	1781
Q Serve(g_s), s				30.1	27.1	27.2	12.2	0.0	0.0	0.0	0.0	32.0
Cycle Q Clear(g_c), s				30.1	27.1	27.2	44.2	0.0	0.0	0.0	0.0	32.0
Prop In Lane				0.15		0.27	0.19		0.00	0.00		0.26
Lane Grp Cap(c), veh/h				1066	1075	1025	247	0	0	0	0	606
V/C Ratio(X)				0.45	0.41	0.41	2.00	0.00	0.00	0.00	0.00	0.80
Avail Cap(c_a), veh/h				1066	1075	1025	247	0	0	0	0	606
HCM Platoon Ratio				0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.93	0.93	0.93	1.00	0.00	0.00	0.00	0.00	0.09
Uniform Delay (d), s/veh				34.4	33.3	33.3	49.7	0.0	0.0	0.0	0.0	38.9
Incr Delay (d2), s/veh				1.3	1.1	1.1	464.4	0.0	0.0	0.0	0.0	1.1
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				15.5	14.0	13.4	40.3	0.0	0.0	0.0	0.0	14.7
Lane Grp Delay (d), s/veh				35.7	34.3	34.4	514.1	0.0	0.0	0.0	0.0	39.9
Lane Grp LOS				D	C	C	F					D
Approach Vol, veh/h					1348			495			484	
Approach Delay, s/veh					34.9			514.1			39.9	
Approach LOS					C			F			D	

Timer	
Assigned Phs	2 4 8
Phs Duration (G+Y+Rc), s	80.0 50.0 50.0
Change Period (Y+Rc), s	5.0 5.8 5.8
Max Green Setting (Gmax), s	75.0 44.2 44.2
Max Q Clear Time (g_c+I1), s	32.1 46.2 34.0
Green Ext Time (p_c), s	7.1 0.0 2.7

Intersection Summary	
HCM 2010 Ctrl Delay	137.9
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	0	1150	160	130	310	0	0	0	0
Number				5	2	12	7	4	14			
Initial Q (Qb), veh				0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00			
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow veh/h/ln				0.0	186.3	190.0	190.0	186.3	0.0			
Lanes				0	3	0	0	1	0			
Cap, veh/h				0	2883	400	31	23	0			
Arrive On Green				0.00	0.20	0.20	0.33	0.33	0.00			
Sat Flow, veh/h				0	4804	666	0	68	0			
Grp Volume(v), veh/h				0	939	440	463	0	0			
Grp Sat Flow(s),veh/h/ln				0	1863	1745	68	0	0			
Q Serve(g_s), s				0.0	33.1	33.1	0.0	0.0	0.0			
Cycle Q Clear(g_c), s				0.0	33.1	33.1	50.0	0.0	0.0			
Prop In Lane				0.00		0.38	0.30		0.00			
Lane Grp Cap(c), veh/h				0	2235	1047	54	0	0			
V/C Ratio(X)				0.00	0.42	0.42	8.63	0.00	0.00			
Avail Cap(c_a), veh/h				0	2235	1047	54	0	0			
HCM Platoon Ratio				1.00	0.33	0.33	1.00	1.00	1.00			
Upstream Filter(I)				0.00	0.82	0.82	1.00	0.00	0.00			
Uniform Delay (d), s/veh				0.0	37.3	37.3	54.4	0.0	0.0			
Incr Delay (d2), s/veh				0.0	0.5	1.0	3469.4	0.0	0.0			
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0			
%ile Back of Q (50%), veh/ln				0.0	16.9	16.0	53.8	0.0	0.0			
Lane Grp Delay (d), s/veh				0.0	37.8	38.3	3523.8	0.0	0.0			
Lane Grp LOS					D	D	F					
Approach Vol, veh/h					1379			463				
Approach Delay, s/veh					38.0			3523.8				
Approach LOS					D			F				

Timer	
Assigned Phs	2 4
Phs Duration (G+Y+Rc), s	95.0 55.0
Change Period (Y+Rc), s	5.0 5.0
Max Green Setting (Gmax), s	90.0 50.0
Max Q Clear Time (g_c+I1), s	35.1 52.0
Green Ext Time (p_c), s	14.2 0.0

Intersection Summary	
HCM 2010 Ctrl Delay	914.2
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↑↑↑						↑↑	↱
Volume (veh/h)	0	0	0	0	1020	0	0	0	0	0	370	440
Number				5	2	12				3	8	18
Initial Q (Qb), veh				0	0	0				0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00				1.00		1.00
Parking Bus Adj				1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow veh/h/ln				0.0	167.6	0.0				0.0	167.6	167.6
Lanes				0	3	0				0	2	1
Cap, veh/h				0	2859	0				0	1168	496
Arrive On Green				0.00	0.19	0.00				0.00	0.35	0.35
Sat Flow, veh/h				0	5029	0				0	3353	1425
Grp Volume(v), veh/h				0	1074	0				0	389	463
Grp Sat Flow(s),veh/h/ln				0	1676	0				0	1676	1425
Q Serve(g_s), s				0.0	24.6	0.0				0.0	11.3	41.4
Cycle Q Clear(g_c), s				0.0	24.6	0.0				0.0	11.3	41.4
Prop In Lane				0.00		0.00				0.00		1.00
Lane Grp Cap(c), veh/h				0	2859	0				0	1168	496
V/C Ratio(X)				0.00	0.38	0.00				0.00	0.33	0.93
Avail Cap(c_a), veh/h				0	2859	0				0	1626	691
HCM Platoon Ratio				1.00	0.33	1.00				1.00	1.00	1.00
Upstream Filter(I)				0.00	1.00	0.00				0.00	0.09	0.09
Uniform Delay (d), s/veh				0.0	33.1	0.0				0.0	31.7	41.5
Incr Delay (d2), s/veh				0.0	0.4	0.0				0.0	0.0	1.7
Initial Q Delay(d3),s/veh				0.0	0.0	0.0				0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				0.0	11.3	0.0				0.0	4.8	15.3
Lane Grp Delay (d), s/veh				0.0	33.5	0.0				0.0	31.7	43.2
Lane Grp LOS					C						C	D
Approach Vol, veh/h					1074						852	
Approach Delay, s/veh					33.5						38.0	
Approach LOS					C						D	

Timer	
Assigned Phs	2
Phs Duration (G+Y+Rc), s	80.0
Change Period (Y+Rc), s	5.0
Max Green Setting (Gmax), s	75.0
Max Q Clear Time (g_c+I1), s	26.6
Green Ext Time (p_c), s	10.1

Intersection Summary	
HCM 2010 Ctrl Delay	35.5
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	0	3500	330	130	310	0	0	0	210
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					5.0		4.7	4.7				4.7
Lane Util. Factor					0.91		1.00	1.00				1.00
Frt					0.99		1.00	1.00				0.86
Flt Protected					1.00		0.95	1.00				1.00
Satd. Flow (prot)					4518		1593	1676				1450
Flt Permitted					1.00		0.95	1.00				1.00
Satd. Flow (perm)					4518		1593	1676				1450
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	0	3684	347	137	326	0	0	0	221
RTOR Reduction (vph)	0	0	0	0	7	0	12	0	0	0	0	12
Lane Group Flow (vph)	0	0	0	0	4024	0	125	326	0	0	0	209
Turn Type					NA		Perm	NA				custom
Protected Phases					2			4				
Permitted Phases							4					8
Actuated Green, G (s)					110.0		30.3	30.3				30.3
Effective Green, g (s)					110.0		30.3	30.3				30.3
Actuated g/C Ratio					0.73		0.20	0.20				0.20
Clearance Time (s)					5.0		4.7	4.7				4.7
Vehicle Extension (s)					3.0		3.0	3.0				2.5
Lane Grp Cap (vph)					3313		321	338				292
v/s Ratio Prot					c0.89			c0.19				
v/s Ratio Perm							0.08					0.14
v/c Ratio					1.21		0.39	0.96				0.72
Uniform Delay, d1					20.0		51.8	59.3				55.8
Progression Factor					0.27		1.00	1.00				1.32
Incremental Delay, d2					96.8		3.5	40.7				0.7
Delay (s)					102.1		55.4	100.1				74.6
Level of Service					F		E	F				E
Approach Delay (s)		0.0			102.1			86.8			74.6	
Approach LOS		A			F			F			E	

Intersection Summary			
HCM 2000 Control Delay	99.3	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.16		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	9.7
Intersection Capacity Utilization	117.8%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	180	3500	190	360	890	0	0	500	160
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				171.0	166.0	171.0	166.0	166.0	0.0	0.0	166.0	171.0
Lanes				0	3	0	1	2	0	0	2	0
Cap, veh/h				132	2738	151	248	1034	0	0	398	127
Arrive On Green				0.20	0.20	0.20	0.13	0.31	0.00	0.00	0.16	0.16
Sat Flow, veh/h				216	4465	246	1581	3320	0	0	2417	768
Grp Volume(v), veh/h				1444	1314	1314	379	937	0	0	361	333
Grp Sat Flow(s),veh/h/ln				1649	1660	1617	1581	1660	0	0	1660	1525
Q Serve(g_s), s				92.0	92.0	92.0	19.0	40.6	0.0	0.0	24.7	24.7
Cycle Q Clear(g_c), s				92.0	92.0	92.0	19.0	40.6	0.0	0.0	24.7	24.7
Prop In Lane				0.13		0.15	1.00		0.00	0.00		0.50
Lane Grp Cap(c), veh/h				1012	1018	992	248	1034	0	0	273	251
V/C Ratio(X)				1.43	1.29	1.33	1.53	0.91	0.00	0.00	1.32	1.33
Avail Cap(c_a), veh/h				1012	1018	992	248	1034	0	0	273	251
HCM Platoon Ratio				0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.09	0.09	0.09	1.00	1.00	0.00	0.00	0.96	0.96
Uniform Delay (d), s/veh				59.8	59.8	59.8	45.8	49.6	0.0	0.0	62.7	62.7
Incr Delay (d2), s/veh				193.0	131.6	147.1	256.4	12.9	0.0	0.0	166.2	171.6
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				95.6	78.8	81.0	27.6	19.4	0.0	0.0	23.4	21.9
Lane Grp Delay (d), s/veh				252.8	191.4	206.9	302.2	62.5	0.0	0.0	228.8	234.3
Lane Grp LOS				F	F	F	F	E			F	F
Approach Vol, veh/h					4073			1316			694	
Approach Delay, s/veh					218.2			131.5			231.4	
Approach LOS					F			F			F	

Timer												
Assigned Phs					2		7	4			8	
Phs Duration (G+Y+Rc), s					97.0		22.0	53.0			31.0	
Change Period (Y+Rc), s					5.0		3.0	6.3			6.3	
Max Green Setting (Gmax), s					92.0		19.0	46.7			24.7	
Max Q Clear Time (g_c+I1), s					94.0		21.0	42.6			26.7	
Green Ext Time (p_c), s					0.0		0.0	2.0			0.0	

Intersection Summary		
HCM 2010 Ctrl Delay		200.9
HCM 2010 LOS		F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	370	3060	0	0	0	0	0	1160	490
Number				5	2	12				3	8	18
Initial Q (Qb), veh				0	0	0				0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00				1.00		1.00
Parking Bus Adj				1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow veh/h/ln				171.0	166.0	0.0				0.0	166.0	171.0
Lanes				0	3	0				0	2	0
Cap, veh/h				48	1632	0				0	891	360
Arrive On Green				0.18	0.18	0.00				0.00	0.40	0.40
Sat Flow, veh/h				0	3022	0				0	2251	909
Grp Volume(v), veh/h				389	3221	0				0	886	851
Grp Sat Flow(s),veh/h/ln				0	1511	0				0	1660	1500
Q Serve(g_s), s				0.0	81.0	0.0				0.0	59.4	59.4
Cycle Q Clear(g_c), s				81.0	81.0	0.0				0.0	59.4	59.4
Prop In Lane				1.00		0.00				0.00		0.61
Lane Grp Cap(c), veh/h				48	1632	0				0	657	594
V/C Ratio(X)				8.10	1.97	0.00				0.00	1.35	1.43
Avail Cap(c_a), veh/h				48	1632	0				0	657	594
HCM Platoon Ratio				0.33	0.33	1.00				1.00	1.00	1.00
Upstream Filter(I)				0.09	0.09	0.00				0.00	0.09	0.09
Uniform Delay (d), s/veh				102.1	61.6	0.0				0.0	45.3	45.3
Incr Delay (d2), s/veh				3200.7	438.5	0.0				0.0	157.4	195.7
Initial Q Delay(d3),s/veh				0.0	0.0	0.0				0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				44.6	132.7	0.0				0.0	54.1	55.2
Lane Grp Delay (d), s/veh				3302.8	500.2	0.0				0.0	202.7	241.0
Lane Grp LOS				F	F						F	F
Approach Vol, veh/h					3610						1737	
Approach Delay, s/veh					802.2						221.5	
Approach LOS					F						F	

Timer	
Assigned Phs	2
Phs Duration (G+Y+Rc), s	86.0
Change Period (Y+Rc), s	5.0
Max Green Setting (Gmax), s	81.0
Max Q Clear Time (g_c+I1), s	83.0
Green Ext Time (p_c), s	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	613.5
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	0	2970	240	450	890	0	0	0	0
Number				5	2	12	7	4	14			
Initial Q (Qb), veh				0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00			
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow veh/h/ln				0.0	166.0	171.0	171.0	166.0	0.0			
Lanes				0	3	0	0	3	0			
Cap, veh/h				0	3009	237	48	834	0			
Arrive On Green				0.00	0.66	0.66	0.28	0.28	0.00			
Sat Flow, veh/h				0	4559	359	0	3022	0			
Grp Volume(v), veh/h				0	2253	1126	474	937	0			
Grp Sat Flow(s),veh/h/ln				0	1660	1597	0	1511	0			
Q Serve(g_s), s				0.0	99.0	99.0	0.0	41.4	0.0			
Cycle Q Clear(g_c), s				0.0	99.0	99.0	41.4	41.4	0.0			
Prop In Lane				0.00		0.22	1.00		0.00			
Lane Grp Cap(c), veh/h				0	2191	1054	48	834	0			
V/C Ratio(X)				0.00	1.03	1.07	9.87	1.12	0.00			
Avail Cap(c_a), veh/h				0	2191	1054	48	834	0			
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)				0.00	0.09	0.09	1.00	1.00	0.00			
Uniform Delay (d), s/veh				0.0	25.5	25.5	75.0	54.3	0.0			
Incr Delay (d2), s/veh				0.0	14.9	33.1	4035.0	71.0	0.0			
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0			
%ile Back of Q (50%), veh/ln				0.0	43.8	47.5	55.7	24.4	0.0			
Lane Grp Delay (d), s/veh				0.0	40.4	58.6	4110.0	125.3	0.0			
Lane Grp LOS					F	F	F	F				
Approach Vol, veh/h					3379			1411				
Approach Delay, s/veh					46.5			1463.9				
Approach LOS					D			F				

Timer	
Assigned Phs	2 4
Phs Duration (G+Y+Rc), s	104.0 46.0
Change Period (Y+Rc), s	5.0 4.6
Max Green Setting (Gmax), s	99.0 41.4
Max Q Clear Time (g_c+I1), s	101.0 43.4
Green Ext Time (p_c), s	0.0 0.0

Intersection Summary	
HCM 2010 Ctrl Delay	464.0
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	380	1180	310	970	1490	310	1050	1350	790
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.7	6.7	6.7	5.0	6.2		5.0	6.2	6.2
Lane Util. Factor				0.95	0.95	1.00	0.97	0.95		0.97	0.95	1.00
Frt				1.00	1.00	0.85	1.00	0.97		1.00	1.00	0.85
Flt Protected				0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)				1498	1575	1411	3060	3073		3060	3154	1411
Flt Permitted				0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)				1498	1575	1411	3060	3073		3060	3154	1411
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	400	1242	326	1021	1568	326	1105	1421	832
RTOR Reduction (vph)	0	0	0	0	0	72	0	13	0	0	0	44
Lane Group Flow (vph)	0	0	0	360	1282	254	1021	1881	0	1105	1421	788
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type				Perm	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases					4		1	6		5	2	
Permitted Phases				4		4						2
Actuated Green, G (s)				51.3	51.3	51.3	21.0	46.8		24.0	49.8	49.8
Effective Green, g (s)				51.3	51.3	51.3	21.0	46.8		24.0	49.8	49.8
Actuated g/C Ratio				0.37	0.37	0.37	0.15	0.33		0.17	0.36	0.36
Clearance Time (s)				6.7	6.7	6.7	5.0	6.2		5.0	6.2	6.2
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)				548	577	517	459	1027		524	1121	501
v/s Ratio Prot							0.33	c0.61		c0.36	0.45	
v/s Ratio Perm				0.24	0.81	0.18						c0.56
v/c Ratio				0.66	2.22	0.49	2.22	1.83		2.11	1.27	1.57
Uniform Delay, d1				37.0	44.4	34.3	59.5	46.6		58.0	45.1	45.1
Progression Factor				1.00	1.00	1.00	1.00	1.00		1.18	0.90	0.89
Incremental Delay, d2				2.8	555.4	0.7	558.0	378.2		499.5	121.1	258.8
Delay (s)				39.8	599.8	35.0	617.5	424.8		568.1	161.8	299.0
Level of Service				D	F	C	F	F		F	F	F
Approach Delay (s)		0.0			403.8			492.3			329.5	
Approach LOS		A			F			F			F	

Intersection Summary			
HCM 2000 Control Delay	404.8	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	2.05		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	17.9
Intersection Capacity Utilization	157.8%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	540	30	1640	90	0	140	0	1930	20	30	2380	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.7	6.7	6.7	6.7		6.7		6.2		3.5	6.2	
Lane Util. Factor	0.95	0.95	1.00	1.00		1.00		0.91		1.00	0.95	
Frt	1.00	1.00	0.85	1.00		0.85		1.00		1.00	1.00	
Flt Protected	0.95	0.96	1.00	0.95		1.00		1.00		0.95	1.00	
Satd. Flow (prot)	1498	1510	1411	1577		1411		4525		1577	3154	
Flt Permitted	0.95	0.96	1.00	0.57		1.00		1.00		0.05	1.00	
Satd. Flow (perm)	1498	1510	1411	945		1411		4525		80	3154	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	568	32	1726	95	0	147	0	2032	21	32	2505	0
RTOR Reduction (vph)	0	0	79	0	0	87	0	0	0	0	0	0
Lane Group Flow (vph)	301	299	1647	95	0	60	0	2053	0	32	2505	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Split	NA	Perm	custom		custom		NA		pm+pt	NA	
Protected Phases	3	3						6		5	2	
Permitted Phases			3	4		4				2		
Actuated Green, G (s)	28.3	28.3	28.3	16.0		16.0		79.9		86.1	86.1	
Effective Green, g (s)	28.3	28.3	28.3	16.0		16.0		79.9		86.1	86.1	
Actuated g/C Ratio	0.19	0.19	0.19	0.11		0.11		0.53		0.57	0.57	
Clearance Time (s)	6.7	6.7	6.7	6.7		6.7		6.2		3.5	6.2	
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0		3.0		3.0	3.0	
Lane Grp Cap (vph)	282	284	266	100		150		2410		72	1810	
v/s Ratio Prot	0.20	0.20						0.45		0.01	c0.79	
v/s Ratio Perm			c1.17	c0.10		0.04				0.25		
v/c Ratio	1.07	1.05	6.19	0.95		0.40		0.85		0.44	1.38	
Uniform Delay, d1	60.9	60.9	60.9	66.6		62.5		30.0		23.0	32.0	
Progression Factor	0.74	0.74	0.73	1.00		1.00		0.34		1.00	1.00	
Incremental Delay, d2	37.6	32.2	2337.5	72.9		1.8		0.4		4.3	176.3	
Delay (s)	82.8	77.4	2382.1	139.5		64.3		10.6		27.3	208.3	
Level of Service	F	E	F	F		E		B		C	F	
Approach Delay (s)		1788.3			93.8			10.6			206.0	
Approach LOS		F			F			B			F	

Intersection Summary			
HCM 2000 Control Delay	660.3	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	2.44		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	23.1
Intersection Capacity Utilization	205.6%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	1450	2210	0	0	0	0	0	1580	250	0	0	0
Number	1	6	16				7	4	14			
Initial Q (Qb), veh	0	0	0				0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00			
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00			
Adj Sat Flow veh/h/ln	171.0	166.0	0.0				0.0	166.0	166.0			
Lanes	0	3	0				0	2	1			
Cap, veh/h	48	1732	0				0	1213	516			
Arrive On Green	0.19	0.19	0.00				0.00	0.37	0.37			
Sat Flow, veh/h	0	3022	0				0	3320	1411			
Grp Volume(v), veh/h	1526	2326	0				0	1663	263			
Grp Sat Flow(s),veh/h/ln	0	1511	0				0	1660	1411			
Q Serve(g_s), s	0.0	86.0	0.0				0.0	54.8	21.8			
Cycle Q Clear(g_c), s	86.0	86.0	0.0				0.0	54.8	21.8			
Prop In Lane	1.00		0.00				0.00		1.00			
Lane Grp Cap(c), veh/h	48	1732	0				0	1213	516			
V/C Ratio(X)	31.79	1.34	0.00				0.00	1.37	0.51			
Avail Cap(c_a), veh/h	48	1732	0				0	1213	516			
HCM Platoon Ratio	0.33	0.33	1.00				1.00	1.00	1.00			
Upstream Filter(I)	0.09	0.09	0.00				0.00	0.09	0.09			
Uniform Delay (d), s/veh	103.8	60.8	0.0				0.0	47.6	37.1			
Incr Delay (d2), s/veh	13859.7	154.6	0.0				0.0	167.4	0.1			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0			
%ile Back of Q (50%), veh/ln	186.8	72.6	0.0				0.0	51.8	8.0			
Lane Grp Delay (d), s/veh	13963.5	215.4	0.0				0.0	215.0	37.2			
Lane Grp LOS	F	F						F	D			
Approach Vol, veh/h		3852						1926				
Approach Delay, s/veh		5661.8						190.7				
Approach LOS		F						F				

Timer	
Assigned Phs	6
Phs Duration (G+Y+Rc), s	91.0
Change Period (Y+Rc), s	5.0
Max Green Setting (Gmax), s	86.0
Max Q Clear Time (g_c+I1), s	88.0
Green Ext Time (p_c), s	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	3838.1
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	2720	650	0	0	0	0	0	0	600	1220	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0								4.6	4.6	
Lane Util. Factor		0.91								0.95	0.95	
Frt		0.97								1.00	1.00	
Flt Protected		1.00								0.95	1.00	
Satd. Flow (prot)		4401								1498	1574	
Flt Permitted		1.00								0.95	1.00	
Satd. Flow (perm)		4401								1498	1574	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	2863	684	0	0	0	0	0	0	632	1284	0
RTOR Reduction (vph)	0	15	0	0	0	0	0	0	0	8	8	0
Lane Group Flow (vph)	0	3532	0	0	0	0	0	0	0	561	1339	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type		NA								Perm	NA	
Protected Phases		6									8	
Permitted Phases										8		
Actuated Green, G (s)		69.0								71.4	71.4	
Effective Green, g (s)		69.0								71.4	71.4	
Actuated g/C Ratio		0.46								0.48	0.48	
Clearance Time (s)		5.0								4.6	4.6	
Vehicle Extension (s)		3.0								3.0	3.0	
Lane Grp Cap (vph)		2024								713	749	
v/s Ratio Prot		c0.80										
v/s Ratio Perm										0.37	0.85	
v/c Ratio		1.75								0.79	1.79	
Uniform Delay, d1		40.5								32.9	39.3	
Progression Factor		1.00								1.00	1.00	
Incremental Delay, d2		335.4								5.7	359.9	
Delay (s)		375.8								38.7	399.2	
Level of Service		F								D	F	
Approach Delay (s)		375.8			0.0			0.0			292.2	
Approach LOS		F			A			A			F	

Intersection Summary			
HCM 2000 Control Delay	346.5	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.77		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	9.6
Intersection Capacity Utilization	143.3%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	940	2560	670	0	0	0	0	800	200	300	470	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	171.0	166.0	171.0				0.0	166.0	171.0	166.0	166.0	0.0
Lanes	0	3	0				0	2	0	1	2	0
Cap, veh/h	593	1748	441				0	588	147	217	1182	0
Arrive On Green	0.19	0.19	0.19				0.00	0.23	0.23	0.11	0.36	0.00
Sat Flow, veh/h	1022	3013	760				0	2565	642	1581	3320	0
Grp Volume(v), veh/h	1556	1416	1416				0	545	508	316	495	0
Grp Sat Flow(s),veh/h/ln	1609	1660	1526				0	1660	1547	1581	1660	0
Q Serve(g_s), s	87.0	87.0	87.0				0.0	34.4	34.4	16.0	16.9	0.0
Cycle Q Clear(g_c), s	87.0	87.0	87.0				0.0	34.4	34.4	16.0	16.9	0.0
Prop In Lane	0.64		0.50				0.00		0.42	1.00		0.00
Lane Grp Cap(c), veh/h	933	963	885				0	381	355	217	1182	0
V/C Ratio(X)	1.67	1.47	1.60				0.00	1.43	1.43	1.46	0.42	0.00
Avail Cap(c_a), veh/h	933	963	885				0	381	355	217	1182	0
HCM Platoon Ratio	0.33	0.33	0.33				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.09				0.00	0.70	0.70	1.00	1.00	0.00
Uniform Delay (d), s/veh	60.6	60.6	60.6				0.0	57.8	57.8	43.6	36.6	0.0
Incr Delay (d2), s/veh	300.9	212.4	270.5				0.0	204.5	205.5	230.0	1.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	116.1	96.1	102.7				0.0	36.5	34.1	22.4	7.4	0.0
Lane Grp Delay (d), s/veh	361.5	273.1	331.2				0.0	262.3	263.3	273.7	37.6	0.0
Lane Grp LOS	F	F	F					F	F	F	D	
Approach Vol, veh/h		4389						1053			811	
Approach Delay, s/veh		323.2						262.8			129.6	
Approach LOS		F						F			F	

Timer				
Assigned Phs	6	4	3	8
Phs Duration (G+Y+Rc), s	92.0	39.0	19.0	58.0
Change Period (Y+Rc), s	5.0	4.6	3.0	4.6
Max Green Setting (Gmax), s	87.0	34.4	16.0	53.4
Max Q Clear Time (g_c+I1), s	89.0	36.4	18.0	18.9
Green Ext Time (p_c), s	0.0	0.0	0.0	14.0

Intersection Summary	
HCM 2010 Ctrl Delay	287.9
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	370	3200	350	0	0	0	0	350	580	0	0	0
Number	1	6	16				7	4	14			
Initial Q (Qb), veh	0	0	0				0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00			
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00			
Adj Sat Flow veh/h/ln	171.0	166.0	171.0				0.0	166.0	171.0			
Lanes	0	3	0				0	1	0			
Cap, veh/h	48	1485	159				0	216	359			
Arrive On Green	0.18	0.18	0.18				0.00	0.13	0.13			
Sat Flow, veh/h	0	2683	288				0	562	933			
Grp Volume(v), veh/h	389	1868	1868				0	0	979			
Grp Sat Flow(s),veh/h/ln	0	1511	1460				0	0	1495			
Q Serve(g_s), s	0.0	83.0	83.0				0.0	0.0	57.7			
Cycle Q Clear(g_c), s	83.0	83.0	83.0				0.0	0.0	57.7			
Prop In Lane	1.00		0.20				0.00		0.62			
Lane Grp Cap(c), veh/h	48	836	808				0	0	575			
V/C Ratio(X)	8.10	2.23	2.31				0.00	0.00	1.70			
Avail Cap(c_a), veh/h	48	836	808				0	0	575			
HCM Platoon Ratio	0.33	0.33	0.33				1.00	0.33	0.33			
Upstream Filter(I)	1.00	1.00	1.00				0.00	0.00	0.09			
Uniform Delay (d), s/veh	102.8	61.3	61.3				0.0	0.0	65.5			
Incr Delay (d2), s/veh	3239.1	559.4	594.4				0.0	0.0	316.5			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0			
%ile Back of Q (50%), veh/ln	45.2	164.0	166.4				0.0	0.0	74.2			
Lane Grp Delay (d), s/veh	3341.9	620.7	655.7				0.0	0.0	382.0			
Lane Grp LOS	F	F	F						F			
Approach Vol, veh/h		4125						979				
Approach Delay, s/veh		893.2						382.0				
Approach LOS		F						F				

Timer	
Assigned Phs	6
Phs Duration (G+Y+Rc), s	88.0
Change Period (Y+Rc), s	5.0
Max Green Setting (Gmax), s	83.0
Max Q Clear Time (g_c+I1), s	85.0
Green Ext Time (p_c), s	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	795.1
HCM 2010 LOS	F

Notes

Movement	EBT	EBR	SBL	SBT	SWL2	SWL
Lane Configurations						
Volume (vph)	2450	210	240	720	1000	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0			7.0	7.0	
Lane Util. Factor	0.91			0.95	0.97	
Frt	0.99			1.00	1.00	
Flt Protected	1.00			0.99	0.95	
Satd. Flow (prot)	4523			3146	3090	
Flt Permitted	1.00			0.99	0.95	
Satd. Flow (perm)	4523			3146	3090	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	2579	221	253	758	1053	0
RTOR Reduction (vph)	7	0	0	0	106	0
Lane Group Flow (vph)	2793	0	0	1011	947	0
Turn Type	NA		Perm	NA	Perm	
Protected Phases	6			9		8
Permitted Phases			9		8	
Actuated Green, G (s)	65.0			31.0	35.0	
Effective Green, g (s)	65.0			31.0	35.0	
Actuated g/C Ratio	0.43			0.21	0.23	
Clearance Time (s)	5.0			7.0	7.0	
Vehicle Extension (s)	3.0			3.0	3.0	
Lane Grp Cap (vph)	1959			650	721	
v/s Ratio Prot	c0.62					
v/s Ratio Perm				0.32	c0.31	
v/c Ratio	1.43			1.56	1.31	
Uniform Delay, d1	42.5			59.5	57.5	
Progression Factor	1.00			1.00	1.00	
Incremental Delay, d2	194.7			257.5	151.0	
Delay (s)	237.2			317.0	208.5	
Level of Service	F			F	F	
Approach Delay (s)	237.2			317.0		208.5
Approach LOS	F			F		F

Intersection Summary			
HCM 2000 Control Delay	247.5	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.43		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	19.0
Intersection Capacity Utilization	135.2%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	270	2700	70	0	0	0	0	270	70	180	230	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	186.3	190.0	190.0	193.7	0.0
Lanes	0	3	0				0	1	0	0	1	0
Cap, veh/h	246	2640	70				0	538	140	182	193	0
Arrive On Green	0.18	0.18	0.18				0.00	0.38	0.38	0.38	0.38	0.00
Sat Flow, veh/h	460	4950	132				0	1426	371	368	511	0
Grp Volume(v), veh/h	1135	1033	1033				0	0	358	431	0	0
Grp Sat Flow(s),veh/h/ln	1840	1863	1839				0	0	1797	878	0	0
Q Serve(g_s), s	64.0	64.0	64.0				0.0	0.0	18.6	26.7	0.0	0.0
Cycle Q Clear(g_c), s	64.0	64.0	64.0				0.0	0.0	18.6	45.3	0.0	0.0
Prop In Lane	0.25		0.07				0.00		0.21	0.44		0.00
Lane Grp Cap(c), veh/h	981	993	981				0	0	678	375	0	0
V/C Ratio(X)	1.16	1.04	1.05				0.00	0.00	0.53	1.15	0.00	0.00
Avail Cap(c_a), veh/h	981	993	981				0	0	678	375	0	0
HCM Platoon Ratio	0.33	0.33	0.33				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	0.00	0.09	1.00	0.00	0.00
Uniform Delay (d), s/veh	49.4	49.4	49.4				0.0	0.0	29.0	46.9	0.0	0.0
Incr Delay (d2), s/veh	82.1	39.3	43.6				0.0	0.0	0.1	94.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	54.3	43.1	43.8				0.0	0.0	8.4	21.4	0.0	0.0
Lane Grp Delay (d), s/veh	131.5	88.7	93.0				0.0	0.0	29.1	141.0	0.0	0.0
Lane Grp LOS	F	F	F						C	F		
Approach Vol, veh/h		3200						358			431	
Approach Delay, s/veh		105.3						29.1			141.0	
Approach LOS		F						C			F	

Timer												
Assigned Phs		6						4			8	
Phs Duration (G+Y+Rc), s		69.0						51.0			51.0	
Change Period (Y+Rc), s		5.0						5.7			5.7	
Max Green Setting (Gmax), s		64.0						45.3			45.3	
Max Q Clear Time (g_c+I1), s		66.0						20.6			47.3	
Green Ext Time (p_c), s		0.0						2.6			0.0	

Intersection Summary												
HCM 2010 Ctrl Delay			102.3									
HCM 2010 LOS			F									

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	240	2750	120	0	0	0	0	620	200	250	710	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	184.5	190.0				0.0	184.5	190.0	190.0	177.1	0.0
Lanes	0	3	0				0	2	0	0	2	0
Cap, veh/h	189	2310	102				0	1181	381	216	712	0
Arrive On Green	0.16	0.16	0.16				0.00	0.44	0.43	0.43	0.44	0.00
Sat Flow, veh/h	398	4863	215				0	2674	863	352	1611	0
Grp Volume(v), veh/h	1161	1057	1057				0	450	414	263	747	0
Grp Sat Flow(s),veh/h/ln	1825	1845	1807				0	1845	1692	352	1611	0
Q Serve(g_s), s	57.0	57.0	57.0				0.0	21.6	21.8	30.2	53.0	0.0
Cycle Q Clear(g_c), s	57.0	57.0	57.0				0.0	21.6	21.8	52.0	53.0	0.0
Prop In Lane	0.22		0.12				0.00		0.51	1.00		0.00
Lane Grp Cap(c), veh/h	867	876	858				0	815	747	213	712	0
V/C Ratio(X)	1.34	1.21	1.23				0.00	0.55	0.55	1.24	1.05	0.00
Avail Cap(c_a), veh/h	867	876	858				0	815	747	213	712	0
HCM Platoon Ratio	0.33	0.33	0.33				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.28	0.28	0.28				0.00	0.09	0.09	1.00	1.00	0.00
Uniform Delay (d), s/veh	50.6	50.6	50.6				0.0	24.7	25.0	48.9	33.5	0.0
Incr Delay (d2), s/veh	155.0	95.9	107.1				0.0	0.2	0.3	140.1	47.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	65.5	51.8	53.4				0.0	9.9	9.2	15.0	30.5	0.0
Lane Grp Delay (d), s/veh	205.6	146.5	157.7				0.0	25.0	25.2	188.9	81.0	0.0
Lane Grp LOS	F	F	F					C	C	F	F	
Approach Vol, veh/h		3274						864			1010	
Approach Delay, s/veh		171.1						25.1			109.1	
Approach LOS		F						C			F	

Timer			
Assigned Phs	6	4	8
Phs Duration (G+Y+Rc), s	62.0	58.0	58.0
Change Period (Y+Rc), s	5.0	6.0	6.0
Max Green Setting (Gmax), s	57.0	52.0	52.0
Max Q Clear Time (g_c+I1), s	59.0	23.8	55.0
Green Ext Time (p_c), s	0.0	10.7	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	134.4
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	3080	90	0	0	0	0	0	0	40	60	0
Number	1	6	16							3	8	18
Initial Q (Qb), veh	0	0	0							0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00							1.00		1.00
Parking Bus Adj	1.00	1.00	1.00							1.00	1.00	1.00
Adj Sat Flow veh/h/ln	0.0	182.7	190.0							190.0	190.0	0.0
Lanes	0	3	0							0	1	0
Cap, veh/h	0	3887	113							42	47	0
Arrive On Green	0.00	0.24	0.24							0.18	0.18	0.00
Sat Flow, veh/h	0	5300	154							0	258	0
Grp Volume(v), veh/h	0	2225	1112							105	0	0
Grp Sat Flow(s),veh/h/ln	0	1827	1800							258	0	0
Q Serve(g_s), s	0.0	69.3	70.6							0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	69.3	70.6							22.0	0.0	0.0
Prop In Lane	0.00		0.09							0.40		0.00
Lane Grp Cap(c), veh/h	0	2679	1320							89	0	0
V/C Ratio(X)	0.00	0.83	0.84							1.18	0.00	0.00
Avail Cap(c_a), veh/h	0	2679	1320							89	0	0
HCM Platoon Ratio	1.00	0.33	0.33							1.00	1.00	1.00
Upstream Filter(I)	0.00	0.09	0.09							1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	38.4	38.9							49.1	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.3	0.7							150.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0							0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.0	34.3	34.6							6.5	0.0	0.0
Lane Grp Delay (d), s/veh	0.0	38.7	39.5							199.1	0.0	0.0
Lane Grp LOS		D	D							F		
Approach Vol, veh/h		3337									105	
Approach Delay, s/veh		39.0									199.1	
Approach LOS		D									F	

Timer	
Assigned Phs	6
Phs Duration (G+Y+Rc), s	93.0
Change Period (Y+Rc), s	5.0
Max Green Setting (Gmax), s	88.0
Max Q Clear Time (g_c+I1), s	72.6
Green Ext Time (p_c), s	14.1

Intersection Summary	
HCM 2010 Ctrl Delay	43.9
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	160	2600	130	0	0	0	0	770	270	300	1110	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	184.5	190.0				0.0	184.5	190.0	184.5	184.5	0.0
Lanes	0	3	0				0	2	0	1	2	0
Cap, veh/h	145	2511	128				0	745	261	250	1513	0
Arrive On Green	0.17	0.17	0.17				0.00	0.28	0.28	0.11	0.41	0.00
Sat Flow, veh/h	285	4939	251				0	2614	914	1757	3689	0
Grp Volume(v), veh/h	1079	982	982				0	572	523	316	1168	0
Grp Sat Flow(s),veh/h/ln	1830	1845	1800				0	1845	1683	1757	1845	0
Q Serve(g_s), s	61.0	61.0	61.0				0.0	34.2	34.2	13.0	32.8	0.0
Cycle Q Clear(g_c), s	61.0	61.0	61.0				0.0	34.2	34.2	13.0	32.8	0.0
Prop In Lane	0.16		0.14				0.00		0.54	1.00		0.00
Lane Grp Cap(c), veh/h	930	938	915				0	526	480	250	1513	0
V/C Ratio(X)	1.16	1.05	1.07				0.00	1.09	1.09	1.26	0.77	0.00
Avail Cap(c_a), veh/h	930	938	915				0	526	480	250	1513	0
HCM Platoon Ratio	0.33	0.33	0.33				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.24	0.24	0.24				0.00	0.81	0.81	1.00	1.00	0.00
Uniform Delay (d), s/veh	49.9	49.9	49.9				0.0	42.9	43.2	34.7	30.6	0.0
Incr Delay (d2), s/veh	74.9	28.6	38.5				0.0	61.7	63.8	146.0	3.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	49.6	37.9	39.5				0.0	25.1	23.2	17.9	15.9	0.0
Lane Grp Delay (d), s/veh	124.8	78.5	88.5				0.0	104.6	106.9	180.8	34.4	0.0
Lane Grp LOS	F	F	F					F	F	F	C	
Approach Vol, veh/h		3042						1095			1484	
Approach Delay, s/veh		98.2						105.7			65.6	
Approach LOS		F						F			E	

Timer					
Assigned Phs		6		4		3	8
Phs Duration (G+Y+Rc), s		66.0		38.0		16.0	54.0
Change Period (Y+Rc), s		5.0		4.8		3.0	4.8
Max Green Setting (Gmax), s		61.0		33.2		13.0	49.2
Max Q Clear Time (g_c+I1), s		63.0		36.2		15.0	34.8
Green Ext Time (p_c), s		0.0		0.0		0.0	2.9

Intersection Summary	
HCM 2010 Ctrl Delay	91.0
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	130	2640	40	0	0	0	0	90	90	170	110	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	186.3	190.0	190.0	186.3	0.0
Lanes	0	3	0				0	1	0	0	1	0
Cap, veh/h	145	3141	49				0	271	271	241	135	0
Arrive On Green	0.20	0.20	0.20				0.00	0.32	0.31	0.31	0.32	0.00
Sat Flow, veh/h	242	5239	81				0	856	856	607	427	0
Grp Volume(v), veh/h	1049	955	955				0	0	190	295	0	0
Grp Sat Flow(s),veh/h/ln	1851	1863	1848				0	0	1712	1033	0	0
Q Serve(g_s), s	65.8	58.2	58.8				0.0	0.0	10.1	23.6	0.0	0.0
Cycle Q Clear(g_c), s	65.8	58.2	58.8				0.0	0.0	10.1	33.7	0.0	0.0
Prop In Lane	0.13		0.04				0.00		0.50	0.61		0.00
Lane Grp Cap(c), veh/h	1110	1117	1108				0	0	541	367	0	0
V/C Ratio(X)	0.95	0.85	0.86				0.00	0.00	0.35	0.80	0.00	0.00
Avail Cap(c_a), veh/h	1110	1117	1108				0	0	574	394	0	0
HCM Platoon Ratio	0.33	0.33	0.33				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	0.00	0.68	1.00	0.00	0.00
Uniform Delay (d), s/veh	45.3	42.3	42.5				0.0	0.0	31.2	43.5	0.0	0.0
Incr Delay (d2), s/veh	16.7	8.4	8.8				0.0	0.0	0.2	10.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	38.7	32.4	32.6				0.0	0.0	4.4	9.8	0.0	0.0
Lane Grp Delay (d), s/veh	62.0	50.7	51.3				0.0	0.0	31.4	53.9	0.0	0.0
Lane Grp LOS	E	D	D						C	D		
Approach Vol, veh/h		2958						190			295	
Approach Delay, s/veh		54.9						31.4			53.9	
Approach LOS		D						C			D	

Timer												
Assigned Phs		6						4			8	
Phs Duration (G+Y+Rc), s		75.6						42.1			42.1	
Change Period (Y+Rc), s		5.0						5.9			5.9	
Max Green Setting (Gmax), s		70.6						38.5			38.5	
Max Q Clear Time (g_c+I1), s		67.8						12.1			35.7	
Green Ext Time (p_c), s		2.6						1.5			0.5	

Intersection Summary			
HCM 2010 Ctrl Delay		53.5	
HCM 2010 LOS		D	

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	180	2540	80	0	0	0	0	890	190	80	1490	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	186.3	190.0	186.3	186.3	0.0
Lanes	0	3	0				0	2	0	1	2	0
Cap, veh/h	156	2355	76				0	1126	240	177	1661	0
Arrive On Green	0.15	0.15	0.15				0.00	0.38	0.37	0.04	0.45	0.00
Sat Flow, veh/h	334	5047	162				0	2978	635	1774	3725	0
Grp Volume(v), veh/h	1045	951	951				0	586	551	84	1568	0
Grp Sat Flow(s),veh/h/ln	1846	1863	1834				0	1863	1751	1774	1863	0
Q Serve(g_s), s	56.0	56.0	56.0				0.0	34.2	34.4	3.4	48.3	0.0
Cycle Q Clear(g_c), s	56.0	56.0	56.0				0.0	34.2	34.4	3.4	48.3	0.0
Prop In Lane	0.18		0.09				0.00		0.36	1.00		0.00
Lane Grp Cap(c), veh/h	861	869	856				0	704	662	177	1661	0
V/C Ratio(X)	1.21	1.09	1.11				0.00	0.83	0.83	0.47	0.94	0.00
Avail Cap(c_a), veh/h	861	869	856				0	704	662	243	1661	0
HCM Platoon Ratio	0.33	0.33	0.33				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.09				0.00	0.76	0.76	1.00	1.00	0.00
Uniform Delay (d), s/veh	50.8	50.8	50.8				0.0	33.9	34.1	27.2	31.8	0.0
Incr Delay (d2), s/veh	96.9	44.4	51.8				0.0	6.5	7.0	2.0	12.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	51.2	39.0	40.1				0.0	17.4	16.5	1.6	25.3	0.0
Lane Grp Delay (d), s/veh	147.7	95.1	102.6				0.0	40.4	41.0	29.1	44.1	0.0
Lane Grp LOS	F	F	F					D	D	C	D	
Approach Vol, veh/h		2947						1137			1652	
Approach Delay, s/veh		116.2						40.7			43.3	
Approach LOS		F						D			D	
Timer												
Assigned Phs		6						4		3	8	
Phs Duration (G+Y+Rc), s		61.0						50.9		8.1	59.0	
Change Period (Y+Rc), s		5.0						6.5		3.0	6.5	
Max Green Setting (Gmax), s		56.0						39.9		9.6	52.5	
Max Q Clear Time (g_c+I1), s		58.0						36.4		5.4	50.3	
Green Ext Time (p_c), s		0.0						3.2		0.1	2.0	
Intersection Summary												
HCM 2010 Ctrl Delay			80.2									
HCM 2010 LOS			F									
Notes												

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Volume (veh/h)	210	2240	60	0	0	0	0	290	120	400	430	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	186.3	190.0	186.3	193.7	0.0
Lanes	0	3	0				0	2	0	1	1	0
Cap, veh/h	225	2569	70				0	452	183	446	751	0
Arrive On Green	0.52	0.52	0.52				0.00	0.18	0.18	0.18	0.39	0.00
Sat Flow, veh/h	435	4972	136				0	2525	1020	1774	1937	0
Grp Volume(v), veh/h	936	855	851				0	223	208	421	453	0
Grp Sat Flow(s),veh/h/ln	1841	1863	1839				0	1863	1683	1774	1937	0
Q Serve(g_s), s	60.0	49.2	50.0				0.0	13.4	13.9	22.0	22.4	0.0
Cycle Q Clear(g_c), s	60.0	49.2	50.0				0.0	13.4	13.9	22.0	22.4	0.0
Prop In Lane	0.24		0.07				0.00		0.61	1.00		0.00
Lane Grp Cap(c), veh/h	951	962	950				0	334	301	446	751	0
V/C Ratio(X)	0.98	0.89	0.90				0.00	0.67	0.69	0.94	0.60	0.00
Avail Cap(c_a), veh/h	951	962	950				0	334	301	446	751	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.09				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	28.5	25.9	26.1				0.0	45.9	46.1	32.8	29.4	0.0
Incr Delay (d2), s/veh	5.7	1.1	1.2				0.0	10.2	12.2	29.0	3.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	28.3	22.6	22.5				0.0	7.4	7.0	17.0	11.7	0.0
Lane Grp Delay (d), s/veh	34.2	27.0	27.3				0.0	56.1	58.3	61.8	33.0	0.0
Lane Grp LOS	C	C	C					E	E	E	C	
Approach Vol, veh/h		2642						431			874	
Approach Delay, s/veh		29.6						57.2			46.8	
Approach LOS		C						E			D	
Timer												
Assigned Phs		6						4		3	8	
Phs Duration (G+Y+Rc), s		67.0						28.0		25.0	53.0	
Change Period (Y+Rc), s		5.0						6.5		3.0	6.5	
Max Green Setting (Gmax), s		62.0						21.5		22.0	46.5	
Max Q Clear Time (g_c+I1), s		62.0						15.9		24.0	24.4	
Green Ext Time (p_c), s		0.0						1.5		0.0	2.5	
Intersection Summary												
HCM 2010 Ctrl Delay			36.5									
HCM 2010 LOS			D									
Notes												

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	140	0	30	0	0	0	0	1980	1880	560	2080	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	9	12	9	11	11	11	12	10	12	12	10.	12
Total Lost time (s)	3.9		3.9					3.6	4.6	4.6	3.6	
Lane Util. Factor	1.00		1.00					0.91	0.91	0.97	0.95	
Frt	1.00		0.85					0.96	0.85	1.00	1.00	
Flt Protected	0.95		1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1593		1425					3041	1441	3433	3303	
Flt Permitted	0.95		1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1593		1425					3041	1441	3433	3303	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	147	0	32	0	0	0	0	2084	1979	589	2189	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	25	160	0	0	0
Lane Group Flow (vph)	147	0	3	0	0	0	0	2791	1087	589	2189	0
Turn Type	custom		custom					NA	Perm	Prot	NA	
Protected Phases			8					6		5	2	
Permitted Phases	8								6			
Actuated Green, G (s)	13.1		13.1					84.4	84.4	18.4	107.4	
Effective Green, g (s)	14.1		14.1					85.4	84.4	18.4	108.4	
Actuated g/C Ratio	0.11		0.11					0.66	0.65	0.14	0.83	
Clearance Time (s)	4.9		4.9					4.6	4.6	4.6	4.6	
Vehicle Extension (s)	2.5		2.5					2.5	2.5	3.0	2.5	
Lane Grp Cap (vph)	172		154					1997	935	485	2754	
v/s Ratio Prot			0.00					c0.92		c0.17	0.66	
v/s Ratio Perm	c0.09								0.75			
v/c Ratio	0.85		0.02					1.40	1.16	1.21	0.79	
Uniform Delay, d1	56.9		51.8					22.3	22.8	55.8	5.3	
Progression Factor	1.00		1.00					0.72	0.53	1.00	1.00	
Incremental Delay, d2	38.7		0.3					179.3	74.4	114.2	2.5	
Delay (s)	95.6		52.1					195.3	86.5	170.0	7.8	
Level of Service	F		D					F	F	F	A	
Approach Delay (s)		87.8			0.0			161.9			42.2	
Approach LOS		F			A			F			D	

Intersection Summary			
HCM 2000 Control Delay	112.6	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.30		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	12.1
Intersection Capacity Utilization	109.0%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1310	0	60	320	310	450	240	1770	0	0	1760	180
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	11	12	12	11	12	11	10	12	10	10	12
Total Lost time (s)	6.7		6.7	6.7	5.7		3.5	5.0			5.0	5.0
Lane Util. Factor	0.97		1.00	0.97	1.00		1.00	0.91			0.95	1.00
Frt	1.00		0.85	1.00	0.91		1.00	1.00			1.00	0.85
Flt Protected	0.95		1.00	0.95	1.00		0.95	1.00			1.00	1.00
Satd. Flow (prot)	3433		1583	3433	1641		1711	4746			3303	1583
Flt Permitted	0.09		1.00	0.95	1.00		0.12	1.00			1.00	1.00
Satd. Flow (perm)	319		1583	3433	1641		218	4746			3303	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	1379	0	63	337	326	474	253	1863	0	0	1853	189
RTOR Reduction (vph)	0	0	41	0	2	0	0	0	0	0	0	85
Lane Group Flow (vph)	1379	0	22	337	798	0	253	1863	0	0	1853	104
Turn Type	custom		custom	Split	NA		pm+pt	NA			NA	Perm
Protected Phases				2	2		7	4			8	
Permitted Phases	1		1				4					8
Actuated Green, G (s)	45.3		45.3	25.3	25.3		40.0	40.0			30.0	30.0
Effective Green, g (s)	45.3		45.3	25.3	26.3		39.5	41.0			31.0	31.0
Actuated g/C Ratio	0.35		0.35	0.19	0.20		0.30	0.32			0.24	0.24
Clearance Time (s)	6.7		6.7	6.7	6.7		3.0	6.0			6.0	6.0
Vehicle Extension (s)	2.5		2.5	2.5	2.5		2.0	2.5			2.5	2.5
Lane Grp Cap (vph)	111		551	668	331		140	1496			787	377
v/s Ratio Prot				0.10	c0.49		c0.09	0.39			c0.56	
v/s Ratio Perm	c4.32		0.01				0.46					0.07
v/c Ratio	12.42		0.04	0.50	2.41		1.81	1.25			2.35	0.28
Uniform Delay, d1	42.4		28.0	46.8	51.9		42.1	44.5			49.5	40.3
Progression Factor	1.00		1.00	1.00	1.00		1.00	1.00			0.91	0.82
Incremental Delay, d2	5158.1		0.1	2.7	644.6		390.0	116.2			611.9	1.1
Delay (s)	5200.5		28.1	49.5	696.5		432.1	160.7			657.0	34.1
Level of Service	F		C	D	F		F	F			F	C
Approach Delay (s)		4974.5			504.7			193.1			599.3	
Approach LOS		F			F			F			F	

Intersection Summary			
HCM 2000 Control Delay	1392.2	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	6.57		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	21.9
Intersection Capacity Utilization	158.8%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	40	850	60	60	70	0	0	120	80
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	186.3	190.0	190.0	186.3	0.0	0.0	186.3	190.0
Lanes				0	3	0	0	1	0	0	1	0
Cap, veh/h				153	3467	251	108	110	0	0	209	139
Arrive On Green				0.23	0.23	0.23	0.20	0.20	0.00	0.00	0.20	0.20
Sat Flow, veh/h				218	4938	358	304	551	0	0	1044	696
Grp Volume(v), veh/h				357	327	317	137	0	0	0	0	210
Grp Sat Flow(s),veh/h/ln				1852	1863	1800	854	0	0	0	0	1740
Q Serve(g_s), s				17.8	16.1	16.1	7.3	0.0	0.0	0.0	0.0	12.4
Cycle Q Clear(g_c), s				17.8	16.1	16.1	19.6	0.0	0.0	0.0	0.0	12.4
Prop In Lane				0.12		0.20	0.46		0.00	0.00		0.40
Lane Grp Cap(c), veh/h				1300	1308	1263	218	0	0	0	0	348
V/C Ratio(X)				0.27	0.25	0.25	0.63	0.00	0.00	0.00	0.00	0.60
Avail Cap(c_a), veh/h				1300	1308	1263	315	0	0	0	0	464
HCM Platoon Ratio				0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.65	0.65	0.65	1.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				19.7	19.1	19.1	45.7	0.0	0.0	0.0	0.0	40.9
Incr Delay (d2), s/veh				0.3	0.3	0.3	3.0	0.0	0.0	0.0	0.0	1.7
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				9.1	8.3	8.0	4.0	0.0	0.0	0.0	0.0	5.6
Lane Grp Delay (d), s/veh				20.1	19.4	19.4	48.6	0.0	0.0	0.0	0.0	42.6
Lane Grp LOS				C	B	B	D					D
Approach Vol, veh/h					1000			137			210	
Approach Delay, s/veh					19.6			48.6			42.6	
Approach LOS					B			D			D	
Timer												
Assigned Phs					2			4			8	
Phs Duration (G+Y+Rc), s					84.0			28.5			28.5	
Change Period (Y+Rc), s					5.0			6.0			6.0	
Max Green Setting (Gmax), s					79.0			30.0			30.0	
Max Q Clear Time (g_c+I1), s					19.8			21.6			14.4	
Green Ext Time (p_c), s					4.7			0.9			1.2	
Intersection Summary												
HCM 2010 Ctrl Delay			26.2									
HCM 2010 LOS			C									
Notes												

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	330	800	230	130	970	0	0	1540	130
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	186.3	190.0	186.3	186.3	0.0	0.0	186.3	190.0
Lanes				0	3	0	1	2	0	0	2	0
Cap, veh/h				499	1308	383	166	1894	0	0	1437	120
Arrive On Green				0.13	0.13	0.13	0.06	0.51	0.00	0.00	0.42	0.42
Sat Flow, veh/h				1222	3202	937	1774	3725	0	0	3392	284
Grp Volume(v), veh/h				511	481	438	137	1021	0	0	883	875
Grp Sat Flow(s),veh/h/ln				1802	1863	1697	1774	1863	0	0	1863	1813
Q Serve(g_s), s				32.5	29.3	29.3	5.1	22.3	0.0	0.0	50.9	50.9
Cycle Q Clear(g_c), s				32.5	29.3	29.3	5.1	22.3	0.0	0.0	50.9	50.9
Prop In Lane				0.68		0.55	1.00		0.00	0.00		0.16
Lane Grp Cap(c), veh/h				736	761	693	166	1894	0	0	789	768
V/C Ratio(X)				0.70	0.63	0.63	0.83	0.54	0.00	0.00	1.12	1.14
Avail Cap(c_a), veh/h				736	761	693	208	1894	0	0	789	768
HCM Platoon Ratio				0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.96	0.96	0.96	1.00	1.00	0.00	0.00	0.10	0.10
Uniform Delay (d), s/veh				44.8	43.4	43.4	28.0	20.0	0.0	0.0	34.6	34.6
Incr Delay (d2), s/veh				5.2	3.8	4.2	19.4	1.1	0.0	0.0	55.6	64.3
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				16.9	15.6	14.3	5.2	10.4	0.0	0.0	36.1	37.0
Lane Grp Delay (d), s/veh				50.0	47.2	47.6	47.4	21.1	0.0	0.0	90.2	99.0
Lane Grp LOS				D	D	D	D	C			F	F
Approach Vol, veh/h					1431			1158			1758	
Approach Delay, s/veh					48.3			24.2			94.6	
Approach LOS					D			C			F	

Timer												
Assigned Phs					2		7	4			8	
Phs Duration (G+Y+Rc), s					54.0		10.1	66.0			55.9	
Change Period (Y+Rc), s					5.0		3.0	6.0			6.0	
Max Green Setting (Gmax), s					49.0		10.0	60.0			47.3	
Max Q Clear Time (g_c+I1), s					34.5		7.1	24.3			52.9	
Green Ext Time (p_c), s					5.9		0.1	17.2			0.0	

Intersection Summary		
HCM 2010 Ctrl Delay		60.6
HCM 2010 LOS		E

Notes

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations			↑↑↑			↱
Volume (vph)	0	0	1280	0	0	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	12	11	12	12	11	12
Total Lost time (s)			5.0			4.3
Lane Util. Factor			0.91			1.00
Frt			1.00			0.86
Flt Protected			1.00			1.00
Satd. Flow (prot)			5187			1644
Flt Permitted			1.00			1.00
Satd. Flow (perm)			5187			1644
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	1347	0	0	84
RTOR Reduction (vph)	0	0	0	0	0	75
Lane Group Flow (vph)	0	0	1347	0	0	9
Heavy Vehicles (%)	2%	2%	0%	0%	2%	0%
Turn Type			NA			custom
Protected Phases			2			
Permitted Phases						8
Actuated Green, G (s)			105.1			5.6
Effective Green, g (s)			105.1			5.6
Actuated g/C Ratio			0.88			0.05
Clearance Time (s)			5.0			4.3
Vehicle Extension (s)			3.0			2.5
Lane Grp Cap (vph)			4542			76
v/s Ratio Prot			c0.26			
v/s Ratio Perm						c0.01
v/c Ratio			0.30			0.11
Uniform Delay, d1			1.2			54.8
Progression Factor			0.33			1.00
Incremental Delay, d2			0.1			0.5
Delay (s)			0.5			55.3
Level of Service			A			E
Approach Delay (s)		0.0	0.5		55.3	
Approach LOS		A	A		E	

Intersection Summary			
HCM 2000 Control Delay	3.7	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.29		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	9.3
Intersection Capacity Utilization	37.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	40	2000	130	90	90	0	0	110	170
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	190.0	190.0	190.0	195.6	0.0	0.0	196.1	190.0
Lanes				0	3	0	0	1	0	0	1	0
Cap, veh/h				63	3373	225	140	129	0	0	196	302
Arrive On Green				0.65	0.65	0.65	0.27	0.28	0.00	0.00	0.28	0.27
Sat Flow, veh/h				98	5189	347	338	458	0	0	696	1075
Grp Volume(v), veh/h				815	743	726	190	0	0	0	0	295
Grp Sat Flow(s),veh/h/ln				1895	1900	1839	796	0	0	0	0	1771
Q Serve(g_s), s				31.7	27.0	27.4	12.8	0.0	0.0	0.0	0.0	17.3
Cycle Q Clear(g_c), s				31.7	27.0	27.4	30.1	0.0	0.0	0.0	0.0	17.3
Prop In Lane				0.05		0.19	0.50		0.00	0.00		0.61
Lane Grp Cap(c), veh/h				1232	1235	1195	262	0	0	0	0	497
V/C Ratio(X)				0.66	0.60	0.61	0.73	0.00	0.00	0.00	0.00	0.59
Avail Cap(c_a), veh/h				1232	1235	1195	262	0	0	0	0	497
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.27
Uniform Delay (d), s/veh				12.9	12.1	12.1	46.7	0.0	0.0	0.0	0.0	37.5
Incr Delay (d2), s/veh				2.8	2.2	2.3	16.1	0.0	0.0	0.0	0.0	1.4
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				14.8	12.5	12.3	7.0	0.0	0.0	0.0	0.0	8.1
Lane Grp Delay (d), s/veh				15.7	14.2	14.5	62.8	0.0	0.0	0.0	0.0	38.9
Lane Grp LOS				B	B	B	E					D
Approach Vol, veh/h					2284			190			295	
Approach Delay, s/veh					14.8			62.8			38.9	
Approach LOS					B			E			D	

Timer	
Assigned Phs	2 4 8
Phs Duration (G+Y+Rc), s	83.0 37.0 37.0
Change Period (Y+Rc), s	5.0 4.3 4.3
Max Green Setting (Gmax), s	78.0 32.7 32.7
Max Q Clear Time (g_c+I1), s	33.7 32.1 19.3
Green Ext Time (p_c), s	17.9 0.1 1.4

Intersection Summary	
HCM 2010 Ctrl Delay	20.7
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	270	910	160	150	790	0	0	1160	210
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	190.0	190.0	186.3	186.3	0.0	0.0	186.3	190.0
Lanes				0	3	0	1	2	0	0	2	1
Cap, veh/h				515	1871	335	197	1608	0	0	1229	519
Arrive On Green				0.49	0.49	0.49	0.08	0.43	0.00	0.00	0.33	0.32
Sat Flow, veh/h				1047	3801	680	1774	3725	0	0	3725	1615
Grp Volume(v), veh/h				501	469	440	158	832	0	0	1221	221
Grp Sat Flow(s),veh/h/ln				1848	1900	1780	1774	1863	0	0	1863	1615
Q Serve(g_s), s				21.9	19.3	19.3	6.6	18.9	0.0	0.0	37.8	12.5
Cycle Q Clear(g_c), s				21.9	19.3	19.3	6.6	18.9	0.0	0.0	37.8	12.5
Prop In Lane				0.57		0.38	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				910	935	876	197	1608	0	0	1229	519
V/C Ratio(X)				0.55	0.50	0.50	0.80	0.52	0.00	0.00	0.99	0.43
Avail Cap(c_a), veh/h				910	935	876	261	1744	0	0	1229	519
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.43	0.43
Uniform Delay (d), s/veh				20.5	19.8	19.8	28.4	24.1	0.0	0.0	38.7	30.9
Incr Delay (d2), s/veh				2.4	1.9	2.0	12.5	0.3	0.0	0.0	15.2	0.2
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				10.5	9.5	8.9	5.4	8.7	0.0	0.0	20.4	5.1
Lane Grp Delay (d), s/veh				22.9	21.7	21.9	40.9	24.3	0.0	0.0	53.9	31.1
Lane Grp LOS				C	C	C	D	C			D	C
Approach Vol, veh/h					1410			990			1442	
Approach Delay, s/veh					22.2			27.0			50.4	
Approach LOS					C			C			D	

Timer					
Assigned Phs		2	7	4	8
Phs Duration (G+Y+Rc), s		62.0	11.8	53.8	42.0
Change Period (Y+Rc), s		5.0	3.0	4.8	4.8
Max Green Setting (Gmax), s		57.0	13.0	53.2	37.2
Max Q Clear Time (g_c+I1), s		23.9	8.6	20.9	39.8
Green Ext Time (p_c), s		7.4	0.2	16.1	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	34.0
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	260	900	160	250	660	0	0	710	160
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	190.0	190.0	190.0	186.3	0.0	0.0	186.9	190.0
Lanes				0	3	0	0	2	0	0	2	0
Cap, veh/h				572	2128	386	151	626	0	0	1092	245
Arrive On Green				0.18	0.18	0.18	0.36	0.37	0.00	0.00	0.37	0.36
Sat Flow, veh/h				1025	3811	691	248	1695	0	0	2957	665
Grp Volume(v), veh/h				494	462	433	263	695	0	0	472	443
Grp Sat Flow(s),veh/h/ln				1849	1900	1778	248	1695	0	0	1869	1752
Q Serve(g_s), s				28.7	25.9	25.9	17.7	44.3	0.0	0.0	25.6	25.6
Cycle Q Clear(g_c), s				28.7	25.9	25.9	43.3	44.3	0.0	0.0	25.6	25.6
Prop In Lane				0.55		0.39	1.00		0.00	0.00		0.38
Lane Grp Cap(c), veh/h				1032	1061	993	149	626	0	0	690	647
V/C Ratio(X)				0.48	0.44	0.44	1.76	1.11	0.00	0.00	0.68	0.68
Avail Cap(c_a), veh/h				1032	1061	993	149	626	0	0	690	647
HCM Platoon Ratio				0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.94	0.94	0.94	1.00	1.00	0.00	0.00	0.09	0.09
Uniform Delay (d), s/veh				33.3	32.2	32.2	54.4	37.8	0.0	0.0	31.9	32.1
Incr Delay (d2), s/veh				1.5	1.2	1.3	368.1	70.2	0.0	0.0	0.3	0.3
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				14.8	13.7	12.8	20.0	31.2	0.0	0.0	12.1	11.4
Lane Grp Delay (d), s/veh				34.8	33.4	33.5	422.5	108.1	0.0	0.0	32.2	32.4
Lane Grp LOS				C	C	C	F	F			C	C
Approach Vol, veh/h					1389			958			915	
Approach Delay, s/veh					33.9			194.4			32.3	
Approach LOS					C			F			C	

Timer	
Assigned Phs	2 4 8
Phs Duration (G+Y+Rc), s	72.0 48.0 48.0
Change Period (Y+Rc), s	5.0 4.7 4.7
Max Green Setting (Gmax), s	67.0 43.3 43.3
Max Q Clear Time (g_c+I1), s	30.7 46.3 27.6
Green Ext Time (p_c), s	7.4 0.0 8.0

Intersection Summary	
HCM 2010 Ctrl Delay	80.6
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	80	1240	0	60	0	0	0	80	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	10	12	12	12	12	12	11	12	12	11	12
Total Lost time (s)					5.0		4.3				4.3	4.3
Lane Util. Factor					0.91		1.00				1.00	1.00
Frt					1.00		1.00				1.00	0.85
Flt Protected					1.00		0.95				1.00	1.00
Satd. Flow (prot)					5070		1805				1801	1615
Flt Permitted					1.00		0.69				1.00	1.00
Satd. Flow (perm)					5070		1307				1801	1615
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	84	1305	0	63	0	0	0	84	95
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	77
Lane Group Flow (vph)	0	0	0	0	1389	0	63	0	0	0	84	18
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	0%	2%	2%	2%	2%	0%
Turn Type				Perm	NA		custom				NA	Perm
Protected Phases					2						8	
Permitted Phases				2			4					8
Actuated Green, G (s)					88.0		22.7				22.7	22.7
Effective Green, g (s)					88.0		22.7				22.7	22.7
Actuated g/C Ratio					0.73		0.19				0.19	0.19
Clearance Time (s)					5.0		4.3				4.3	4.3
Vehicle Extension (s)					3.0		3.0				3.0	3.0
Lane Grp Cap (vph)					3718		247				340	305
v/s Ratio Prot											0.05	
v/s Ratio Perm					0.27		c0.05					0.01
v/c Ratio					0.37		0.26				0.25	0.06
Uniform Delay, d1					5.9		41.4				41.4	39.9
Progression Factor					0.53		1.00				1.00	1.00
Incremental Delay, d2					0.2		2.5				0.4	0.1
Delay (s)					3.3		43.9				41.8	40.0
Level of Service					A		D				D	D
Approach Delay (s)		0.0			3.3			43.9			40.8	
Approach LOS		A			A			D			D	

Intersection Summary			
HCM 2000 Control Delay	9.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	9.3
Intersection Capacity Utilization	45.6%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	110	1100	110	130	260	0	0	230	90
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	186.3	190.0	190.0	186.3	0.0	0.0	186.3	190.0
Lanes				0	3	0	0	1	0	0	1	0
Cap, veh/h				262	2786	288	108	165	0	0	384	151
Arrive On Green				0.20	0.20	0.20	0.30	0.30	0.00	0.00	0.30	0.30
Sat Flow, veh/h				430	4580	473	225	545	0	0	1274	500
Grp Volume(v), veh/h				496	457	437	411	0	0	0	0	337
Grp Sat Flow(s),veh/h/ln				1841	1863	1779	770	0	0	0	0	1774
Q Serve(g_s), s				28.4	25.6	25.6	16.6	0.0	0.0	0.0	0.0	19.6
Cycle Q Clear(g_c), s				28.4	25.6	25.6	36.2	0.0	0.0	0.0	0.0	19.6
Prop In Lane				0.23		0.27	0.33		0.00	0.00		0.28
Lane Grp Cap(c), veh/h				1120	1133	1082	272	0	0	0	0	535
V/C Ratio(X)				0.44	0.40	0.40	1.51	0.00	0.00	0.00	0.00	0.63
Avail Cap(c_a), veh/h				1120	1133	1082	272	0	0	0	0	535
HCM Platoon Ratio				0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.80	0.80	0.80	1.00	0.00	0.00	0.00	0.00	0.09
Uniform Delay (d), s/veh				30.1	29.0	29.0	50.1	0.0	0.0	0.0	0.0	36.1
Incr Delay (d2), s/veh				1.0	0.9	0.9	247.4	0.0	0.0	0.0	0.0	0.5
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				14.5	13.2	12.6	27.2	0.0	0.0	0.0	0.0	9.0
Lane Grp Delay (d), s/veh				31.1	29.9	29.9	297.4	0.0	0.0	0.0	0.0	36.6
Lane Grp LOS				C	C	C	F					D
Approach Vol, veh/h					1390			411			337	
Approach Delay, s/veh					30.3			297.4			36.6	
Approach LOS					C			F			D	

Timer			
Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	78.0	42.0	42.0
Change Period (Y+Rc), s	5.0	5.8	5.8
Max Green Setting (Gmax), s	73.0	36.2	36.2
Max Q Clear Time (g_c+I1), s	30.4	38.2	21.6
Green Ext Time (p_c), s	7.4	0.0	2.2

Intersection Summary	
HCM 2010 Ctrl Delay	82.7
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	0	1300	260	180	410	0	0	0	0
Number				5	2	12	7	4	14			
Initial Q (Qb), veh				0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00			
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow veh/h/ln				0.0	186.3	190.0	190.0	186.3	0.0			
Lanes				0	3	0	0	1	0			
Cap, veh/h				0	2835	567	31	0	0			
Arrive On Green				0.00	0.21	0.21	0.31	0.31	0.00			
Sat Flow, veh/h				0	4524	905	0	0	0			
Grp Volume(v), veh/h				0	1126	516	621	0	0			
Grp Sat Flow(s),veh/h/ln				0	1863	1703	0	0	0			
Q Serve(g_s), s				0.0	40.0	40.0	0.0	0.0	0.0			
Cycle Q Clear(g_c), s				0.0	40.0	40.0	46.0	0.0	0.0			
Prop In Lane				0.00		0.53	0.30		0.00			
Lane Grp Cap(c), veh/h				0	2335	1067	31	0	0			
V/C Ratio(X)				0.00	0.48	0.48	19.84	0.00	0.00			
Avail Cap(c_a), veh/h				0	2335	1067	31	0	0			
HCM Platoon Ratio				1.00	0.33	0.33	1.00	1.00	1.00			
Upstream Filter(I)				0.00	0.50	0.50	1.00	0.00	0.00			
Uniform Delay (d), s/veh				0.0	38.1	38.1	75.0	0.0	0.0			
Incr Delay (d2), s/veh				0.0	0.4	0.8	8537.0	0.0	0.0			
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0			
%ile Back of Q (50%), veh/ln				0.0	20.4	18.8	75.5	0.0	0.0			
Lane Grp Delay (d), s/veh				0.0	38.4	38.9	8612.0	0.0	0.0			
Lane Grp LOS					D	D	F					
Approach Vol, veh/h					1642			621				
Approach Delay, s/veh					38.6			8612.0				
Approach LOS					D			F				

Timer	
Assigned Phs	2	4
Phs Duration (G+Y+Rc), s	99.0	51.0
Change Period (Y+Rc), s	5.0	5.0
Max Green Setting (Gmax), s	94.0	46.0
Max Q Clear Time (g_c+I1), s	42.0	48.0
Green Ext Time (p_c), s	18.9	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	2391.2
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↑↑↑						↑↑	↱
Volume (veh/h)	0	0	0	0	970	0	0	0	0	0	140	770
Number				5	2	12				3	8	18
Initial Q (Qb), veh				0	0	0				0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00				1.00		1.00
Parking Bus Adj				1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow veh/h/ln				0.0	167.6	0.0				0.0	167.6	167.6
Lanes				0	3	0				0	2	1
Cap, veh/h				0	2448	0				0	1475	627
Arrive On Green				0.00	0.16	0.00				0.00	0.44	0.44
Sat Flow, veh/h				0	5029	0				0	3353	1425
Grp Volume(v), veh/h				0	1021	0				0	147	811
Grp Sat Flow(s),veh/h/ln				0	1676	0				0	1676	1425
Q Serve(g_s), s				0.0	27.4	0.0				0.0	3.9	66.0
Cycle Q Clear(g_c), s				0.0	27.4	0.0				0.0	3.9	66.0
Prop In Lane				0.00		0.00				0.00		1.00
Lane Grp Cap(c), veh/h				0	2448	0				0	1475	627
V/C Ratio(X)				0.00	0.42	0.00				0.00	0.10	1.29
Avail Cap(c_a), veh/h				0	2448	0				0	1475	627
HCM Platoon Ratio				1.00	0.33	1.00				1.00	1.00	1.00
Upstream Filter(I)				0.00	1.00	0.00				0.00	0.09	0.09
Uniform Delay (d), s/veh				0.0	43.8	0.0				0.0	24.6	42.0
Incr Delay (d2), s/veh				0.0	0.5	0.0				0.0	0.0	133.2
Initial Q Delay(d3),s/veh				0.0	0.0	0.0				0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				0.0	12.6	0.0				0.0	1.6	47.1
Lane Grp Delay (d), s/veh				0.0	44.3	0.0				0.0	24.6	175.2
Lane Grp LOS					D						C	F
Approach Vol, veh/h					1021						958	
Approach Delay, s/veh					44.3						152.1	
Approach LOS					D						F	

Timer	
Assigned Phs	2
Phs Duration (G+Y+Rc), s	78.0
Change Period (Y+Rc), s	5.0
Max Green Setting (Gmax), s	73.0
Max Q Clear Time (g_c+I1), s	29.4
Green Ext Time (p_c), s	9.3

Intersection Summary	
HCM 2010 Ctrl Delay	96.5
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	0	3450	530	170	500	0	0	0	350
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					5.0		4.7	4.7				4.7
Lane Util. Factor					0.91		1.00	1.00				1.00
Frt					0.98		1.00	1.00				0.86
Flt Protected					1.00		0.95	1.00				1.00
Satd. Flow (prot)					4485		1593	1676				1450
Flt Permitted					1.00		0.95	1.00				1.00
Satd. Flow (perm)					4485		1593	1676				1450
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	0	3632	558	179	526	0	0	0	368
RTOR Reduction (vph)	0	0	0	0	14	0	11	0	0	0	0	11
Lane Group Flow (vph)	0	0	0	0	4176	0	168	526	0	0	0	357
Turn Type					NA		Perm	NA				custom
Protected Phases					2			4				
Permitted Phases							4					8
Actuated Green, G (s)					101.0		39.3	39.3				39.3
Effective Green, g (s)					101.0		39.3	39.3				39.3
Actuated g/C Ratio					0.67		0.26	0.26				0.26
Clearance Time (s)					5.0		4.7	4.7				4.7
Vehicle Extension (s)					3.0		3.0	3.0				2.5
Lane Grp Cap (vph)					3019		417	439				379
v/s Ratio Prot					c0.93			c0.31				
v/s Ratio Perm							0.11					0.25
v/c Ratio					1.38		0.40	1.20				0.94
Uniform Delay, d1					24.5		45.7	55.4				54.2
Progression Factor					0.21		1.00	1.00				1.34
Incremental Delay, d2					172.7		2.9	109.4				5.2
Delay (s)					177.9		48.5	164.7				77.8
Level of Service					F		D	F				E
Approach Delay (s)		0.0			177.9			135.2			77.8	
Approach LOS		A			F			F			E	

Intersection Summary			
HCM 2000 Control Delay	165.2	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.33		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	9.7
Intersection Capacity Utilization	133.7%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	190	3300	180	380	750	0	0	620	420
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				171.0	166.0	171.0	166.0	166.0	0.0	0.0	166.0	171.0
Lanes				0	3	0	1	2	0	0	2	0
Cap, veh/h				132	2427	134	248	1255	0	0	428	289
Arrive On Green				0.18	0.18	0.18	0.13	0.38	0.00	0.00	0.23	0.23
Sat Flow, veh/h				241	4440	245	1581	3320	0	0	1850	1250
Grp Volume(v), veh/h				1370	1247	1247	400	789	0	0	586	509
Grp Sat Flow(s),veh/h/ln				1648	1660	1617	1581	1660	0	0	1660	1440
Q Serve(g_s), s				82.0	82.0	82.0	19.0	29.1	0.0	0.0	34.7	34.7
Cycle Q Clear(g_c), s				82.0	82.0	82.0	19.0	29.1	0.0	0.0	34.7	34.7
Prop In Lane				0.15		0.15	1.00		0.00	0.00		0.87
Lane Grp Cap(c), veh/h				901	908	884	248	1255	0	0	384	333
V/C Ratio(X)				1.52	1.37	1.41	1.61	0.63	0.00	0.00	1.53	1.53
Avail Cap(c_a), veh/h				901	908	884	248	1255	0	0	384	333
HCM Platoon Ratio				0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.09	0.09	0.09	1.00	1.00	0.00	0.00	0.90	0.90
Uniform Delay (d), s/veh				61.5	61.5	61.5	45.4	38.1	0.0	0.0	57.7	57.7
Incr Delay (d2), s/veh				234.7	168.7	185.2	292.9	2.4	0.0	0.0	248.1	251.2
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				95.5	79.6	81.6	30.0	12.9	0.0	0.0	41.5	36.3
Lane Grp Delay (d), s/veh				296.2	230.2	246.7	338.4	40.5	0.0	0.0	305.8	308.9
Lane Grp LOS				F	F	F	F	D			F	F
Approach Vol, veh/h					3863			1189			1095	
Approach Delay, s/veh					258.9			140.7			307.2	
Approach LOS					F			F			F	

Timer												
Assigned Phs					2		7	4			8	
Phs Duration (G+Y+Rc), s					87.0		22.0	63.0			41.0	
Change Period (Y+Rc), s					5.0		3.0	6.3			6.3	
Max Green Setting (Gmax), s					82.0		19.0	56.7			34.7	
Max Q Clear Time (g_c+I1), s					84.0		21.0	31.1			36.7	
Green Ext Time (p_c), s					0.0		0.0	5.8			0.0	

Intersection Summary		
HCM 2010 Ctrl Delay		244.7
HCM 2010 LOS		F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	630	2910	0	0	0	0	0	1310	490
Number				5	2	12				3	8	18
Initial Q (Qb), veh				0	0	0				0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00				1.00		1.00
Parking Bus Adj				1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow veh/h/ln				171.0	166.0	0.0				0.0	166.0	171.0
Lanes				0	3	0				0	2	0
Cap, veh/h				48	1591	0				0	960	339
Arrive On Green				0.17	0.17	0.00				0.00	0.41	0.41
Sat Flow, veh/h				0	3022	0				0	2346	829
Grp Volume(v), veh/h				663	3063	0				0	952	943
Grp Sat Flow(s),veh/h/ln				0	1511	0				0	1660	1514
Q Serve(g_s), s				0.0	79.0	0.0				0.0	61.4	61.4
Cycle Q Clear(g_c), s				79.0	79.0	0.0				0.0	61.4	61.4
Prop In Lane				1.00		0.00				0.00		0.55
Lane Grp Cap(c), veh/h				48	1591	0				0	680	620
V/C Ratio(X)				13.81	1.92	0.00				0.00	1.40	1.52
Avail Cap(c_a), veh/h				48	1591	0				0	680	620
HCM Platoon Ratio				0.33	0.33	1.00				1.00	1.00	1.00
Upstream Filter(I)				0.09	0.09	0.00				0.00	0.09	0.09
Uniform Delay (d), s/veh				101.5	62.0	0.0				0.0	44.3	44.3
Incr Delay (d2), s/veh				5769.2	416.4	0.0				0.0	181.3	235.4
Initial Q Delay(d3),s/veh				0.0	0.0	0.0				0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				78.9	124.5	0.0				0.0	60.3	64.3
Lane Grp Delay (d), s/veh				5870.7	478.3	0.0				0.0	225.6	279.7
Lane Grp LOS				F	F						F	F
Approach Vol, veh/h					3726						1895	
Approach Delay, s/veh					1437.8						252.5	
Approach LOS					F						F	

Timer	
Assigned Phs	2	8
Phs Duration (G+Y+Rc), s	84.0	66.0
Change Period (Y+Rc), s	5.0	4.6
Max Green Setting (Gmax), s	79.0	61.4
Max Q Clear Time (g_c+I1), s	81.0	63.4
Green Ext Time (p_c), s	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	1038.2
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	0	2700	660	890	1350	0	0	0	0
Number				5	2	12	7	4	14			
Initial Q (Qb), veh				0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00			
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow veh/h/ln				0.0	166.0	171.0	171.0	166.0	0.0			
Lanes				0	3	0	0	3	0			
Cap, veh/h				0	2205	496	48	1136	0			
Arrive On Green				0.00	0.18	0.18	0.38	0.38	0.00			
Sat Flow, veh/h				0	3938	886	0	3022	0			
Grp Volume(v), veh/h				0	2358	1179	937	1421	0			
Grp Sat Flow(s),veh/h/ln				0	1660	1504	0	1511	0			
Q Serve(g_s), s				0.0	84.0	84.0	0.0	56.4	0.0			
Cycle Q Clear(g_c), s				0.0	84.0	84.0	56.4	56.4	0.0			
Prop In Lane				0.00		0.59	1.00		0.00			
Lane Grp Cap(c), veh/h				0	1859	842	48	1136	0			
V/C Ratio(X)				0.00	1.27	1.40	19.52	1.25	0.00			
Avail Cap(c_a), veh/h				0	1859	842	48	1136	0			
HCM Platoon Ratio				1.00	0.33	0.33	1.00	1.00	1.00			
Upstream Filter(I)				0.00	0.09	0.09	1.00	1.00	0.00			
Uniform Delay (d), s/veh				0.0	61.1	61.1	75.0	46.8	0.0			
Incr Delay (d2), s/veh				0.0	121.1	180.7	8373.7	120.3	0.0			
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0			
%ile Back of Q (50%), veh/ln				0.0	69.2	76.7	113.5	40.9	0.0			
Lane Grp Delay (d), s/veh				0.0	182.2	241.8	8448.7	167.1	0.0			
Lane Grp LOS					F	F	F	F				
Approach Vol, veh/h					3537			2358				
Approach Delay, s/veh					202.1			3457.9				
Approach LOS					F			F				

Timer	
Assigned Phs	2	4
Phs Duration (G+Y+Rc), s	89.0	61.0
Change Period (Y+Rc), s	5.0	4.6
Max Green Setting (Gmax), s	84.0	56.4
Max Q Clear Time (g_c+I1), s	86.0	58.4
Green Ext Time (p_c), s	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	1504.4
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	660	930	330	1080	1710	260	1050	2100	1030
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.7	6.7	6.7	5.0	6.2		5.0	6.2	6.2
Lane Util. Factor				0.95	0.95	1.00	0.97	0.95		0.97	0.95	1.00
Frt				1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85
Flt Protected				0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)				1498	1572	1411	3060	3092		3060	3154	1411
Flt Permitted				0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)				1498	1572	1411	3060	3092		3060	3154	1411
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	695	979	347	1137	1800	274	1105	2211	1084
RTOR Reduction (vph)	0	0	0	0	0	87	0	8	0	0	0	38
Lane Group Flow (vph)	0	0	0	625	1049	260	1137	2066	0	1105	2211	1046
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type				Perm	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases					4		1	6		5	2	
Permitted Phases				4		4						2
Actuated Green, G (s)				46.3	46.3	46.3	27.0	58.8		27.0	58.8	58.8
Effective Green, g (s)				46.3	46.3	46.3	27.0	58.8		27.0	58.8	58.8
Actuated g/C Ratio				0.31	0.31	0.31	0.18	0.39		0.18	0.39	0.39
Clearance Time (s)				6.7	6.7	6.7	5.0	6.2		5.0	6.2	6.2
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)				462	485	435	550	1212		550	1236	553
v/s Ratio Prot							c0.37	0.67		0.36	0.70	
v/s Ratio Perm				0.42	0.67	0.18						c0.74
v/c Ratio				1.35	2.16	0.60	2.07	1.70		2.01	1.79	1.89
Uniform Delay, d1				51.9	51.9	44.0	61.5	45.6		61.5	45.6	45.6
Progression Factor				1.00	1.00	1.00	1.00	1.00		1.12	0.99	0.99
Incremental Delay, d2				172.5	530.1	2.2	486.5	320.7		454.7	355.3	401.5
Delay (s)				224.4	582.0	46.2	548.0	366.3		523.3	400.4	446.6
Level of Service				F	F	D	F	F		F	F	F
Approach Delay (s)		0.0			379.4			430.6			442.7	
Approach LOS		A			F			F			F	

Intersection Summary			
HCM 2000 Control Delay	425.4	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	2.02		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	17.9
Intersection Capacity Utilization	174.2%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	300	50	130	10	50	50	290	1460	280	220	1270	180
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.7	6.7		6.7	6.7	6.7	3.0	6.2		3.0	6.2	6.2
Lane Util. Factor	0.95	0.95		1.00	1.00	1.00	1.00	0.91		1.00	0.95	1.00
Frt	1.00	0.92		1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	0.99		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1498	1429		1577	1660	1411	1577	4423		1577	3154	1411
Flt Permitted	0.95	0.99		0.60	1.00	1.00	0.07	1.00		0.07	1.00	1.00
Satd. Flow (perm)	1498	1429		994	1660	1411	117	4423		123	3154	1411
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	316	53	137	11	53	53	305	1537	295	232	1337	189
RTOR Reduction (vph)	0	33	0	0	0	50	0	20	0	0	0	79
Lane Group Flow (vph)	259	214	0	11	53	3	305	1812	0	232	1337	110
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Split	NA		Perm	NA	Perm	pm+pt	NA		pm+pt	NA	Perm
Protected Phases	3	3			4		1	6		5	2	
Permitted Phases				4		4	6			2		2
Actuated Green, G (s)	27.7	27.7		8.6	8.6	8.6	84.1	60.5		74.4	53.8	53.8
Effective Green, g (s)	27.7	27.7		8.6	8.6	8.6	84.1	60.5		74.4	53.8	53.8
Actuated g/C Ratio	0.20	0.20		0.06	0.06	0.06	0.60	0.43		0.53	0.38	0.38
Clearance Time (s)	6.7	6.7		6.7	6.7	6.7	3.0	6.2		3.0	6.2	6.2
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	296	282		61	101	86	354	1911		279	1212	542
v/s Ratio Prot	c0.17	0.15			c0.03		c0.17	0.41		0.12	c0.42	
v/s Ratio Perm				0.01		0.00	0.35			0.32		0.08
v/c Ratio	0.88	0.76		0.18	0.52	0.04	0.86	0.95		0.83	1.10	0.20
Uniform Delay, d1	54.5	53.0		62.4	63.7	61.8	43.4	38.2		40.6	43.1	28.8
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.83	0.29		1.00	1.00	1.00
Incremental Delay, d2	23.7	11.1		1.4	4.8	0.2	2.1	1.5		18.6	58.9	0.8
Delay (s)	78.2	64.1		63.8	68.6	62.0	81.6	12.5		59.2	102.0	29.6
Level of Service	E	E		E	E	E	F	B		E	F	C
Approach Delay (s)		71.3			65.1			22.3			88.6	
Approach LOS		E			E			C			F	

Intersection Summary			
HCM 2000 Control Delay	54.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.95		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	22.6
Intersection Capacity Utilization	92.7%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	90	510	0	0	400	70	120	700	30	0	0	0
Number	1	6	16	5	2	12	7	4	14			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow veh/h/ln	166.0	166.0	0.0	0.0	166.0	171.0	171.0	166.0	166.0			
Lanes	1	1	0	0	1	0	0	2	1			
Cap, veh/h	396	1012	0	0	753	132	151	933	464			
Arrive On Green	0.08	1.00	0.00	0.00	0.55	0.55	0.11	0.11	0.11			
Sat Flow, veh/h	1581	1660	0	0	1376	242	460	2838	1411			
Grp Volume(v), veh/h	95	537	0	0	0	495	449	414	32			
Grp Sat Flow(s),veh/h/ln	1581	1660	0	0	0	1618	1637	1660	1411			
Q Serve(g_s), s	3.5	0.0	0.0	0.0	0.0	26.5	35.7	32.2	2.7			
Cycle Q Clear(g_c), s	3.5	0.0	0.0	0.0	0.0	26.5	35.7	32.2	2.7			
Prop In Lane	1.00		0.00	0.00		0.15	0.28		1.00			
Lane Grp Cap(c), veh/h	396	1012	0	0	0	885	538	546	464			
V/C Ratio(X)	0.24	0.53	0.00	0.00	0.00	0.56	0.83	0.76	0.07			
Avail Cap(c_a), veh/h	404	1012	0	0	0	885	749	760	646			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33			
Upstream Filter(I)	0.09	0.09	0.00	0.00	0.00	0.74	0.41	0.41	0.41			
Uniform Delay (d), s/veh	14.1	0.0	0.0	0.0	0.0	19.6	55.7	54.1	41.0			
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.0	0.0	1.9	2.5	1.2	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile Back of Q (50%), veh/ln	1.2	0.1	0.0	0.0	0.0	11.1	16.4	14.8	1.0			
Lane Grp Delay (d), s/veh	14.1	0.2	0.0	0.0	0.0	21.5	58.2	55.3	41.0			
Lane Grp LOS	B	A				C	E	E	D			
Approach Vol, veh/h		632			495			895				
Approach Delay, s/veh		2.3			21.5			56.2				
Approach LOS		A			C			E				

Timer												
Assigned Phs	1	6			2			4				
Phs Duration (G+Y+Rc), s	8.3	85.0			76.7			47.9				
Change Period (Y+Rc), s	3.0	4.0			4.0			4.2				
Max Green Setting (Gmax), s	6.0	81.0			72.0			60.8				
Max Q Clear Time (g_c+I1), s	5.5	2.0			28.5			37.7				
Green Ext Time (p_c), s	0.0	8.9			8.6			6.0				

Intersection Summary												
HCM 2010 Ctrl Delay			30.9									
HCM 2010 LOS			C									

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	510	130	80	400	0	0	0	0	120	980	130
Number	1	6	16	5	2	12				3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow veh/h/ln	0.0	166.0	171.0	166.0	166.0	0.0				166.0	166.0	171.0
Lanes	0	1	0	1	1	0				1	1	0
Cap, veh/h	0	426	109	101	642	0				879	798	106
Arrive On Green	0.00	0.67	0.67	0.07	0.77	0.00				0.56	0.56	0.56
Sat Flow, veh/h	0	1277	326	1581	1660	0				1581	1436	191
Grp Volume(v), veh/h	0	0	674	84	421	0				126	0	1169
Grp Sat Flow(s),veh/h/ln	0	0	1603	1581	1660	0				1581	0	1627
Q Serve(g_s), s	0.0	0.0	50.0	5.0	17.5	0.0				5.8	0.0	83.4
Cycle Q Clear(g_c), s	0.0	0.0	50.0	5.0	17.5	0.0				5.8	0.0	83.4
Prop In Lane	0.00		0.20	1.00		0.00				1.00		0.12
Lane Grp Cap(c), veh/h	0	0	534	101	642	0				879	0	904
V/C Ratio(X)	0.00	0.00	1.26	0.83	0.66	0.00				0.14	0.00	1.29
Avail Cap(c_a), veh/h	0	0	534	101	642	0				879	0	904
HCM Platoon Ratio	1.00	2.00	2.00	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.55	0.80	0.80	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	25.0	40.1	12.4	0.0				16.1	0.0	33.3
Incr Delay (d2), s/veh	0.0	0.0	126.0	36.0	4.2	0.0				0.1	0.0	140.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.0	0.0	34.7	3.0	5.4	0.0				2.3	0.0	69.1
Lane Grp Delay (d), s/veh	0.0	0.0	151.0	76.1	16.6	0.0				16.1	0.0	173.3
Lane Grp LOS			F	E	B					B		F
Approach Vol, veh/h		674			505						1295	
Approach Delay, s/veh		151.0			26.5						158.0	
Approach LOS		F			C						F	

Timer			
Assigned Phs	6	5	2	8
Phs Duration (G+Y+Rc), s	54.0	8.0	62.0	88.0
Change Period (Y+Rc), s	4.0	3.0	4.0	4.6
Max Green Setting (Gmax), s	50.0	5.0	58.0	83.4
Max Q Clear Time (g_c+I1), s	52.0	7.0	19.5	85.4
Green Ext Time (p_c), s	0.0	0.0	9.5	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	129.2
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	110	540	70	40	390	50	100	800	20	30	230	40
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	166.0	166.0	171.0	166.0	166.0	171.0	166.0	166.0	171.0	166.0	166.0	171.0
Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Cap, veh/h	452	694	90	374	655	84	391	1175	29	202	914	156
Arrive On Green	0.10	0.96	0.96	0.05	0.91	0.91	0.11	0.73	0.73	0.02	0.33	0.33
Sat Flow, veh/h	1581	1440	188	1581	1442	186	1581	3226	80	1581	2764	473
Grp Volume(v), veh/h	116	0	642	42	0	464	105	433	430	32	144	140
Grp Sat Flow(s),veh/h/ln	1581	0	1627	1581	0	1627	1581	1660	1646	1581	1660	1577
Q Serve(g_s), s	5.5	0.0	10.1	2.1	0.0	9.1	6.1	22.1	22.1	2.0	9.5	9.8
Cycle Q Clear(g_c), s	5.5	0.0	10.1	2.1	0.0	9.1	6.1	22.1	22.1	2.0	9.5	9.8
Prop In Lane	1.00		0.12	1.00		0.11	1.00		0.05	1.00		0.30
Lane Grp Cap(c), veh/h	452	0	784	374	0	739	391	605	600	202	549	521
V/C Ratio(X)	0.26	0.00	0.82	0.11	0.00	0.63	0.27	0.72	0.72	0.16	0.26	0.27
Avail Cap(c_a), veh/h	499	0	784	380	0	739	391	605	600	256	549	521
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	0.51	0.00	0.51	0.71	0.00	0.71	0.09	0.09	0.09	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.6	0.0	1.6	20.6	0.0	4.2	25.4	15.9	15.9	33.2	36.7	36.7
Incr Delay (d2), s/veh	0.2	0.0	4.9	0.1	0.0	2.8	0.0	0.7	0.7	0.4	1.2	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	2.0	0.0	2.0	0.8	0.0	2.3	2.3	6.7	6.6	0.8	4.3	4.2
Lane Grp Delay (d), s/veh	16.8	0.0	6.5	20.7	0.0	7.0	25.5	16.5	16.6	33.6	37.8	38.0
Lane Grp LOS	B		A	C		A	C	B	B	C	D	D
Approach Vol, veh/h		758			506			968			316	
Approach Delay, s/veh		8.1			8.1			17.5			37.5	
Approach LOS		A			A			B			D	

Timer												
Assigned Phs	1	6		5	2		7	4		3	8	
Phs Duration (G+Y+Rc), s	11.6	76.0		7.4	71.9		12.0	59.0		7.0	54.0	
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0		4.0	4.6		4.0	4.6	
Max Green Setting (Gmax), s	12.0	72.0		4.0	64.0		8.0	49.4		8.0	49.4	
Max Q Clear Time (g_c+I1), s	7.5	12.1		4.1	11.1		8.1	24.1		4.0	11.8	
Green Ext Time (p_c), s	0.1	10.1		0.0	10.0		0.0	8.1		0.0	9.0	

Intersection Summary	
HCM 2010 Ctrl Delay	15.3
HCM 2010 LOS	B

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	40	630	120	230	260	60	50	220	60	0	0	0
Number	1	6	16	5	2	12	7	4	14			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow veh/h/ln	166.0	166.0	171.0	166.0	166.0	171.0	166.0	166.0	171.0			
Lanes	1	1	0	1	1	0	1	1	0			
Cap, veh/h	668	857	163	536	881	203	359	286	78			
Arrive On Green	0.04	1.00	1.00	0.11	1.00	1.00	0.45	0.45	0.45			
Sat Flow, veh/h	1581	1357	258	1581	1307	300	1581	1258	342			
Grp Volume(v), veh/h	42	0	789	242	0	337	53	0	295			
Grp Sat Flow(s),veh/h/ln	1581	0	1615	1581	0	1607	1581	0	1600			
Q Serve(g_s), s	1.4	0.0	0.0	7.2	0.0	0.0	2.9	0.0	23.6			
Cycle Q Clear(g_c), s	1.4	0.0	0.0	7.2	0.0	0.0	2.9	0.0	23.6			
Prop In Lane	1.00		0.16	1.00		0.19	1.00		0.21			
Lane Grp Cap(c), veh/h	668	0	1019	536	0	1084	359	0	364			
V/C Ratio(X)	0.06	0.00	0.77	0.45	0.00	0.31	0.15	0.00	0.81			
Avail Cap(c_a), veh/h	687	0	1019	636	0	1084	359	0	364			
HCM Platoon Ratio	2.00	2.00	2.00	1.67	1.67	1.67	2.00	2.00	2.00			
Upstream Filter(I)	1.00	0.00	1.00	0.79	0.00	0.79	0.75	0.00	0.75			
Uniform Delay (d), s/veh	8.9	0.0	0.0	5.5	0.0	0.0	32.0	0.0	37.7			
Incr Delay (d2), s/veh	0.0	0.0	5.7	0.5	0.0	0.6	0.7	0.0	13.8			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile Back of Q (50%), veh/ln	0.5	0.0	1.6	2.2	0.0	0.2	1.2	0.0	10.0			
Lane Grp Delay (d), s/veh	9.0	0.0	5.7	6.0	0.0	0.6	32.7	0.0	51.5			
Lane Grp LOS	A		A	A		A	C		D			
Approach Vol, veh/h		831			579			348				
Approach Delay, s/veh		5.9			2.8			48.6				
Approach LOS		A			A			D				
Timer												
Assigned Phs	1	6		5	2			4				
Phs Duration (G+Y+Rc), s	6.3	97.6		12.7	104.0			38.0				
Change Period (Y+Rc), s	3.0	4.0		3.0	4.0			4.3				
Max Green Setting (Gmax), s	5.0	86.0		19.0	100.0			33.7				
Max Q Clear Time (g_c+I1), s	3.4	2.0		9.2	2.0			25.6				
Green Ext Time (p_c), s	0.0	11.3		0.5	11.3			1.2				
Intersection Summary												
HCM 2010 Ctrl Delay			13.3									
HCM 2010 LOS			B									
Notes												

Movement	EBT	EBR	WBL	WBT	SBL	SBT	SBR	SWL2	SWL	SWR
Lane Configurations										
Volume (vph)	600	30	140	200	60	180	10	280	740	110
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		3.0	4.0		7.0		7.0	7.0	
Lane Util. Factor	1.00		1.00	1.00		0.95		0.97	1.00	
Frt	0.99		1.00	1.00		0.99		1.00	0.98	
Flt Protected	1.00		0.95	1.00		0.99		0.95	0.96	
Satd. Flow (prot)	1666		1593	1676		3128		3090	1575	
Flt Permitted	1.00		0.08	1.00		0.99		0.95	0.96	
Satd. Flow (perm)	1666		142	1676		3128		3090	1575	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	632	32	147	211	63	189	11	295	779	116
RTOR Reduction (vph)	1	0	0	0	0	2	0	0	0	0
Lane Group Flow (vph)	663	0	147	211	0	261	0	295	895	0
Turn Type	NA		pm+pt	NA	Perm	NA		Perm	NA	
Protected Phases	6		5	2		9			8	
Permitted Phases			2		9			8		
Actuated Green, G (s)	44.2		56.6	56.6		17.4		58.0	58.0	
Effective Green, g (s)	44.2		56.6	56.6		17.4		58.0	58.0	
Actuated g/C Ratio	0.29		0.38	0.38		0.12		0.39	0.39	
Clearance Time (s)	4.0		3.0	4.0		7.0		7.0	7.0	
Vehicle Extension (s)	3.0		3.0	3.0		3.0		3.0	3.0	
Lane Grp Cap (vph)	490		144	632		362		1194	609	
v/s Ratio Prot	c0.40		c0.06	0.13					c0.57	
v/s Ratio Perm			0.32			0.08		0.10		
v/c Ratio	1.35		1.02	0.33		0.72		0.25	1.47	
Uniform Delay, d1	52.9		39.2	33.3		64.0		31.2	46.0	
Progression Factor	1.00		1.00	1.00		1.00		1.00	1.00	
Incremental Delay, d2	171.5		80.6	1.4		6.9		0.1	220.2	
Delay (s)	224.4		119.8	34.7		70.9		31.3	266.2	
Level of Service	F		F	C		E		C	F	
Approach Delay (s)	224.4			69.6		70.9			208.0	
Approach LOS	F			E		E			F	

Intersection Summary			
HCM 2000 Control Delay	177.8	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.29		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	21.0
Intersection Capacity Utilization	124.9%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	40	580	10	20	250	30	20	310	10	50	280	30
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	186.3	186.3	190.0	186.3	186.3	190.0	186.3	186.3	190.0	190.0	193.7	190.0
Lanes	1	1	0	1	1	0	1	1	0	0	1	0
Cap, veh/h	514	849	15	432	843	103	93	712	24	36	140	13
Arrive On Green	0.00	0.93	0.93	0.03	0.52	0.51	0.03	0.79	0.79	0.35	0.35	0.35
Sat Flow, veh/h	1774	1824	33	1774	1629	198	1774	1792	60	1	396	36
Grp Volume(v), veh/h	42	0	622	21	0	295	21	0	337	380	0	0
Grp Sat Flow(s),veh/h/ln	1774	0	1857	1774	0	1828	1774	0	1852	433	0	0
Q Serve(g_s), s	0.1	0.0	8.0	0.6	0.0	10.6	0.8	0.0	6.7	0.1	0.0	0.0
Cycle Q Clear(g_c), s	0.1	0.0	8.0	0.6	0.0	10.6	0.8	0.0	6.7	40.3	0.0	0.0
Prop In Lane	1.00		0.02	1.00		0.11	1.00		0.03	0.14		0.08
Lane Grp Cap(c), veh/h	514	0	864	432	0	946	93	0	736	191	0	0
V/C Ratio(X)	0.08	0.00	0.72	0.05	0.00	0.31	0.22	0.00	0.46	1.98	0.00	0.00
Avail Cap(c_a), veh/h	590	0	864	479	0	946	141	0	736	191	0	0
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.95	0.00	0.95	0.81	0.00	0.81	1.00	0.00	0.00
Uniform Delay (d), s/veh	19.9	0.0	2.4	12.1	0.0	15.8	27.9	0.0	7.7	30.7	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	5.1	0.0	0.0	0.8	1.0	0.0	0.3	461.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.7	0.0	2.5	0.3	0.0	4.9	0.6	0.0	2.2	28.4	0.0	0.0
Lane Grp Delay (d), s/veh	20.0	0.0	7.5	12.2	0.0	16.7	28.9	0.0	8.0	492.0	0.0	0.0
Lane Grp LOS	B		A	B		B	C		A	F		
Approach Vol, veh/h		664			316			358			380	
Approach Delay, s/veh		8.3			16.4			9.2			492.0	
Approach LOS		A			B			A			F	

Timer												
Assigned Phs	1	6		5	2		7	4		3	8	
Phs Duration (G+Y+Rc), s	0.0	58.0		4.9	62.9		4.9	50.9		0.0	46.0	
Change Period (Y+Rc), s	3.0	5.0		3.0	5.0		3.0	5.7		3.0	5.7	
Max Green Setting (Gmax), s	5.0	53.0		5.0	53.0		5.0	40.3		5.0	40.3	
Max Q Clear Time (g_c+I1), s	0.0	10.0		2.6	12.6		2.8	8.7		0.0	42.3	
Green Ext Time (p_c), s	0.0	4.5		0.0	4.5		0.0	2.4		0.0	0.0	

Intersection Summary	
HCM 2010 Ctrl Delay	117.0
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	50	520	30	30	270	30	50	570	30	30	410	40
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99
Adj Sat Flow veh/h/ln	184.5	184.5	190.0	184.5	184.5	190.0	190.0	184.5	190.0	190.0	177.1	190.0
Lanes	1	1	0	1	1	0	0	2	0	0	2	0
Cap, veh/h	489	867	51	393	915	103	67	1193	30	56	1109	51
Arrive On Green	0.00	0.67	0.67	0.01	0.19	0.18	0.69	0.71	0.69	0.35	0.36	0.35
Sat Flow, veh/h	1757	1726	101	1757	1629	184	5	1580	84	3	1476	144
Grp Volume(v), veh/h	53	0	579	32	0	316	343	0	343	253	0	253
Grp Sat Flow(s),veh/h/ln	1757	0	1827	1757	0	1812	1624	0	1815	1553	0	1707
Q Serve(g_s), s	0.1	0.0	19.9	0.8	0.0	16.5	0.1	0.0	39.0	0.1	0.0	39.0
Cycle Q Clear(g_c), s	0.1	0.0	19.9	0.8	0.0	16.5	39.0	0.0	39.0	39.0	0.0	39.0
Prop In Lane	1.00		0.06	1.00		0.10	1.00		0.05	0.67		0.09
Lane Grp Cap(c), veh/h	489	0	918	393	0	1018	66	0	646	71	0	608
V/C Ratio(X)	0.11	0.00	0.63	0.08	0.00	0.31	5.21	0.00	0.53	3.57	0.00	0.42
Avail Cap(c_a), veh/h	567	0	918	433	0	1018	66	0	646	71	0	608
HCM Platoon Ratio	1.33	1.33	1.33	0.33	0.33	0.33	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	0.87	0.00	0.87	1.00	0.00	1.00	0.63	0.00	0.63	1.00	0.00	1.00
Uniform Delay (d), s/veh	20.2	0.0	12.3	12.2	0.0	26.3	35.4	0.0	15.8	46.1	0.0	35.3
Incr Delay (d2), s/veh	0.1	0.0	2.9	0.1	0.0	0.8	1914.9	0.0	2.0	1189.1	0.0	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.9	0.0	8.1	0.3	0.0	8.5	35.0	0.0	3.3	23.4	0.0	5.6
Lane Grp Delay (d), s/veh	20.3	0.0	15.2	12.3	0.0	27.1	1950.3	0.0	17.8	1235.2	0.0	37.4
Lane Grp LOS	C		B	B		C	F		B	F		D
Approach Vol, veh/h		632			348			685			506	
Approach Delay, s/veh		15.7			25.7			984.1			636.3	
Approach LOS		B			C			F			F	

Timer												
Assigned Phs	1	6		5	2		7	4		3	8	
Phs Duration (G+Y+Rc), s	0.0	60.0		5.5	65.5		0.0	44.0		0.0	44.0	
Change Period (Y+Rc), s	3.0	5.0		3.0	5.0		3.0	6.0		3.0	6.0	
Max Green Setting (Gmax), s	5.0	55.0		5.0	55.0		5.0	38.0		5.0	38.0	
Max Q Clear Time (g_c+I1), s	0.0	21.9		2.8	18.5		0.0	41.0		0.0	41.0	
Green Ext Time (p_c), s	0.0	4.3		0.0	4.3		0.0	0.0		0.0	0.0	

Intersection Summary	
HCM 2010 Ctrl Delay	467.5
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	500	50	50	400	0	0	0	0	50	50	20
Number	1	6	16	5	2	12				3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow veh/h/ln	0.0	182.7	190.0	182.7	182.7	0.0				190.0	190.0	190.0
Lanes	0	1	0	1	1	0				0	1	0
Cap, veh/h	0	1112	112	684	1355	0				145	145	57
Arrive On Green	0.00	1.00	1.00	0.07	1.00	0.00				0.19	0.19	0.19
Sat Flow, veh/h	0	1633	165	1740	1827	0				755	755	299
Grp Volume(v), veh/h	0	0	579	53	421	0				127	0	0
Grp Sat Flow(s),veh/h/ln	0	0	1798	1740	1827	0				1809	0	0
Q Serve(g_s), s	0.0	0.0	0.0	1.0	0.0	0.0				7.3	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	1.0	0.0	0.0				7.3	0.0	0.0
Prop In Lane	0.00		0.09	1.00		0.00				0.42		0.17
Lane Grp Cap(c), veh/h	0	0	1224	684	1355	0				347	0	0
V/C Ratio(X)	0.00	0.00	0.47	0.08	0.31	0.00				0.37	0.00	0.00
Avail Cap(c_a), veh/h	0	0	1224	738	1355	0				347	0	0
HCM Platoon Ratio	1.00	2.00	2.00	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.74	0.93	0.93	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	4.0	0.0	0.0				42.2	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	1.0	0.0	0.6	0.0				3.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.0	0.0	0.3	0.3	0.2	0.0				3.7	0.0	0.0
Lane Grp Delay (d), s/veh	0.0	0.0	1.0	4.0	0.6	0.0				45.1	0.0	0.0
Lane Grp LOS			A	A	A					D		
Approach Vol, veh/h		579			474						127	
Approach Delay, s/veh		1.0			0.9						45.1	
Approach LOS		A			A						D	

Timer				
Assigned Phs	6	5	2	8
Phs Duration (G+Y+Rc), s	86.7	6.3	93.0	27.0
Change Period (Y+Rc), s	5.0	3.0	5.0	4.0
Max Green Setting (Gmax), s	78.0	7.0	88.0	23.0
Max Q Clear Time (g_c+I1), s	2.0	3.0	2.0	9.3
Green Ext Time (p_c), s	5.1	0.0	5.1	0.3

Intersection Summary	
HCM 2010 Ctrl Delay	5.7
HCM 2010 LOS	A

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	50	440	20	50	300	50	30	720	50	60	1000	40
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	184.5	184.5	190.0	184.5	184.5	190.0	184.5	184.5	190.0	184.5	184.5	190.0
Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Cap, veh/h	427	679	31	371	610	102	212	1444	101	353	1499	60
Arrive On Green	0.06	0.78	0.78	0.07	0.79	0.77	0.06	0.85	0.83	0.03	0.43	0.43
Sat Flow, veh/h	1757	1751	79	1757	1541	258	1757	3409	238	1757	3524	141
Grp Volume(v), veh/h	53	0	484	53	0	369	32	410	401	63	551	544
Grp Sat Flow(s),veh/h/ln	1757	0	1831	1757	0	1799	1757	1845	1803	1757	1845	1820
Q Serve(g_s), s	2.1	0.0	14.6	2.0	0.0	8.5	1.2	7.1	7.2	2.3	28.4	28.4
Cycle Q Clear(g_c), s	2.1	0.0	14.6	2.0	0.0	8.5	1.2	7.1	7.2	2.3	28.4	28.4
Prop In Lane	1.00		0.04	1.00		0.14	1.00		0.13	1.00		0.08
Lane Grp Cap(c), veh/h	427	0	710	371	0	712	212	781	764	353	785	774
V/C Ratio(X)	0.12	0.00	0.68	0.14	0.00	0.52	0.15	0.52	0.53	0.18	0.70	0.70
Avail Cap(c_a), veh/h	452	0	710	396	0	712	249	781	764	387	785	774
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	0.95	0.00	0.95	0.96	0.00	0.96	0.60	0.60	0.60	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.1	0.0	9.6	19.4	0.0	8.3	20.3	5.7	5.8	17.9	27.3	27.4
Incr Delay (d2), s/veh	0.1	0.0	5.0	0.2	0.0	2.6	0.2	1.5	1.5	0.2	5.2	5.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.9	0.0	4.5	0.9	0.0	2.9	0.5	2.2	2.2	1.0	14.1	14.0
Lane Grp Delay (d), s/veh	20.2	0.0	14.6	19.6	0.0	10.8	20.5	7.2	7.3	18.2	32.6	32.6
Lane Grp LOS	C		B	B		B	C	A	A	B	C	C
Approach Vol, veh/h		537			422			843			1158	
Approach Delay, s/veh		15.1			11.9			7.7			31.8	
Approach LOS		B			B			A			C	

Timer												
Assigned Phs	1	6		5	2		7	4		3	8	
Phs Duration (G+Y+Rc), s	6.4	50.1		6.3	50.0		5.6	53.0		6.8	54.2	
Change Period (Y+Rc), s	3.0	5.0		3.0	5.0		3.0	4.8		3.0	4.8	
Max Green Setting (Gmax), s	5.0	45.0		5.0	45.0		5.0	48.2		6.0	49.2	
Max Q Clear Time (g_c+I1), s	4.1	16.6		4.0	10.5		3.2	9.2		4.3	30.4	
Green Ext Time (p_c), s	0.0	3.9		0.0	4.0		0.0	1.8		0.0	1.8	

Intersection Summary	
HCM 2010 Ctrl Delay	19.1
HCM 2010 LOS	B

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	50	360	50	50	270	50	30	70	20	30	110	20
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	186.3	186.3	190.0	186.3	186.3	190.0	190.0	186.3	190.0	190.0	186.3	190.0
Lanes	1	1	0	1	1	0	0	1	0	0	1	0
Cap, veh/h	848	1103	154	816	1069	200	84	139	35	75	173	29
Arrive On Green	0.06	1.00	1.00	0.08	1.00	1.00	0.27	0.27	0.25	0.12	0.13	0.12
Sat Flow, veh/h	1774	1600	224	1774	1527	285	274	1038	260	228	1290	215
Grp Volume(v), veh/h	53	0	432	53	0	337	127	0	0	169	0	0
Grp Sat Flow(s),veh/h/ln	1774	0	1823	1774	0	1812	1572	0	0	1733	0	0
Q Serve(g_s), s	0.8	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	2.4	0.0	0.0
Cycle Q Clear(g_c), s	0.8	0.0	0.0	0.8	0.0	0.0	6.6	0.0	0.0	9.0	0.0	0.0
Prop In Lane	1.00		0.12	1.00		0.16	0.25		0.17	0.19		0.12
Lane Grp Cap(c), veh/h	848	0	1257	816	0	1269	257	0	0	258	0	0
V/C Ratio(X)	0.06	0.00	0.34	0.06	0.00	0.27	0.49	0.00	0.00	0.65	0.00	0.00
Avail Cap(c_a), veh/h	921	0	1257	871	0	1269	617	0	0	634	0	0
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.86	0.00	0.86	0.92	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	3.7	0.0	0.0	3.1	0.0	0.0	32.8	0.0	0.0	39.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.7	0.0	0.0	0.4	1.0	0.0	0.0	2.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.3	0.0	0.3	0.2	0.0	0.2	2.5	0.0	0.0	4.2	0.0	0.0
Lane Grp Delay (d), s/veh	3.7	0.0	0.7	3.2	0.0	0.4	33.7	0.0	0.0	42.0	0.0	0.0
Lane Grp LOS	A		A	A		A	C			D		
Approach Vol, veh/h		485			390			127			169	
Approach Delay, s/veh		1.1			0.8			33.7			42.0	
Approach LOS		A			A			C			D	

Timer												
Assigned Phs	1	6		5	2			4			8	
Phs Duration (G+Y+Rc), s	7.0	71.0		7.0	71.0			17.7			17.7	
Change Period (Y+Rc), s	4.0	5.0		4.0	5.0			5.9			5.9	
Max Green Setting (Gmax), s	7.0	66.0		6.0	65.0			33.1			33.1	
Max Q Clear Time (g_c+I1), s	2.8	2.0		2.8	2.0			8.6			11.0	
Green Ext Time (p_c), s	0.0	3.6		0.0	3.6			0.9			0.8	

Intersection Summary	
HCM 2010 Ctrl Delay	10.4
HCM 2010 LOS	B

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	20	390	20	50	310	30	30	840	40	30	1000	20
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	186.3	186.3	190.0	186.3	186.3	190.0	186.3	186.3	190.0	186.3	186.3	190.0
Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Cap, veh/h	306	667	34	397	668	66	189	1508	72	309	1555	31
Arrive On Green	0.03	0.76	0.76	0.01	0.13	0.13	0.04	0.85	0.84	0.02	0.43	0.42
Sat Flow, veh/h	1774	1757	90	1774	1670	164	1774	3528	168	1774	3640	73
Grp Volume(v), veh/h	21	0	432	53	0	358	32	467	459	32	539	535
Grp Sat Flow(s),veh/h/ln	1774	0	1847	1774	0	1834	1774	1863	1833	1774	1863	1850
Q Serve(g_s), s	0.8	0.0	12.2	2.0	0.0	21.0	1.2	8.5	8.5	1.2	27.0	27.0
Cycle Q Clear(g_c), s	0.8	0.0	12.2	2.0	0.0	21.0	1.2	8.5	8.5	1.2	27.0	27.0
Prop In Lane	1.00		0.05	1.00		0.09	1.00		0.09	1.00		0.04
Lane Grp Cap(c), veh/h	306	0	701	397	0	733	189	796	783	309	796	790
V/C Ratio(X)	0.07	0.00	0.62	0.13	0.00	0.49	0.17	0.59	0.59	0.10	0.68	0.68
Avail Cap(c_a), veh/h	353	0	701	423	0	733	226	796	783	346	796	790
HCM Platoon Ratio	2.00	2.00	2.00	0.33	0.33	0.33	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	0.16	0.00	0.16	1.00	0.00	1.00	0.59	0.59	0.59	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.6	0.0	10.1	19.7	0.0	39.3	22.0	5.4	5.5	18.8	26.7	26.7
Incr Delay (d2), s/veh	0.0	0.0	0.7	0.2	0.0	2.3	0.2	0.7	0.7	0.1	4.6	4.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.4	0.0	3.4	0.9	0.0	10.9	0.5	2.3	2.2	0.5	13.6	13.5
Lane Grp Delay (d), s/veh	22.7	0.0	10.8	19.9	0.0	41.6	22.2	6.1	6.2	18.9	31.3	31.4
Lane Grp LOS	C		B	B		D	C	A	A	B	C	C
Approach Vol, veh/h		453			411			958			1106	
Approach Delay, s/veh		11.3			38.8			6.7			31.0	
Approach LOS		B			D			A			C	

Timer												
Assigned Phs	1	6		5	2		7	4		3	8	
Phs Duration (G+Y+Rc), s	5.0	49.0		6.3	50.3		5.6	55.0		5.6	55.0	
Change Period (Y+Rc), s	3.0	5.0		3.0	5.0		3.0	6.5		3.0	6.5	
Max Green Setting (Gmax), s	5.0	44.0		5.0	44.0		5.0	48.5		5.0	48.5	
Max Q Clear Time (g_c+I1), s	2.8	14.2		4.0	23.0		3.2	10.5		3.2	29.0	
Green Ext Time (p_c), s	0.0	3.5		0.0	3.3		0.0	12.2		0.0	9.5	

Intersection Summary	
HCM 2010 Ctrl Delay	21.1
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Volume (veh/h)	10	300	10	170	190	30	60	460	50	50	960	130
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	186.3	186.3	190.0	186.3	186.3	190.0	186.3	186.3	190.0	186.3	193.7	190.0
Lanes	1	1	0	1	1	0	1	2	0	1	1	0
Cap, veh/h	186	287	10	181	341	55	113	1970	215	566	994	135
Arrive On Green	0.02	0.32	0.32	0.02	0.07	0.07	0.03	0.60	0.60	0.03	0.59	0.59
Sat Flow, veh/h	1774	1789	62	1774	1568	251	1774	3302	360	1774	1671	226
Grp Volume(v), veh/h	11	0	327	179	0	232	63	272	265	53	0	1148
Grp Sat Flow(s),veh/h/ln	1774	0	1852	1774	0	1818	1774	1863	1799	1774	0	1897
Q Serve(g_s), s	0.6	0.0	19.0	8.0	0.0	14.6	1.6	8.2	8.2	1.4	0.0	70.5
Cycle Q Clear(g_c), s	0.6	0.0	19.0	8.0	0.0	14.6	1.6	8.2	8.2	1.4	0.0	70.5
Prop In Lane	1.00		0.03	1.00		0.14	1.00		0.20	1.00		0.12
Lane Grp Cap(c), veh/h	186	0	297	181	0	396	113	1111	1073	566	0	1129
V/C Ratio(X)	0.06	0.00	1.10	0.99	0.00	0.59	0.56	0.24	0.25	0.09	0.00	1.02
Avail Cap(c_a), veh/h	243	0	297	181	0	396	136	1111	1073	591	0	1129
HCM Platoon Ratio	2.00	2.00	2.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.82	0.00	0.82	0.89	0.00	0.89	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	40.8	0.0	40.2	39.3	0.0	49.8	29.7	11.3	11.3	9.0	0.0	24.0
Incr Delay (d2), s/veh	0.1	0.0	77.3	60.5	0.0	2.0	4.2	0.5	0.5	0.1	0.0	31.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.3	0.0	14.4	3.0	0.0	7.5	2.1	3.8	3.7	0.6	0.0	41.4
Lane Grp Delay (d), s/veh	41.0	0.0	117.5	99.8	0.0	51.8	33.9	11.8	11.9	9.1	0.0	55.1
Lane Grp LOS	D		F	F		D	C	B	B	A		F
Approach Vol, veh/h		338			411			600			1201	
Approach Delay, s/veh		115.0			72.7			14.2			53.1	
Approach LOS		F			E			B			D	
Timer												
Assigned Phs	1	6		5	2		7	4		3	8	
Phs Duration (G+Y+Rc), s	4.2	24.0		11.0	30.8		6.5	77.2		6.3	77.0	
Change Period (Y+Rc), s	3.0	5.0		3.0	5.0		3.0	6.5		3.0	6.5	
Max Green Setting (Gmax), s	5.0	19.0		8.0	22.0		5.0	70.5		5.0	70.5	
Max Q Clear Time (g_c+I1), s	2.6	21.0		10.0	16.6		3.6	10.2		3.4	72.5	
Green Ext Time (p_c), s	0.0	0.0		0.0	1.2		0.0	8.6		0.0	0.0	
Intersection Summary												
HCM 2010 Ctrl Delay			55.3									
HCM 2010 LOS			E									
Notes												

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	150	0	40	150	100	150	0	1600	150	150	1660	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	9	12	9	11	11	11	12	10	12	12	10	12
Total Lost time (s)	3.9		3.9	3.0	3.0			3.6	4.6	4.6	3.6	
Lane Util. Factor	1.00		1.00	1.00	1.00			0.91	0.91	0.97	0.95	
Frt	1.00		0.85	1.00	0.91			1.00	0.85	1.00	1.00	
Flt Protected	0.95		1.00	0.95	1.00			1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1593		1425	1711	1638			3160	1441	3433	3294	
Flt Permitted	0.60		1.00	0.95	1.00			1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1001		1425	1711	1638			3160	1441	3433	3294	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	158	0	42	158	105	158	0	1684	158	158	1747	32
RTOR Reduction (vph)	0	0	33	0	49	0	0	1	55	0	1	0
Lane Group Flow (vph)	158	0	9	158	214	0	0	1699	87	158	1778	0
Turn Type	custom		custom	Perm	NA			NA	Perm	Prot	NA	
Protected Phases			8		4			6		5	2	
Permitted Phases	8			4					6			
Actuated Green, G (s)	24.8		24.8	20.2	20.2			50.4	50.4	6.5	61.5	
Effective Green, g (s)	25.8		25.8	21.2	21.2			51.4	50.4	6.5	62.5	
Actuated g/C Ratio	0.22		0.22	0.18	0.18			0.43	0.42	0.05	0.52	
Clearance Time (s)	4.9		4.9	4.0	4.0			4.6	4.6	4.6	4.6	
Vehicle Extension (s)	2.5		2.5	3.0	3.0			2.5	2.5	3.0	2.5	
Lane Grp Cap (vph)	215		306	302	289			1353	605	185	1715	
v/s Ratio Prot			0.01		c0.13			c0.54		0.05	c0.54	
v/s Ratio Perm	c0.16			0.09					0.06			
v/c Ratio	0.73		0.03	0.52	0.74			1.26	0.14	0.85	1.04	
Uniform Delay, d1	43.9		37.2	44.8	46.8			34.3	21.5	56.3	28.8	
Progression Factor	1.00		1.00	0.72	0.64			0.45	0.22	1.00	1.00	
Incremental Delay, d2	19.9		0.2	1.2	7.4			119.2	0.3	29.8	31.9	
Delay (s)	63.8		37.4	33.7	37.2			134.6	5.0	86.1	60.6	
Level of Service	E		D	C	D			F	A	F	E	
Approach Delay (s)		58.3			35.9			124.6			62.7	
Approach LOS		E			D			F			E	

Intersection Summary			
HCM 2000 Control Delay	85.9	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.03		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	15.1
Intersection Capacity Utilization	86.7%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	70	470	60	0	230	50	200	1710	120	70	1500	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	11	12	12	11	12	11	10	12	10	10	12
Total Lost time (s)	6.7	5.7	6.7		5.7	6.7	3.5	5.0		3.5	5.0	5.0
Lane Util. Factor	0.97	1.00	1.00		1.00	1.00	1.00	0.91		1.00	0.91	0.91
Frt	1.00	1.00	0.85		1.00	0.85	1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3433	1801	1583		1801	1583	1711	4700		1652	3164	1441
Flt Permitted	0.25	1.00	1.00		1.00	1.00	0.07	1.00		0.07	1.00	1.00
Satd. Flow (perm)	903	1801	1583		1801	1583	121	4700		124	3164	1441
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	74	495	63	0	242	53	211	1800	126	74	1579	105
RTOR Reduction (vph)	0	0	55	0	0	46	0	6	0	0	0	55
Lane Group Flow (vph)	74	495	8	0	242	7	211	1920	0	74	1579	50
Turn Type	custom	NA	custom		NA	Perm	pm+pt	NA		pm+pt	NA	Perm
Protected Phases		6			2		7	4		3	8	
Permitted Phases	1		1			2	4			8		8
Actuated Green, G (s)	16.0	38.7	16.0		16.0	16.0	68.6	61.6		60.6	56.6	56.6
Effective Green, g (s)	16.0	39.7	16.0		17.0	16.0	68.1	62.6		59.6	57.6	57.6
Actuated g/C Ratio	0.13	0.33	0.13		0.14	0.13	0.57	0.52		0.50	0.48	0.48
Clearance Time (s)	6.7	6.7	6.7		6.7	6.7	3.0	6.0		3.0	6.0	6.0
Vehicle Extension (s)	2.5	2.5	2.5		2.5	2.5	2.0	2.5		3.0	2.5	2.5
Lane Grp Cap (vph)	120	595	211		255	211	181	2451		106	1518	691
v/s Ratio Prot		c0.27			0.13		c0.08	0.41		0.02	0.50	
v/s Ratio Perm	0.08		0.01			0.00	c0.58			0.33		0.03
v/c Ratio	0.62	0.83	0.04		0.95	0.03	1.17	0.78		0.70	1.04	0.07
Uniform Delay, d1	49.1	37.1	45.3		51.1	45.3	36.5	23.2		20.3	31.2	16.8
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.91	0.31	0.06
Incremental Delay, d2	21.5	12.8	0.4		44.6	0.3	118.6	2.6		5.8	24.7	0.1
Delay (s)	70.6	49.9	45.7		95.7	45.6	155.0	25.8		44.5	34.4	1.1
Level of Service	E	D	D		F	D	F	C		D	C	A
Approach Delay (s)		51.9			86.7			38.6			32.8	
Approach LOS		D			F			D			C	

Intersection Summary			
HCM 2000 Control Delay	41.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.12		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	20.9
Intersection Capacity Utilization	90.6%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	20	560	10	110	130	0	50	10	30	10	10	100
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	186.3	186.3	190.0	186.3	186.3	190.0	190.0	186.3	190.0	190.0	186.3	190.0
Lanes	1	1	0	1	1	0	0	1	0	0	1	0
Cap, veh/h	1001	1335	25	723	1383	0	110	30	43	45	23	148
Arrive On Green	0.03	1.00	1.00	0.07	1.00	0.00	0.11	0.11	0.11	0.11	0.11	0.11
Sat Flow, veh/h	1774	1823	34	1774	1863	0	529	277	403	77	212	1380
Grp Volume(v), veh/h	21	0	600	116	137	0	96	0	0	127	0	0
Grp Sat Flow(s),veh/h/ln	1774	0	1857	1774	1863	0	1209	0	0	1669	0	0
Q Serve(g_s), s	0.3	0.0	0.0	1.6	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.3	0.0	0.0	1.6	0.0	0.0	8.6	0.0	0.0	7.7	0.0	0.0
Prop In Lane	1.00		0.02	1.00		0.00	0.55		0.33	0.09		0.83
Lane Grp Cap(c), veh/h	1001	0	1360	723	1383	0	183	0	0	216	0	0
V/C Ratio(X)	0.02	0.00	0.44	0.16	0.10	0.00	0.53	0.00	0.00	0.59	0.00	0.00
Avail Cap(c_a), veh/h	1054	0	1360	810	1383	0	341	0	0	393	0	0
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.97	0.97	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	3.5	0.0	0.0	2.5	0.0	0.0	45.4	0.0	0.0	45.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	1.0	0.1	0.1	0.0	2.3	0.0	0.0	2.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.1	0.0	0.4	0.5	0.1	0.0	2.6	0.0	0.0	3.5	0.0	0.0
Lane Grp Delay (d), s/veh	3.5	0.0	1.0	2.6	0.1	0.0	47.8	0.0	0.0	47.9	0.0	0.0
Lane Grp LOS	A		A	A	A		D			D		
Approach Vol, veh/h		621			253			96			127	
Approach Delay, s/veh		1.1			1.3			47.8			47.9	
Approach LOS		A			A			D			D	

Timer												
Assigned Phs	1	6		5	2			4			8	
Phs Duration (G+Y+Rc), s	4.8	81.0		6.9	83.0			17.2			17.2	
Change Period (Y+Rc), s	3.0	5.0		3.0	5.0			6.0			6.0	
Max Green Setting (Gmax), s	5.0	74.0		9.0	78.0			23.0			23.0	
Max Q Clear Time (g_c+I1), s	2.3	2.0		3.6	2.0			10.6			9.7	
Green Ext Time (p_c), s	0.0	3.5		0.1	3.5			0.7			0.7	

Intersection Summary			
HCM 2010 Ctrl Delay		10.7	
HCM 2010 LOS		B	

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	30	600	30	30	210	20	20	890	60	50	1100	20
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	186.3	186.3	190.0	186.3	186.3	190.0	186.3	186.3	190.0	186.3	186.3	190.0
Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Cap, veh/h	468	725	37	246	691	66	208	1377	93	206	1496	27
Arrive On Green	0.04	0.83	0.83	0.02	0.41	0.41	0.02	0.40	0.39	0.06	0.82	0.80
Sat Flow, veh/h	1774	1758	89	1774	1675	159	1774	3452	232	1774	3648	66
Grp Volume(v), veh/h	32	0	664	32	0	242	21	506	494	53	591	588
Grp Sat Flow(s),veh/h/ln	1774	0	1847	1774	0	1835	1774	1863	1822	1774	1863	1851
Q Serve(g_s), s	1.2	0.0	25.9	1.2	0.0	10.3	0.8	26.0	26.0	2.0	18.1	18.1
Cycle Q Clear(g_c), s	1.2	0.0	25.9	1.2	0.0	10.3	0.8	26.0	26.0	2.0	18.1	18.1
Prop In Lane	1.00		0.05	1.00		0.09	1.00		0.13	1.00		0.04
Lane Grp Cap(c), veh/h	468	0	762	246	0	757	208	743	726	206	764	759
V/C Ratio(X)	0.07	0.00	0.87	0.13	0.00	0.32	0.10	0.68	0.68	0.26	0.77	0.77
Avail Cap(c_a), veh/h	505	0	762	284	0	757	255	743	726	232	764	759
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	0.89	0.00	0.89	0.99	0.00	0.99	1.00	1.00	1.00	0.69	0.69	0.69
Uniform Delay (d), s/veh	18.9	0.0	8.2	21.9	0.0	23.0	21.9	28.8	28.8	22.2	7.8	7.8
Incr Delay (d2), s/veh	0.1	0.0	11.8	0.2	0.0	1.1	0.2	5.0	5.1	0.5	5.3	5.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.5	0.0	6.7	0.5	0.0	5.0	0.4	13.1	12.9	0.9	4.5	4.5
Lane Grp Delay (d), s/veh	18.9	0.0	20.0	22.1	0.0	24.1	22.1	33.7	33.9	22.6	13.0	13.1
Lane Grp LOS	B		C	C		C	C	C	C	C	B	B
Approach Vol, veh/h		696			274			1021			1232	
Approach Delay, s/veh		20.0			23.9			33.6			13.5	
Approach LOS		B			C			C			B	

Timer												
Assigned Phs	1	6		5	2		7	4		3	8	
Phs Duration (G+Y+Rc), s	5.6	52.8		5.6	52.8		5.0	51.2		6.3	52.5	
Change Period (Y+Rc), s	3.0	5.0		3.0	5.0		3.0	6.0		3.0	6.0	
Max Green Setting (Gmax), s	5.0	47.8		5.0	47.8		5.0	45.2		5.0	45.5	
Max Q Clear Time (g_c+I1), s	3.2	27.9		3.2	12.3		2.8	28.0		4.0	20.1	
Green Ext Time (p_c), s	0.0	4.1		0.0	4.5		0.0	7.8		0.0	9.1	

Intersection Summary	
HCM 2010 Ctrl Delay	22.1
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	30	680	260	0	20	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	12	11	12	12	11	12
Total Lost time (s)	2.0	4.0	5.0		4.3	
Lane Util. Factor	1.00	1.00	1.00		1.00	
Frt	1.00	1.00	1.00		0.93	
Flt Protected	0.95	1.00	1.00		0.98	
Satd. Flow (prot)	1770	1801	1900		1654	
Flt Permitted	0.58	1.00	1.00		0.98	
Satd. Flow (perm)	1079	1801	1900		1654	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	32	716	274	0	21	21
RTOR Reduction (vph)	0	0	0	0	20	0
Lane Group Flow (vph)	32	716	274	0	22	0
Heavy Vehicles (%)	2%	2%	0%	0%	2%	0%
Turn Type	pm+pt	NA	NA		NA	
Protected Phases	1	6	2		8	
Permitted Phases	6					
Actuated Green, G (s)	104.9	104.9	98.4		5.8	
Effective Green, g (s)	105.9	105.9	98.4		5.8	
Actuated g/C Ratio	0.88	0.88	0.82		0.05	
Clearance Time (s)	3.0	5.0	5.0		4.3	
Vehicle Extension (s)	3.0	3.0	3.0		2.5	
Lane Grp Cap (vph)	978	1589	1558		79	
v/s Ratio Prot	0.00	c0.40	0.14		c0.01	
v/s Ratio Perm	0.03					
v/c Ratio	0.03	0.45	0.18		0.28	
Uniform Delay, d1	0.9	1.4	2.3		55.1	
Progression Factor	0.18	0.37	0.24		1.00	
Incremental Delay, d2	0.0	0.5	0.2		1.4	
Delay (s)	0.2	1.0	0.8		56.5	
Level of Service	A	A	A		E	
Approach Delay (s)		1.0	0.8		56.5	
Approach LOS		A	A		E	

Intersection Summary			
HCM 2000 Control Delay	3.1	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	11.3
Intersection Capacity Utilization	46.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	30	680	30	30	180	30	50	80	20	50	90	20
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	186.3	186.3	190.0	190.0	190.0	190.0	190.0	195.0	190.0	190.0	194.2	190.0
Lanes	1	1	0	1	1	0	0	1	0	0	1	0
Cap, veh/h	861	1219	54	541	1078	182	131	200	44	124	211	42
Arrive On Green	0.04	0.92	0.90	0.02	0.68	0.68	0.19	0.20	0.19	0.40	0.40	0.39
Sat Flow, veh/h	1774	1770	79	1810	1584	268	447	993	221	413	1045	207
Grp Volume(v), veh/h	32	0	748	32	0	221	158	0	0	169	0	0
Grp Sat Flow(s),veh/h/ln	1774	0	1849	1810	0	1853	1661	0	0	1665	0	0
Q Serve(g_s), s	0.6	0.0	8.7	0.6	0.0	5.1	1.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.6	0.0	8.7	0.6	0.0	5.1	9.9	0.0	0.0	8.9	0.0	0.0
Prop In Lane	1.00		0.04	1.00		0.14	0.34		0.13	0.31		0.12
Lane Grp Cap(c), veh/h	861	0	1273	541	0	1260	361	0	0	376	0	0
V/C Ratio(X)	0.04	0.00	0.59	0.06	0.00	0.18	0.44	0.00	0.00	0.45	0.00	0.00
Avail Cap(c_a), veh/h	897	0	1273	578	0	1260	361	0	0	376	0	0
HCM Platoon Ratio	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	0.90	0.00	0.90	1.00	0.00	1.00	1.00	0.00	0.00	0.81	0.00	0.00
Uniform Delay (d), s/veh	4.8	0.0	1.9	5.6	0.0	6.8	41.4	0.0	0.0	30.6	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	1.8	0.0	0.0	0.3	3.8	0.0	0.0	3.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.2	0.0	2.5	0.2	0.0	2.3	4.7	0.0	0.0	3.6	0.0	0.0
Lane Grp Delay (d), s/veh	4.8	0.0	3.7	5.7	0.0	7.1	45.2	0.0	0.0	33.7	0.0	0.0
Lane Grp LOS	A		A	A		A	D			C		
Approach Vol, veh/h		780			253			158			169	
Approach Delay, s/veh		3.7			6.9			45.2			33.7	
Approach LOS		A			A			D			C	
Timer												
Assigned Phs	1	6		5	2			4			8	
Phs Duration (G+Y+Rc), s	5.6	85.0		5.6	85.0			27.0			27.0	
Change Period (Y+Rc), s	3.0	5.0		3.0	5.0			4.3			4.3	
Max Green Setting (Gmax), s	5.0	80.0		5.0	80.0			22.7			22.7	
Max Q Clear Time (g_c+I1), s	2.6	10.7		2.6	7.1			11.9			10.9	
Green Ext Time (p_c), s	0.0	5.2		0.0	5.2			0.7			0.8	
Intersection Summary												
HCM 2010 Ctrl Delay			12.9									
HCM 2010 LOS			B									
Notes												

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	60	650	30	30	190	40	20	760	70	80	1060	30
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	186.3	186.3	190.0	190.0	190.0	190.0	186.3	186.3	190.0	186.3	186.3	190.0
Lanes	1	1	0	1	1	0	1	2	0	1	2	1
Cap, veh/h	594	869	41	226	724	152	145	1065	99	203	1283	542
Arrive On Green	0.04	0.49	0.48	0.02	0.48	0.48	0.02	0.32	0.31	0.09	0.69	0.67
Sat Flow, veh/h	1774	1766	83	1810	1524	320	1774	3360	311	1774	3725	1615
Grp Volume(v), veh/h	63	0	716	32	0	242	21	443	431	84	1116	32
Grp Sat Flow(s),veh/h/ln	1774	0	1848	1810	0	1844	1774	1863	1808	1774	1863	1615
Q Serve(g_s), s	1.9	0.0	35.8	1.0	0.0	8.9	0.9	23.8	23.8	3.4	25.9	0.8
Cycle Q Clear(g_c), s	1.9	0.0	35.8	1.0	0.0	8.9	0.9	23.8	23.8	3.4	25.9	0.8
Prop In Lane	1.00		0.04	1.00		0.17	1.00		0.17	1.00		1.00
Lane Grp Cap(c), veh/h	594	0	910	226	0	876	145	591	573	203	1283	542
V/C Ratio(X)	0.11	0.00	0.79	0.14	0.00	0.28	0.14	0.75	0.75	0.41	0.87	0.06
Avail Cap(c_a), veh/h	619	0	910	267	0	876	194	688	668	220	1409	596
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.63	0.63	0.63
Uniform Delay (d), s/veh	12.8	0.0	23.5	20.0	0.0	17.7	28.2	34.1	34.2	24.3	15.4	12.3
Incr Delay (d2), s/veh	0.1	0.0	6.8	0.3	0.0	0.8	0.5	3.9	4.1	0.8	3.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.8	0.0	17.8	0.5	0.0	4.2	0.4	11.9	11.5	1.4	8.6	0.3
Lane Grp Delay (d), s/veh	12.9	0.0	30.3	20.3	0.0	18.5	28.6	38.1	38.3	25.2	19.1	12.4
Lane Grp LOS	B		C	C		B	C	D	D	C	B	B
Approach Vol, veh/h		779			274			895			1232	
Approach Delay, s/veh		28.9			18.7			38.0			19.4	
Approach LOS		C			B			D			B	
Timer												
Assigned Phs	1	6		5	2		7	4		3	8	
Phs Duration (G+Y+Rc), s	6.4	58.9		5.5	58.0		4.9	39.2		8.0	42.2	
Change Period (Y+Rc), s	3.0	5.0		3.0	5.0		3.0	4.8		3.0	4.8	
Max Green Setting (Gmax), s	5.0	53.0		5.0	53.0		5.0	40.2		6.0	41.2	
Max Q Clear Time (g_c+I1), s	3.9	37.8		3.0	10.9		2.9	25.8		5.4	27.9	
Green Ext Time (p_c), s	0.0	4.1		0.0	5.0		0.0	8.5		0.0	8.1	
Intersection Summary												
HCM 2010 Ctrl Delay			26.9									
HCM 2010 LOS			C									
Notes												

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	70	680	40	20	170	20	40	580	40	50	370	30
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	186.3	186.3	190.0	190.0	190.0	190.0	190.0	186.3	190.0	190.0	186.5	190.0
Lanes	1	1	0	1	1	0	0	2	0	0	2	0
Cap, veh/h	795	1008	59	289	929	109	74	898	61	95	622	51
Arrive On Green	0.04	0.58	0.57	0.03	1.00	1.00	0.31	0.31	0.31	0.61	0.63	0.61
Sat Flow, veh/h	1774	1742	102	1810	1670	196	127	2857	193	170	1980	162
Grp Volume(v), veh/h	74	0	758	21	0	200	334	0	361	145	0	329
Grp Sat Flow(s),veh/h/ln	1774	0	1845	1810	0	1865	1515	0	1661	643	0	1669
Q Serve(g_s), s	1.9	0.0	34.9	0.6	0.0	0.0	10.3	0.0	22.6	7.1	0.0	14.4
Cycle Q Clear(g_c), s	1.9	0.0	34.9	0.6	0.0	0.0	24.7	0.0	22.6	29.7	0.0	14.4
Prop In Lane	1.00		0.06	1.00		0.10	0.13		0.12	0.37		0.10
Lane Grp Cap(c), veh/h	795	0	1067	289	0	1038	498	0	522	238	0	525
V/C Ratio(X)	0.09	0.00	0.71	0.07	0.00	0.19	0.67	0.00	0.69	0.61	0.00	0.63
Avail Cap(c_a), veh/h	815	0	1067	335	0	1038	498	0	522	238	0	525
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	0.99	0.00	0.99	1.00	0.00	1.00	0.89	0.00	0.89
Uniform Delay (d), s/veh	8.4	0.0	17.9	15.5	0.0	0.0	36.1	0.0	35.7	21.8	0.0	17.8
Incr Delay (d2), s/veh	0.1	0.0	4.0	0.1	0.0	0.4	7.0	0.0	7.3	3.9	0.0	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.8	0.0	16.6	0.3	0.0	0.1	10.1	0.0	10.6	3.7	0.0	4.7
Lane Grp Delay (d), s/veh	8.5	0.0	21.9	15.6	0.0	0.4	43.1	0.0	43.0	25.8	0.0	20.0
Lane Grp LOS	A		C	B		A	D		D	C		B
Approach Vol, veh/h		832			221			695			474	
Approach Delay, s/veh		20.7			1.9			43.1			21.7	
Approach LOS		C			A			D			C	
Timer												
Assigned Phs	1	6		5	2			4			8	
Phs Duration (G+Y+Rc), s	6.7	72.7		5.0	71.0			41.0			41.0	
Change Period (Y+Rc), s	3.0	5.0		3.0	5.0			4.7			4.7	
Max Green Setting (Gmax), s	5.0	66.0		5.0	66.0			36.3			36.3	
Max Q Clear Time (g_c+I1), s	3.9	36.9		2.6	2.0			26.7			31.7	
Green Ext Time (p_c), s	0.0	4.9		0.0	5.2			3.6			2.2	
Intersection Summary												
HCM 2010 Ctrl Delay			26.1									
HCM 2010 LOS			C									
Notes												

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	720	50	20	190	0	0	0	40	20	70	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	10	12	12	12	12	12	11	12	12	11	12
Total Lost time (s)		4.0			4.0				4.3		4.3	
Lane Util. Factor		1.00			1.00				1.00		1.00	
Frt		0.99			1.00				0.86		0.95	
Flt Protected		1.00			1.00				1.00		0.99	
Satd. Flow (prot)		1723			1854				1611		1714	
Flt Permitted		1.00			0.91				1.00		0.99	
Satd. Flow (perm)		1723			1694				1611		1714	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	758	53	21	200	0	0	0	42	21	74	53
RTOR Reduction (vph)	0	2	0	0	0	0	0	0	34	0	17	0
Lane Group Flow (vph)	0	809	0	0	221	0	0	0	8	0	131	0
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	0%	2%	2%	2%	2%	0%
Turn Type		NA		Perm	NA				custom	Perm	NA	
Protected Phases		6			2						8	
Permitted Phases				2					4	8		
Actuated Green, G (s)		89.0			89.0				22.7		22.7	
Effective Green, g (s)		89.0			89.0				22.7		22.7	
Actuated g/C Ratio		0.74			0.74				0.19		0.19	
Clearance Time (s)		4.0			4.0				4.3		4.3	
Vehicle Extension (s)		3.0			3.0				3.0		3.0	
Lane Grp Cap (vph)		1277			1256				304		324	
v/s Ratio Prot		c0.47										
v/s Ratio Perm					0.13				0.00		0.08	
v/c Ratio		0.63			0.18				0.03		0.40	
Uniform Delay, d1		7.6			4.6				39.6		42.7	
Progression Factor		0.24			0.79				1.00		1.00	
Incremental Delay, d2		1.6			0.3				0.2		0.8	
Delay (s)		3.4			3.9				39.8		43.5	
Level of Service		A			A				D		D	
Approach Delay (s)		3.4			3.9			39.8			43.5	
Approach LOS		A			A			D			D	

Intersection Summary			
HCM 2000 Control Delay	9.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.3
Intersection Capacity Utilization	62.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	50	620	20	10	160	20	20	300	20	60	200	20
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	186.3	186.3	190.0	186.3	186.3	190.0	190.0	186.3	190.0	190.0	186.3	190.0
Lanes	1	1	0	1	1	0	0	1	0	0	1	0
Cap, veh/h	628	972	31	478	851	106	51	545	35	115	367	34
Arrive On Green	0.06	1.00	1.00	0.00	0.17	0.17	0.33	0.33	0.33	0.65	0.66	0.66
Sat Flow, veh/h	1774	1795	58	1774	1624	203	57	1645	106	235	1109	103
Grp Volume(v), veh/h	53	0	674	11	0	189	358	0	0	295	0	0
Grp Sat Flow(s),veh/h/ln	1774	0	1853	1774	0	1827	1808	0	0	1447	0	0
Q Serve(g_s), s	1.5	0.0	0.0	0.3	0.0	10.5	1.3	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.5	0.0	0.0	0.3	0.0	10.5	19.1	0.0	0.0	14.3	0.0	0.0
Prop In Lane	1.00		0.03	1.00		0.11	0.06		0.06	0.21		0.07
Lane Grp Cap(c), veh/h	628	0	1004	478	0	957	631	0	0	510	0	0
V/C Ratio(X)	0.08	0.00	0.67	0.02	0.00	0.20	0.57	0.00	0.00	0.58	0.00	0.00
Avail Cap(c_a), veh/h	654	0	1004	535	0	957	631	0	0	510	0	0
HCM Platoon Ratio	2.00	2.00	2.00	0.33	0.33	0.33	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	0.76	0.00	0.76	0.97	0.00	0.97	1.00	0.00	0.00	0.45	0.00	0.00
Uniform Delay (d), s/veh	11.3	0.0	0.0	13.0	0.0	27.6	32.8	0.0	0.0	15.2	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	2.7	0.0	0.0	0.4	3.7	0.0	0.0	2.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.6	0.0	0.8	0.1	0.0	5.4	9.6	0.0	0.0	3.6	0.0	0.0
Lane Grp Delay (d), s/veh	11.4	0.0	2.7	13.0	0.0	28.1	36.5	0.0	0.0	17.4	0.0	0.0
Lane Grp LOS	B		A	B		C	D			B		
Approach Vol, veh/h		727			200			358			295	
Approach Delay, s/veh		3.4			27.2			36.5			17.4	
Approach LOS		A			C			D			B	

Timer												
Assigned Phs	1	6		5	2			4			8	
Phs Duration (G+Y+Rc), s	6.3	69.1		4.2	67.0			45.0			45.0	
Change Period (Y+Rc), s	3.0	5.0		3.0	5.0			5.8			5.8	
Max Green Setting (Gmax), s	5.0	62.0		5.0	62.0			39.2			39.2	
Max Q Clear Time (g_c+I1), s	3.5	2.0		2.3	12.5			21.1			16.3	
Green Ext Time (p_c), s	0.0	4.4		0.0	4.4			2.0			2.1	

Intersection Summary	
HCM 2010 Ctrl Delay	16.5
HCM 2010 LOS	B

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	70	630	0	0	210	30	30	520	30	0	0	0
Number	1	6	16	5	2	12	7	4	14			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow veh/h/ln	186.3	186.3	0.0	0.0	186.3	190.0	190.0	186.3	190.0			
Lanes	1	1	0	0	1	0	0	1	0			
Cap, veh/h	718	1118	0	0	876	127	33	560	33			
Arrive On Green	0.03	0.60	0.00	0.00	1.00	1.00	0.34	0.34	0.34			
Sat Flow, veh/h	1774	1863	0	0	1592	230	96	1648	96			
Grp Volume(v), veh/h	74	663	0	0	0	253	611	0	0			
Grp Sat Flow(s),veh/h/ln	1774	1863	0	0	0	1822	1841	0	0			
Q Serve(g_s), s	2.7	33.2	0.0	0.0	0.0	0.0	49.2	0.0	0.0			
Cycle Q Clear(g_c), s	2.7	33.2	0.0	0.0	0.0	0.0	49.2	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		0.13	0.05		0.05			
Lane Grp Cap(c), veh/h	718	1118	0	0	0	1003	626	0	0			
V/C Ratio(X)	0.10	0.59	0.00	0.00	0.00	0.25	0.98	0.00	0.00			
Avail Cap(c_a), veh/h	725	1118	0	0	0	1003	626	0	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00			
Upstream Filter(I)	0.67	0.67	0.00	0.00	0.00	1.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	13.0	18.6	0.0	0.0	0.0	0.0	48.9	0.0	0.0			
Incr Delay (d2), s/veh	0.0	1.6	0.0	0.0	0.0	0.6	29.9	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile Back of Q (50%), veh/ln	1.2	15.6	0.0	0.0	0.0	0.2	28.5	0.0	0.0			
Lane Grp Delay (d), s/veh	13.0	20.2	0.0	0.0	0.0	0.6	78.8	0.0	0.0			
Lane Grp LOS	B	C				A	E					
Approach Vol, veh/h		737			253			611				
Approach Delay, s/veh		19.5			0.6			78.8				
Approach LOS		B			A			E				
Timer												
Assigned Phs	1	6			2			4				
Phs Duration (G+Y+Rc), s	7.4	95.0			87.6			55.0				
Change Period (Y+Rc), s	3.0	5.0			5.0			4.0				
Max Green Setting (Gmax), s	5.0	90.0			82.0			51.0				
Max Q Clear Time (g_c+I1), s	4.7	35.2			2.0			51.2				
Green Ext Time (p_c), s	0.0	7.7			7.8			0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			39.1									
HCM 2010 LOS			D									
Notes												

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	550	30	540	130	0	0	0	0	490	620	80
Number	1	6	16	5	2	12				3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow veh/h/ln	0.0	167.6	167.6	167.6	167.6	0.0				167.6	167.6	171.0
Lanes	0	1	1	1	1	0				2	2	0
Cap, veh/h	0	659	560	559	1174	0				702	660	85
Arrive On Green	0.00	0.39	0.39	0.48	1.00	0.00				0.07	0.07	0.07
Sat Flow, veh/h	0	1676	1425	1597	1676	0				3097	2913	374
Grp Volume(v), veh/h	0	579	32	568	137	0				516	375	362
Grp Sat Flow(s),veh/h/ln	0	1676	1425	1597	1676	0				1549	1676	1610
Q Serve(g_s), s	0.0	48.0	2.1	43.0	0.0	0.0				24.5	33.6	33.6
Cycle Q Clear(g_c), s	0.0	48.0	2.1	43.0	0.0	0.0				24.5	33.6	33.6
Prop In Lane	0.00		1.00	1.00		0.00				1.00		0.23
Lane Grp Cap(c), veh/h	0	659	560	559	1174	0				702	380	365
V/C Ratio(X)	0.00	0.88	0.06	1.02	0.12	0.00				0.73	0.99	0.99
Avail Cap(c_a), veh/h	0	659	560	559	1174	0				702	380	365
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.00				0.33	0.33	0.33
Upstream Filter(I)	0.00	0.72	0.72	1.00	1.00	0.00				0.09	0.09	0.09
Uniform Delay (d), s/veh	0.0	42.2	28.2	26.3	0.0	0.0				65.0	69.2	69.2
Incr Delay (d2), s/veh	0.0	11.7	0.1	42.2	0.2	0.0				0.3	11.2	11.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.0	22.7	0.8	14.3	0.1	0.0				10.4	16.6	16.0
Lane Grp Delay (d), s/veh	0.0	53.9	28.4	68.5	0.2	0.0				65.3	80.4	81.2
Lane Grp LOS		D	C	F	A					E	F	F
Approach Vol, veh/h		611			705						1253	
Approach Delay, s/veh		52.6			55.3						74.4	
Approach LOS		D			E						E	

Timer												
Assigned Phs		6		5	2						8	
Phs Duration (G+Y+Rc), s		64.0		46.0	110.0						40.0	
Change Period (Y+Rc), s		5.0		3.0	5.0						6.0	
Max Green Setting (Gmax), s		59.0		43.0	105.0						34.0	
Max Q Clear Time (g_c+I1), s		50.0		45.0	2.0						35.6	
Green Ext Time (p_c), s		3.2		0.0	5.7						0.0	

Intersection Summary												
HCM 2010 Ctrl Delay			64.0									
HCM 2010 LOS			E									

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	50	890	0	0	810	50	20	260	90	80	0	290
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	167.6	167.6	0.0	0.0	167.6	171.0	167.6	167.6	171.0	171.0	167.6	171.0
Lanes	1	1	0	0	1	0	1	1	0	0	1	0
Cap, veh/h	98	966	0	0	829	52	48	427	148	75	13	213
Arrive On Green	0.05	1.00	0.00	0.00	1.00	1.00	0.36	0.36	0.36	0.36	0.00	0.36
Sat Flow, veh/h	1597	1676	0	0	1562	97	963	1191	413	127	37	595
Grp Volume(v), veh/h	53	937	0	0	0	906	21	0	369	389	0	0
Grp Sat Flow(s),veh/h/ln	1597	1676	0	0	0	1659	963	0	1604	759	0	0
Q Serve(g_s), s	2.2	0.0	0.0	0.0	0.0	78.9	0.0	0.0	28.5	24.8	0.0	0.0
Cycle Q Clear(g_c), s	2.2	0.0	0.0	0.0	0.0	78.9	53.3	0.0	28.5	53.3	0.0	0.0
Prop In Lane	1.00		0.00	0.00		0.06	1.00		0.26	0.22		0.78
Lane Grp Cap(c), veh/h	98	966	0	0	0	881	48	0	575	302	0	0
V/C Ratio(X)	0.54	0.97	0.00	0.00	0.00	1.03	0.43	0.00	0.64	1.29	0.00	0.00
Avail Cap(c_a), veh/h	111	981	0	0	0	882	48	0	575	302	0	0
HCM Platoon Ratio	2.00	2.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	0.00	0.37	1.00	0.00	1.00	0.65	0.00	0.00
Uniform Delay (d), s/veh	35.1	0.0	0.0	0.0	0.0	0.0	74.3	0.0	39.7	55.6	0.0	0.0
Incr Delay (d2), s/veh	4.6	21.5	0.0	0.0	0.0	26.1	25.8	0.0	5.4	145.8	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	1.2	5.8	0.0	0.0	0.0	6.4	1.2	0.0	12.7	23.9	0.0	0.0
Lane Grp Delay (d), s/veh	39.8	21.5	0.0	0.0	0.0	26.1	100.2	0.0	45.2	201.4	0.0	0.0
Lane Grp LOS	D	C				F	F		D	F		
Approach Vol, veh/h		990			906			390			389	
Approach Delay, s/veh		22.5			26.1			48.1			201.4	
Approach LOS		C			C			D			F	
Timer												
Assigned Phs	1	6			2			4			8	
Phs Duration (G+Y+Rc), s	6.7	90.7			84.0			58.0			58.0	
Change Period (Y+Rc), s	3.0	5.0			5.0			4.7			4.7	
Max Green Setting (Gmax), s	5.0	87.0			79.0			53.3			53.3	
Max Q Clear Time (g_c+I1), s	4.2	2.0			80.9			55.3			55.3	
Green Ext Time (p_c), s	0.0	29.9			0.0			0.0			0.0	
Intersection Summary												
HCM 2010 Ctrl Delay			53.5									
HCM 2010 LOS			D									
Notes												

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	160	830	100	60	700	30	70	990	30	50	240	30
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	166.0	166.0	171.0	166.0	166.0	171.0	166.0	166.0	171.0	166.0	166.0	171.0
Lanes	1	1	0	1	1	0	1	2	0	1	1	0
Cap, veh/h	461	788	95	103	809	35	257	894	27	107	393	50
Arrive On Green	0.06	0.54	0.54	0.06	1.00	1.00	0.04	0.28	0.28	0.07	0.54	0.54
Sat Flow, veh/h	1581	1455	175	1581	1580	69	1581	3205	98	1581	1445	183
Grp Volume(v), veh/h	168	0	979	63	0	769	74	540	534	53	0	285
Grp Sat Flow(s),veh/h/ln	1581	0	1629	1581	0	1648	1581	1660	1643	1581	0	1628
Q Serve(g_s), s	6.8	0.0	81.0	2.9	0.0	0.0	5.0	41.7	41.7	3.6	0.0	18.3
Cycle Q Clear(g_c), s	6.8	0.0	81.0	2.9	0.0	0.0	5.0	41.7	41.7	3.6	0.0	18.3
Prop In Lane	1.00		0.11	1.00		0.04	1.00		0.06	1.00		0.11
Lane Grp Cap(c), veh/h	461	0	883	103	0	844	257	463	458	107	0	443
V/C Ratio(X)	0.36	0.00	1.11	0.61	0.00	0.91	0.29	1.17	1.17	0.49	0.00	0.64
Avail Cap(c_a), veh/h	483	0	883	108	0	844	257	463	458	107	0	443
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	0.16	0.00	0.16	0.63	0.00	0.63	1.00	1.00	1.00	0.97	0.00	0.97
Uniform Delay (d), s/veh	12.6	0.0	34.3	34.7	0.0	0.0	37.7	53.9	53.9	41.2	0.0	29.0
Incr Delay (d2), s/veh	0.1	0.0	52.3	5.9	0.0	10.8	0.6	95.7	95.9	3.4	0.0	6.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	2.6	0.0	45.9	2.6	0.0	2.5	2.1	30.3	30.0	2.1	0.0	7.4
Lane Grp Delay (d), s/veh	12.7	0.0	86.5	40.6	0.0	10.8	38.3	149.6	149.8	44.7	0.0	35.8
Lane Grp LOS	B		F	D		B	D	F	F	D		D
Approach Vol, veh/h		1147			832			1148			338	
Approach Delay, s/veh		75.7			13.0			142.5			37.2	
Approach LOS		E			B			F			D	
Timer												
Assigned Phs	1	6		5	2		7	4		3	8	
Phs Duration (G+Y+Rc), s	11.9	86.0		7.5	81.6		9.0	48.0		8.0	47.0	
Change Period (Y+Rc), s	3.0	5.0		3.0	5.0		3.0	6.3		3.0	6.3	
Max Green Setting (Gmax), s	11.0	81.0		5.0	75.0		6.0	41.7		5.0	40.7	
Max Q Clear Time (g_c+I1), s	8.8	83.0		4.9	2.0		7.0	43.7		5.6	20.3	
Green Ext Time (p_c), s	0.1	0.0		0.0	26.0		0.0	0.0		0.0	3.3	
Intersection Summary												
HCM 2010 Ctrl Delay			79.0									
HCM 2010 LOS			E									
Notes												

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	800	190	50	700	0	0	0	0	190	800	90
Number	1	6	16	5	2	12				3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow veh/h/ln	0.0	166.0	171.0	166.0	166.0	0.0				171.0	166.0	171.0
Lanes	0	1	0	1	1	0				0	2	0
Cap, veh/h	0	747	178	86	1029	0				172	763	90
Arrive On Green	0.00	1.00	1.00	0.05	1.00	0.00				0.10	0.10	0.10
Sat Flow, veh/h	0	1298	308	1581	1660	0				545	2414	284
Grp Volume(v), veh/h	0	0	1042	53	737	0				599	0	538
Grp Sat Flow(s),veh/h/ln	0	0	1606	1581	1660	0				1633	0	1610
Q Serve(g_s), s	0.0	0.0	86.4	2.0	0.0	0.0				47.4	0.0	47.4
Cycle Q Clear(g_c), s	0.0	0.0	86.4	2.0	0.0	0.0				47.4	0.0	47.4
Prop In Lane	0.00		0.19	1.00		0.00				0.33		0.18
Lane Grp Cap(c), veh/h	0	0	925	86	1029	0				516	0	509
V/C Ratio(X)	0.00	0.00	1.13	0.62	0.72	0.00				1.16	0.00	1.06
Avail Cap(c_a), veh/h	0	0	925	111	1029	0				516	0	509
HCM Platoon Ratio	1.00	2.00	2.00	2.00	2.00	1.00				0.33	0.33	0.33
Upstream Filter(I)	0.00	0.00	0.09	0.90	0.90	0.00				0.09	0.00	0.09
Uniform Delay (d), s/veh	0.0	0.0	0.0	36.7	0.0	0.0				67.2	0.0	67.2
Incr Delay (d2), s/veh	0.0	0.0	58.5	6.3	3.9	0.0				74.7	0.0	30.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.0	0.0	15.0	2.2	1.1	0.0				31.9	0.0	25.2
Lane Grp Delay (d), s/veh	0.0	0.0	58.5	43.0	3.9	0.0				141.9	0.0	97.8
Lane Grp LOS			F	D	A					F		F
Approach Vol, veh/h		1042			790						1137	
Approach Delay, s/veh		58.5			6.5						121.1	
Approach LOS		E			A						F	

Timer												
Assigned Phs		6		5	2						8	
Phs Duration (G+Y+Rc), s		91.4		6.6	98.0						52.0	
Change Period (Y+Rc), s		5.0		3.0	5.0						4.6	
Max Green Setting (Gmax), s		84.0		6.0	93.0						47.4	
Max Q Clear Time (g_c+I1), s		88.4		4.0	2.0						49.4	
Green Ext Time (p_c), s		0.0		0.0	29.4						0.0	

Intersection Summary	
HCM 2010 Ctrl Delay	68.6
HCM 2010 LOS	E

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	130	920	0	0	750	50	90	730	40	0	0	0
Number	1	6	16	5	2	12	7	4	14			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow veh/h/ln	166.0	166.0	171.0	0.0	166.0	171.0	166.0	166.0	171.0			
Lanes	1	1	0	0	2	0	1	2	0			
Cap, veh/h	391	1105	0	0	1839	124	425	839	46			
Arrive On Green	0.10	1.00	0.00	0.00	0.60	0.60	0.27	0.27	0.27			
Sat Flow, veh/h	1581	1660	0	0	3077	207	1581	3120	171			
Grp Volume(v), veh/h	137	968	0	0	426	416	95	409	401			
Grp Sat Flow(s),veh/h/ln	1581	1660	0	0	1660	1624	1581	1660	1630			
Q Serve(g_s), s	5.0	0.0	0.0	0.0	20.4	20.4	6.9	35.1	35.2			
Cycle Q Clear(g_c), s	5.0	0.0	0.0	0.0	20.4	20.4	6.9	35.1	35.2			
Prop In Lane	1.00		0.00	0.00		0.13	1.00		0.10			
Lane Grp Cap(c), veh/h	391	1105	0	0	992	970	425	447	439			
V/C Ratio(X)	0.35	0.88	0.00	0.00	0.43	0.43	0.22	0.91	0.92			
Avail Cap(c_a), veh/h	412	1105	0	0	992	970	455	478	470			
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.09	0.09	0.00	0.00	0.15	0.15	1.00	1.00	1.00			
Uniform Delay (d), s/veh	11.0	0.0	0.0	0.0	16.0	16.0	41.8	52.2	52.2			
Incr Delay (d2), s/veh	0.0	1.0	0.0	0.0	0.2	0.2	0.3	21.4	21.8			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile Back of Q (50%), veh/ln	1.7	0.3	0.0	0.0	8.4	8.3	2.9	17.8	17.5			
Lane Grp Delay (d), s/veh	11.1	1.0	0.0	0.0	16.2	16.2	42.1	73.6	74.0			
Lane Grp LOS	B	A			B	B	D	E	E			
Approach Vol, veh/h		1105			842			905				
Approach Delay, s/veh		2.3			16.2			70.5				
Approach LOS		A			B			E				
Timer												
Assigned Phs	1	6			2			4				
Phs Duration (G+Y+Rc), s	10.0	103.0			93.0			44.2				
Change Period (Y+Rc), s	3.0	5.0			5.0			4.6				
Max Green Setting (Gmax), s	9.0	98.0			86.0			42.4				
Max Q Clear Time (g_c+I1), s	7.0	2.0			22.4			37.2				
Green Ext Time (p_c), s	0.1	25.8			23.7			2.4				
Intersection Summary												
HCM 2010 Ctrl Delay			28.0									
HCM 2010 LOS			C									
Notes												

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	150	840	60	270	500	210	200	1650	250	390	980	140
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	166.0	166.0	171.0	166.0	166.0	166.0	166.0	166.0	166.0	166.0	166.0	166.0
Lanes	2	1	0	1	1	1	1	2	1	2	2	1
Cap, veh/h	172	505	36	155	617	524	122	1159	492	236	1159	492
Arrive On Green	0.06	0.33	0.33	0.10	0.37	0.37	0.08	0.35	0.35	0.15	0.70	0.70
Sat Flow, veh/h	3067	1532	109	1581	1660	1411	1581	3320	1411	3067	3320	1411
Grp Volume(v), veh/h	158	0	947	284	526	221	211	1737	263	411	1032	147
Grp Sat Flow(s),veh/h/ln	1534	0	1641	1581	1660	1411	1581	1660	1411	1534	1660	1411
Q Serve(g_s), s	7.3	0.0	47.0	14.0	41.6	16.7	11.0	49.8	21.3	11.0	35.4	5.7
Cycle Q Clear(g_c), s	7.3	0.0	47.0	14.0	41.6	16.7	11.0	49.8	21.3	11.0	35.4	5.7
Prop In Lane	1.00		0.07	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	172	0	540	155	617	524	122	1159	492	236	1159	492
V/C Ratio(X)	0.92	0.00	1.75	1.83	0.85	0.42	1.73	1.50	0.53	1.74	0.89	0.30
Avail Cap(c_a), veh/h	172	0	540	155	617	524	122	1159	492	236	1159	492
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	0.34	0.00	0.34	1.00	1.00	1.00	1.00	1.00	1.00	0.09	0.09	0.09
Uniform Delay (d), s/veh	67.0	0.0	47.9	64.3	41.3	33.4	65.8	46.4	37.2	60.3	19.4	14.9
Incr Delay (d2), s/veh	22.1	0.0	341.1	397.9	11.2	0.5	360.9	229.1	4.1	333.8	1.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	3.5	0.0	71.0	22.9	19.6	6.1	16.8	58.1	8.2	15.1	11.0	1.7
Lane Grp Delay (d), s/veh	89.1	0.0	389.0	462.2	52.4	34.0	426.8	275.6	41.3	394.1	20.5	15.0
Lane Grp LOS	F		F	F	D	C	F	F	D	F	C	B
Approach Vol, veh/h		1105			1031			2211			1590	
Approach Delay, s/veh		346.1			161.4			262.1			116.6	
Approach LOS		F			F			F			F	
Timer												
Assigned Phs	3	8		7	4		1	6		5	2	
Phs Duration (G+Y+Rc), s	12.0	53.7		18.0	59.7		15.0	56.0		15.0	56.0	
Change Period (Y+Rc), s	4.0	6.7		4.0	6.7		4.0	6.2		4.0	6.2	
Max Green Setting (Gmax), s	8.0	47.0		14.0	50.3		11.0	49.8		11.0	49.8	
Max Q Clear Time (g_c+I1), s	9.3	49.0		16.0	43.6		13.0	51.8		13.0	37.4	
Green Ext Time (p_c), s	0.0	0.0		0.0	5.2		0.0	0.0		0.0	11.7	
Intersection Summary												
HCM 2010 Ctrl Delay			221.3									
HCM 2010 LOS			F									
Notes												

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	160	40	90	80	280	110	290	1400	10	30	1610	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.7	6.7		6.7	6.7	6.7	3.0	6.2		3.0	6.2	6.2
Lane Util. Factor	0.95	0.95		1.00	1.00	1.00	1.00	0.91		1.00	0.95	1.00
Frt	1.00	0.91		1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85
Flt Protected	0.95	0.99		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1498	1423		1577	1660	1411	1577	4527		1577	3154	1411
Flt Permitted	0.95	0.99		0.65	1.00	1.00	0.08	1.00		0.14	1.00	1.00
Satd. Flow (perm)	1498	1423		1086	1660	1411	131	4527		232	3154	1411
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	168	42	95	84	295	116	305	1474	11	32	1695	95
RTOR Reduction (vph)	0	46	0	0	0	93	0	1	0	0	0	63
Lane Group Flow (vph)	151	108	0	84	295	23	305	1484	0	32	1695	32
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Split	NA		Perm	NA	Perm	pm+pt	NA		pm+pt	NA	Perm
Protected Phases	3	3			4		1	6		5	2	
Permitted Phases				4		4	6			2		2
Actuated Green, G (s)	19.4	19.4		27.2	27.2	27.2	73.8	66.3		52.3	47.8	47.8
Effective Green, g (s)	19.4	19.4		27.2	27.2	27.2	73.8	66.3		52.3	47.8	47.8
Actuated g/C Ratio	0.14	0.14		0.19	0.19	0.19	0.53	0.47		0.37	0.34	0.34
Clearance Time (s)	6.7	6.7		6.7	6.7	6.7	3.0	6.2		3.0	6.2	6.2
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	207	197		210	322	274	306	2143		129	1076	481
v/s Ratio Prot	c0.10	0.08			c0.18		c0.16	0.33		0.01	c0.54	
v/s Ratio Perm				0.08		0.02	0.36			0.08		0.02
v/c Ratio	0.73	0.55		0.40	0.92	0.08	1.00	0.69		0.25	1.58	0.07
Uniform Delay, d1	57.8	56.2		49.3	55.3	46.2	46.0	28.9		28.2	46.1	31.1
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.80	0.24		1.00	1.00	1.00
Incremental Delay, d2	12.1	3.1		1.3	29.4	0.1	23.8	0.4		1.0	263.4	0.3
Delay (s)	69.9	59.4		50.5	84.7	46.3	106.8	7.2		29.3	309.5	31.3
Level of Service	E	E		D	F	D	F	A		C	F	C
Approach Delay (s)		64.6			69.9			24.2			290.1	
Approach LOS		E			E			C			F	

Intersection Summary			
HCM 2000 Control Delay	141.9	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.17		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	22.6
Intersection Capacity Utilization	112.5%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	250	290	0	0	560	100	170	1100	30	0	0	0
Number	1	6	16	5	2	12	7	4	14			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow veh/h/ln	166.0	166.0	0.0	0.0	166.0	171.0	171.0	166.0	166.0			
Lanes	1	1	0	0	1	0	0	2	1			
Cap, veh/h	171	897	0	0	659	117	171	1167	572			
Arrive On Green	0.08	1.00	0.00	0.00	0.48	0.48	0.13	0.13	0.13			
Sat Flow, veh/h	1581	1660	0	0	1372	245	421	2878	1411			
Grp Volume(v), veh/h	263	305	0	0	0	694	696	641	32			
Grp Sat Flow(s),veh/h/ln	1581	1660	0	0	0	1617	1639	1660	1411			
Q Serve(g_s), s	6.0	0.0	0.0	0.0	0.0	58.6	60.8	57.4	3.0			
Cycle Q Clear(g_c), s	6.0	0.0	0.0	0.0	0.0	58.6	60.8	57.4	3.0			
Prop In Lane	1.00		0.00	0.00		0.15	0.26		1.00			
Lane Grp Cap(c), veh/h	171	897	0	0	0	776	664	673	572			
V/C Ratio(X)	1.54	0.34	0.00	0.00	0.00	0.89	1.05	0.95	0.06			
Avail Cap(c_a), veh/h	171	897	0	0	0	776	664	673	572			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33			
Upstream Filter(I)	0.70	0.70	0.00	0.00	0.00	0.42	0.29	0.29	0.29			
Uniform Delay (d), s/veh	44.2	0.0	0.0	0.0	0.0	35.5	65.0	63.5	39.9			
Incr Delay (d2), s/veh	263.5	0.7	0.0	0.0	0.0	7.2	32.9	9.7	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile Back of Q (50%), veh/ln	16.6	0.2	0.0	0.0	0.0	25.4	33.4	28.0	1.1			
Lane Grp Delay (d), s/veh	307.7	0.7	0.0	0.0	0.0	42.7	97.9	73.2	39.9			
Lane Grp LOS	F	A				D	F	E	D			
Approach Vol, veh/h		568			694			1369				
Approach Delay, s/veh		142.9			42.7			85.0				
Approach LOS		F			D			F				
Timer												
Assigned Phs	1	6			2			4				
Phs Duration (G+Y+Rc), s	9.0	85.0			76.0			65.0				
Change Period (Y+Rc), s	3.0	4.0			4.0			4.2				
Max Green Setting (Gmax), s	6.0	81.0			72.0			60.8				
Max Q Clear Time (g_c+I1), s	8.0	2.0			60.6			62.8				
Green Ext Time (p_c), s	0.0	9.0			5.1			0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			86.3									
HCM 2010 LOS			F									
Notes												

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	280	160	100	540	0	0	0	0	220	1060	90
Number	1	6	16	5	2	12				3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow veh/h/ln	0.0	166.0	171.0	166.0	166.0	0.0				166.0	166.0	171.0
Lanes	0	1	0	1	1	0				1	1	0
Cap, veh/h	0	331	189	175	642	0				879	839	71
Arrive On Green	0.00	0.67	0.67	0.07	0.77	0.00				0.56	0.56	0.56
Sat Flow, veh/h	0	994	566	1581	1660	0				1581	1509	128
Grp Volume(v), veh/h	0	0	463	105	568	0				232	0	1211
Grp Sat Flow(s),veh/h/ln	0	0	1560	1581	1660	0				1581	0	1638
Q Serve(g_s), s	0.0	0.0	36.5	5.0	36.8	0.0				11.5	0.0	83.4
Cycle Q Clear(g_c), s	0.0	0.0	36.5	5.0	36.8	0.0				11.5	0.0	83.4
Prop In Lane	0.00		0.36	1.00		0.00				1.00		0.08
Lane Grp Cap(c), veh/h	0	0	520	175	642	0				879	0	910
V/C Ratio(X)	0.00	0.00	0.89	0.60	0.88	0.00				0.26	0.00	1.33
Avail Cap(c_a), veh/h	0	0	520	175	642	0				879	0	910
HCM Platoon Ratio	1.00	2.00	2.00	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.79	0.35	0.35	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	22.7	42.6	14.6	0.0				17.3	0.0	33.3
Incr Delay (d2), s/veh	0.0	0.0	16.6	2.0	6.6	0.0				0.2	0.0	156.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.0	0.0	13.7	1.9	11.0	0.0				4.5	0.0	73.6
Lane Grp Delay (d), s/veh	0.0	0.0	39.3	44.6	21.2	0.0				17.5	0.0	189.4
Lane Grp LOS			D	D	C					B		F
Approach Vol, veh/h		463			673						1443	
Approach Delay, s/veh		39.3			24.9						161.8	
Approach LOS		D			C						F	

Timer												
Assigned Phs		6		5	2						8	
Phs Duration (G+Y+Rc), s		54.0		8.0	62.0						88.0	
Change Period (Y+Rc), s		4.0		3.0	4.0						4.6	
Max Green Setting (Gmax), s		50.0		5.0	58.0						83.4	
Max Q Clear Time (g_c+I1), s		38.5		7.0	38.8						85.4	
Green Ext Time (p_c), s		5.2		0.0	6.9						0.0	

Intersection Summary												
HCM 2010 Ctrl Delay			104.1									
HCM 2010 LOS			F									

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	140	280	180	30	580	30	70	580	60	60	290	60
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	166.0	166.0	171.0	166.0	166.0	171.0	166.0	166.0	171.0	166.0	166.0	171.0
Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Cap, veh/h	331	463	297	380	702	37	340	1010	104	263	900	183
Arrive On Green	0.10	0.82	0.82	0.04	0.90	0.90	0.08	0.68	0.68	0.04	0.34	0.34
Sat Flow, veh/h	1581	947	607	1581	1564	82	1581	2962	305	1581	2679	546
Grp Volume(v), veh/h	147	0	484	32	0	643	74	342	332	63	187	181
Grp Sat Flow(s),veh/h/ln	1581	0	1553	1581	0	1646	1581	1660	1606	1581	1660	1564
Q Serve(g_s), s	6.8	0.0	17.5	1.6	0.0	26.8	4.5	16.4	16.5	3.8	12.4	12.8
Cycle Q Clear(g_c), s	6.8	0.0	17.5	1.6	0.0	26.8	4.5	16.4	16.5	3.8	12.4	12.8
Prop In Lane	1.00		0.39	1.00		0.05	1.00		0.19	1.00		0.35
Lane Grp Cap(c), veh/h	331	0	760	380	0	739	340	566	548	263	558	525
V/C Ratio(X)	0.44	0.00	0.64	0.08	0.00	0.87	0.22	0.60	0.61	0.24	0.34	0.34
Avail Cap(c_a), veh/h	365	0	760	392	0	739	359	566	548	290	558	525
HCM Platoon Ratio	1.67	1.67	1.67	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	0.71	0.00	0.71	0.34	0.00	0.34	0.23	0.23	0.23	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.7	0.0	8.4	21.2	0.0	5.5	28.7	18.0	18.0	31.1	36.6	36.7
Incr Delay (d2), s/veh	0.7	0.0	2.9	0.0	0.0	5.1	0.1	1.1	1.2	0.5	1.6	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	2.5	0.0	4.9	0.6	0.0	3.7	1.7	5.4	5.2	1.6	5.6	5.4
Lane Grp Delay (d), s/veh	20.4	0.0	11.3	21.2	0.0	10.6	28.8	19.1	19.2	31.5	38.2	38.5
Lane Grp LOS	C		B	C		B	C	B	B	C	D	D
Approach Vol, veh/h		631			675			748			431	
Approach Delay, s/veh		13.5			11.1			20.1			37.3	
Approach LOS		B			B			C			D	
Timer												
Assigned Phs	1	6		5	2		7	4		3	8	
Phs Duration (G+Y+Rc), s	12.9	76.0		6.9	70.1		10.2	54.8		9.4	54.0	
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0		4.0	4.6		4.0	4.6	
Max Green Setting (Gmax), s	12.0	72.0		4.0	64.0		8.0	49.4		8.0	49.4	
Max Q Clear Time (g_c+I1), s	8.8	19.5		3.6	28.8		6.5	18.5		5.8	14.8	
Green Ext Time (p_c), s	0.1	10.4		0.0	9.7		0.0	7.5		0.0	7.7	
Intersection Summary												
HCM 2010 Ctrl Delay			19.0									
HCM 2010 LOS			B									
Notes												

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	70	480	120	300	390	80	30	410	70	0	0	0
Number	1	6	16	5	2	12	7	4	14			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow veh/h/ln	166.0	166.0	171.0	166.0	166.0	171.0	166.0	166.0	171.0			
Lanes	1	1	0	1	1	0	1	1	0			
Cap, veh/h	586	786	196	618	895	183	357	312	53			
Arrive On Green	0.06	1.00	1.00	0.17	1.00	1.00	0.45	0.45	0.45			
Sat Flow, veh/h	1581	1283	320	1581	1338	274	1581	1382	237			
Grp Volume(v), veh/h	74	0	631	316	0	495	32	0	506			
Grp Sat Flow(s),veh/h/ln	1581	0	1604	1581	0	1612	1581	0	1618			
Q Serve(g_s), s	2.7	0.0	0.0	10.4	0.0	0.0	1.7	0.0	33.7			
Cycle Q Clear(g_c), s	2.7	0.0	0.0	10.4	0.0	0.0	1.7	0.0	33.7			
Prop In Lane	1.00		0.20	1.00		0.17	1.00		0.15			
Lane Grp Cap(c), veh/h	586	0	982	618	0	1078	357	0	365			
V/C Ratio(X)	0.13	0.00	0.64	0.51	0.00	0.46	0.09	0.00	1.39			
Avail Cap(c_a), veh/h	591	0	982	682	0	1078	357	0	365			
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00			
Upstream Filter(I)	1.00	0.00	1.00	0.44	0.00	0.44	0.70	0.00	0.70			
Uniform Delay (d), s/veh	9.7	0.0	0.0	5.3	0.0	0.0	32.3	0.0	41.0			
Incr Delay (d2), s/veh	0.1	0.0	3.2	0.3	0.0	0.6	0.3	0.0	185.6			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile Back of Q (50%), veh/ln	1.0	0.0	0.9	2.6	0.0	0.2	0.7	0.0	31.4			
Lane Grp Delay (d), s/veh	9.8	0.0	3.2	5.5	0.0	0.6	32.6	0.0	226.6			
Lane Grp LOS	A		A	A		A	C		F			
Approach Vol, veh/h		705			811			538				
Approach Delay, s/veh		3.9			2.5			215.1				
Approach LOS		A			A			F				
Timer												
Assigned Phs	1	6		5	2			4				
Phs Duration (G+Y+Rc), s	7.5	95.5		15.9	104.0			38.0				
Change Period (Y+Rc), s	3.0	4.0		3.0	4.0			4.3				
Max Green Setting (Gmax), s	5.0	86.0		19.0	100.0			33.7				
Max Q Clear Time (g_c+I1), s	4.7	2.0		12.4	2.0			35.7				
Green Ext Time (p_c), s	0.0	10.6		0.5	10.7			0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			58.7									
HCM 2010 LOS			E									
Notes												

Movement	EBT	EBR	WBL	WBT	SBL	SBT	SBR	SWL2	SWL	SWR
Lane Configurations										
Volume (vph)	600	30	140	200	60	180	10	280	740	110
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		3.0	4.0		7.0		7.0	7.0	
Lane Util. Factor	1.00		1.00	1.00		0.95		0.97	1.00	
Frt	0.99		1.00	1.00		0.99		1.00	0.98	
Flt Protected	1.00		0.95	1.00		0.99		0.95	0.96	
Satd. Flow (prot)	1666		1593	1676		3128		3090	1575	
Flt Permitted	1.00		0.08	1.00		0.99		0.95	0.96	
Satd. Flow (perm)	1666		142	1676		3128		3090	1575	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	632	32	147	211	63	189	11	295	779	116
RTOR Reduction (vph)	1	0	0	0	0	2	0	0	0	0
Lane Group Flow (vph)	663	0	147	211	0	261	0	295	895	0
Turn Type	NA		pm+pt	NA	Perm	NA		Perm	NA	
Protected Phases	6		5	2		9			8	
Permitted Phases			2		9			8		
Actuated Green, G (s)	44.2		56.6	56.6		17.4		58.0	58.0	
Effective Green, g (s)	44.2		56.6	56.6		17.4		58.0	58.0	
Actuated g/C Ratio	0.29		0.38	0.38		0.12		0.39	0.39	
Clearance Time (s)	4.0		3.0	4.0		7.0		7.0	7.0	
Vehicle Extension (s)	3.0		3.0	3.0		3.0		3.0	3.0	
Lane Grp Cap (vph)	490		144	632		362		1194	609	
v/s Ratio Prot	c0.40		c0.06	0.13					c0.57	
v/s Ratio Perm			0.32			0.08		0.10		
v/c Ratio	1.35		1.02	0.33		0.72		0.25	1.47	
Uniform Delay, d1	52.9		39.2	33.3		64.0		31.2	46.0	
Progression Factor	1.00		1.00	1.00		1.00		1.00	1.00	
Incremental Delay, d2	171.5		80.6	1.4		6.9		0.1	220.2	
Delay (s)	224.4		119.8	34.7		70.9		31.3	266.2	
Level of Service	F		F	C		E		C	F	
Approach Delay (s)	224.4			69.6		70.9			208.0	
Approach LOS	F			E		E			F	

Intersection Summary			
HCM 2000 Control Delay	177.8	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.29		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	21.0
Intersection Capacity Utilization	124.9%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	60	650	20	20	400	20	20	210	10	40	170	20
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	186.3	186.3	190.0	186.3	186.3	190.0	186.3	186.3	190.0	190.0	193.7	190.0
Lanes	1	1	0	1	1	0	1	1	0	0	1	0
Cap, veh/h	402	837	26	243	911	45	93	699	35	37	142	14
Arrive On Green	0.00	0.62	0.62	0.03	0.52	0.51	0.03	0.79	0.79	0.35	0.35	0.35
Sat Flow, veh/h	1774	1798	55	1774	1759	88	1774	1760	88	1	402	38
Grp Volume(v), veh/h	63	0	705	21	0	442	21	0	232	242	0	0
Grp Sat Flow(s),veh/h/ln	1774	0	1853	1774	0	1847	1774	0	1847	441	0	0
Q Serve(g_s), s	0.1	0.0	33.4	0.6	0.0	17.3	0.8	0.0	3.9	0.1	0.0	0.0
Cycle Q Clear(g_c), s	0.1	0.0	33.4	0.6	0.0	17.3	0.8	0.0	3.9	40.3	0.0	0.0
Prop In Lane	1.00		0.03	1.00		0.05	1.00		0.05	0.17		0.09
Lane Grp Cap(c), veh/h	402	0	862	243	0	956	93	0	734	196	0	0
V/C Ratio(X)	0.16	0.00	0.82	0.09	0.00	0.46	0.22	0.00	0.32	1.24	0.00	0.00
Avail Cap(c_a), veh/h	478	0	862	290	0	956	141	0	734	196	0	0
HCM Platoon Ratio	1.33	1.33	1.33	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.95	0.00	0.95	0.83	0.00	0.83	1.00	0.00	0.00
Uniform Delay (d), s/veh	24.8	0.0	18.0	18.5	0.0	17.4	27.9	0.0	7.5	30.7	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.0	8.5	0.1	0.0	1.5	1.0	0.0	0.2	142.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	1.2	0.0	15.5	0.3	0.0	8.1	0.6	0.0	1.4	11.7	0.0	0.0
Lane Grp Delay (d), s/veh	25.0	0.0	26.4	18.6	0.0	19.0	28.9	0.0	7.6	173.2	0.0	0.0
Lane Grp LOS	C		C	B		B	C		A	F		
Approach Vol, veh/h		768			463			253			242	
Approach Delay, s/veh		26.3			19.0			9.4			173.2	
Approach LOS		C			B			A			F	
Timer												
Assigned Phs	1	6		5	2		7	4		3	8	
Phs Duration (G+Y+Rc), s	0.0	58.0		4.9	62.9		4.9	50.9		0.0	46.0	
Change Period (Y+Rc), s	3.0	5.0		3.0	5.0		3.0	5.7		3.0	5.7	
Max Green Setting (Gmax), s	5.0	53.0		5.0	53.0		5.0	40.3		5.0	40.3	
Max Q Clear Time (g_c+I1), s	0.0	35.4		2.6	19.3		2.8	5.9		0.0	42.3	
Green Ext Time (p_c), s	0.0	5.2		0.0	6.0		0.0	1.5		0.0	0.0	
Intersection Summary												
HCM 2010 Ctrl Delay			42.5									
HCM 2010 LOS			D									
Notes												

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	60	630	40	40	410	30	50	510	40	70	580	30
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99
Adj Sat Flow veh/h/ln	184.5	184.5	190.0	184.5	184.5	190.0	190.0	184.5	190.0	190.0	177.1	190.0
Lanes	1	1	0	1	1	0	0	2	0	0	2	0
Cap, veh/h	525	859	54	230	956	71	67	1148	43	67	1103	28
Arrive On Green	0.00	0.17	0.17	0.07	1.00	1.00	0.69	0.71	0.69	0.35	0.35	0.35
Sat Flow, veh/h	1757	1717	109	1757	1697	126	5	1538	120	4	1506	79
Grp Volume(v), veh/h	63	0	705	42	0	464	316	0	316	359	0	359
Grp Sat Flow(s),veh/h/ln	1757	0	1825	1757	0	1822	1556	0	1802	1462	0	1729
Q Serve(g_s), s	0.1	0.0	40.6	1.0	0.0	0.0	0.1	0.0	39.0	0.1	0.0	39.0
Cycle Q Clear(g_c), s	0.1	0.0	40.6	1.0	0.0	0.0	39.0	0.0	39.0	39.0	0.0	39.0
Prop In Lane	1.00		0.06	1.00		0.07	1.00		0.07	1.00		0.05
Lane Grp Cap(c), veh/h	525	0	914	230	0	1026	66	0	640	66	0	614
V/C Ratio(X)	0.12	0.00	0.77	0.18	0.00	0.45	4.82	0.00	0.49	5.47	0.00	0.58
Avail Cap(c_a), veh/h	604	0	914	264	0	1026	66	0	640	66	0	614
HCM Platoon Ratio	0.33	0.33	0.33	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	0.73	0.00	0.73	1.00	0.00	1.00	0.57	0.00	0.57	1.00	0.00	1.00
Uniform Delay (d), s/veh	14.6	0.0	39.9	18.9	0.0	0.0	35.6	0.0	16.1	55.0	0.0	35.5
Incr Delay (d2), s/veh	0.1	0.0	4.7	0.4	0.0	1.4	1740.0	0.0	1.6	2045.3	0.0	4.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.9	0.0	21.3	0.5	0.0	0.4	31.7	0.0	3.0	37.2	0.0	8.7
Lane Grp Delay (d), s/veh	14.7	0.0	44.5	19.2	0.0	1.4	1775.6	0.0	17.6	2100.3	0.0	39.5
Lane Grp LOS	B		D	B		A	F		B	F		D
Approach Vol, veh/h		768			506			632			717	
Approach Delay, s/veh		42.1			2.9			896.6			1069.9	
Approach LOS		D			A			F			F	

Timer												
Assigned Phs	1	6		5	2		7	4		3	8	
Phs Duration (G+Y+Rc), s	0.0	60.0		5.9	65.9		0.0	44.0		0.0	44.0	
Change Period (Y+Rc), s	3.0	5.0		3.0	5.0		3.0	6.0		3.0	6.0	
Max Green Setting (Gmax), s	5.0	55.0		5.0	55.0		5.0	38.0		5.0	38.0	
Max Q Clear Time (g_c+I1), s	0.0	42.6		3.0	2.0		0.0	41.0		0.0	41.0	
Green Ext Time (p_c), s	0.0	4.5		0.0	6.4		0.0	0.0		0.0	0.0	

Intersection Summary	
HCM 2010 Ctrl Delay	521.4
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	680	50	50	490	0	0	0	0	20	50	20
Number	1	6	16	5	2	12				3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow veh/h/ln	0.0	182.7	190.0	182.7	182.7	0.0				190.0	190.0	190.0
Lanes	0	1	0	1	1	0				0	1	0
Cap, veh/h	0	1144	85	593	1355	0				77	193	77
Arrive On Green	0.00	1.00	1.00	0.07	1.00	0.00				0.19	0.19	0.19
Sat Flow, veh/h	0	1681	124	1740	1827	0				400	1009	400
Grp Volume(v), veh/h	0	0	769	53	516	0				95	0	0
Grp Sat Flow(s),veh/h/ln	0	0	1805	1740	1827	0				1809	0	0
Q Serve(g_s), s	0.0	0.0	0.0	1.0	0.0	0.0				5.4	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	1.0	0.0	0.0				5.4	0.0	0.0
Prop In Lane	0.00		0.07	1.00		0.00				0.22		0.22
Lane Grp Cap(c), veh/h	0	0	1229	593	1355	0				347	0	0
V/C Ratio(X)	0.00	0.00	0.63	0.09	0.38	0.00				0.27	0.00	0.00
Avail Cap(c_a), veh/h	0	0	1229	647	1355	0				347	0	0
HCM Platoon Ratio	1.00	2.00	2.00	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.51	0.80	0.80	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	4.0	0.0	0.0				41.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	1.2	0.1	0.7	0.0				1.9	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.0	0.0	0.4	0.3	0.2	0.0				2.7	0.0	0.0
Lane Grp Delay (d), s/veh	0.0	0.0	1.2	4.0	0.7	0.0				43.3	0.0	0.0
Lane Grp LOS			A	A	A					D		
Approach Vol, veh/h		769			569						95	
Approach Delay, s/veh		1.2			1.0						43.3	
Approach LOS		A			A						D	

Timer				
Assigned Phs	6	5	2	8
Phs Duration (G+Y+Rc), s	86.7	6.3	93.0	27.0
Change Period (Y+Rc), s	5.0	3.0	5.0	4.0
Max Green Setting (Gmax), s	78.0	7.0	88.0	23.0
Max Q Clear Time (g_c+I1), s	2.0	3.0	2.0	7.4
Green Ext Time (p_c), s	7.6	0.0	7.6	0.2

Intersection Summary	
HCM 2010 Ctrl Delay	3.9
HCM 2010 LOS	A

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	40	630	40	50	410	30	30	640	60	90	940	40
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	184.5	184.5	190.0	184.5	184.5	190.0	184.5	184.5	190.0	184.5	184.5	190.0
Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Cap, veh/h	498	785	50	363	795	59	177	1123	105	302	1250	53
Arrive On Green	0.05	0.92	0.92	0.07	0.94	0.92	0.06	0.68	0.66	0.05	0.36	0.36
Sat Flow, veh/h	1757	1717	109	1757	1697	126	1757	3324	310	1757	3514	149
Grp Volume(v), veh/h	42	0	705	53	0	464	32	374	363	95	519	512
Grp Sat Flow(s),veh/h/ln	1757	0	1825	1757	0	1822	1757	1845	1790	1757	1845	1818
Q Serve(g_s), s	1.5	0.0	16.7	1.8	0.0	3.8	1.3	12.8	12.9	3.8	29.2	29.2
Cycle Q Clear(g_c), s	1.5	0.0	16.7	1.8	0.0	3.8	1.3	12.8	12.9	3.8	29.2	29.2
Prop In Lane	1.00		0.06	1.00		0.07	1.00		0.17	1.00		0.08
Lane Grp Cap(c), veh/h	498	0	835	363	0	854	177	623	605	302	656	647
V/C Ratio(X)	0.08	0.00	0.84	0.15	0.00	0.54	0.18	0.60	0.60	0.31	0.79	0.79
Avail Cap(c_a), veh/h	529	0	835	389	0	854	214	623	605	354	656	647
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	0.88	0.00	0.88	0.92	0.00	0.92	0.67	0.67	0.67	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.5	0.0	3.4	15.2	0.0	2.1	25.8	14.5	14.7	22.1	33.5	33.5
Incr Delay (d2), s/veh	0.1	0.0	9.1	0.2	0.0	2.3	0.3	2.8	2.9	0.6	9.5	9.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.6	0.0	3.9	0.7	0.0	1.4	0.6	4.6	4.5	1.7	15.3	15.1
Lane Grp Delay (d), s/veh	15.6	0.0	12.4	15.4	0.0	4.4	26.1	17.3	17.6	22.7	42.9	43.1
Lane Grp LOS	B		B	B		A	C	B	B	C	D	D
Approach Vol, veh/h		747			517			769			1126	
Approach Delay, s/veh		12.6			5.5			17.8			41.3	
Approach LOS		B			A			B			D	
Timer												
Assigned Phs	1	6		5	2		7	4		3	8	
Phs Duration (G+Y+Rc), s	6.0	58.0		6.3	58.3		5.6	42.9		8.6	46.0	
Change Period (Y+Rc), s	3.0	5.0		3.0	5.0		3.0	4.8		3.0	4.8	
Max Green Setting (Gmax), s	5.0	53.0		5.0	53.0		5.0	37.2		9.0	41.2	
Max Q Clear Time (g_c+I1), s	3.5	18.7		3.8	5.8		3.3	14.9		5.8	31.2	
Green Ext Time (p_c), s	0.0	6.2		0.0	6.4		0.0	1.7		0.1	1.6	
Intersection Summary												
HCM 2010 Ctrl Delay			22.9									
HCM 2010 LOS			C									
Notes												

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	50	570	30	50	410	30	30	80	20	30	90	20
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	186.3	186.3	190.0	186.3	186.3	190.0	190.0	186.3	190.0	190.0	186.3	190.0
Lanes	1	1	0	1	1	0	0	1	0	0	1	0
Cap, veh/h	789	1265	67	717	1253	93	75	135	30	72	143	29
Arrive On Green	0.06	1.00	1.00	0.08	1.00	1.00	0.04	0.04	0.04	0.12	0.13	0.12
Sat Flow, veh/h	1774	1753	93	1774	1713	127	259	1069	240	239	1137	227
Grp Volume(v), veh/h	53	0	632	53	0	464	137	0	0	148	0	0
Grp Sat Flow(s),veh/h/ln	1774	0	1846	1774	0	1840	1568	0	0	1603	0	0
Q Serve(g_s), s	0.8	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
Cycle Q Clear(g_c), s	0.8	0.0	0.0	0.7	0.0	0.0	9.2	0.0	0.0	9.6	0.0	0.0
Prop In Lane	1.00		0.05	1.00		0.07	0.23		0.15	0.22		0.14
Lane Grp Cap(c), veh/h	789	0	1333	717	0	1346	239	0	0	228	0	0
V/C Ratio(X)	0.07	0.00	0.47	0.07	0.00	0.34	0.57	0.00	0.00	0.65	0.00	0.00
Avail Cap(c_a), veh/h	820	0	1333	748	0	1346	440	0	0	431	0	0
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.82	0.00	0.82	0.96	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	3.2	0.0	0.0	2.7	0.0	0.0	48.3	0.0	0.0	44.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	1.2	0.0	0.0	0.6	1.5	0.0	0.0	2.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.3	0.0	0.4	0.2	0.0	0.2	4.0	0.0	0.0	4.1	0.0	0.0
Lane Grp Delay (d), s/veh	3.3	0.0	1.2	2.8	0.0	0.6	49.8	0.0	0.0	46.7	0.0	0.0
Lane Grp LOS	A		A	A		A	D			D		
Approach Vol, veh/h		685			517			137			148	
Approach Delay, s/veh		1.4			0.8			49.8			46.7	
Approach LOS		A			A			D			D	

Timer												
Assigned Phs	1	6		5	2			4			8	
Phs Duration (G+Y+Rc), s	6.2	81.0		6.2	81.0			18.1			18.1	
Change Period (Y+Rc), s	3.0	5.0		3.0	5.0			5.9			5.9	
Max Green Setting (Gmax), s	5.0	76.0		5.0	76.0			25.1			25.1	
Max Q Clear Time (g_c+I1), s	2.8	2.0		2.7	2.0			11.2			11.6	
Green Ext Time (p_c), s	0.0	5.8		0.0	5.8			0.7			0.7	

Intersection Summary		
HCM 2010 Ctrl Delay		10.1
HCM 2010 LOS		B

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	50	540	20	10	390	40	20	790	50	60	1100	80
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	186.3	186.3	190.0	186.3	186.3	190.0	186.3	186.3	190.0	186.3	186.3	190.0
Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Cap, veh/h	401	745	28	328	678	69	129	1373	87	303	1415	103
Arrive On Green	0.06	0.83	0.83	0.04	0.82	0.80	0.03	0.79	0.78	0.03	0.41	0.40
Sat Flow, veh/h	1774	1785	66	1774	1663	170	1774	3466	221	1774	3433	249
Grp Volume(v), veh/h	53	0	589	11	0	453	21	447	438	63	628	614
Grp Sat Flow(s),veh/h/ln	1774	0	1851	1774	0	1833	1774	1863	1824	1774	1863	1819
Q Serve(g_s), s	1.9	0.0	16.7	0.4	0.0	10.4	0.8	11.0	11.1	2.4	34.4	34.5
Cycle Q Clear(g_c), s	1.9	0.0	16.7	0.4	0.0	10.4	0.8	11.0	11.1	2.4	34.4	34.5
Prop In Lane	1.00		0.04	1.00		0.09	1.00		0.12	1.00		0.14
Lane Grp Cap(c), veh/h	401	0	772	328	0	748	129	738	723	303	768	750
V/C Ratio(X)	0.13	0.00	0.76	0.03	0.00	0.61	0.16	0.61	0.61	0.21	0.82	0.82
Avail Cap(c_a), veh/h	428	0	772	386	0	748	176	752	736	337	768	750
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.00	0.09	1.00	0.00	1.00	0.81	0.81	0.81	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.0	0.0	6.9	19.6	0.0	7.3	25.8	8.4	8.5	19.4	30.0	30.1
Incr Delay (d2), s/veh	0.0	0.0	0.7	0.0	0.0	3.6	0.5	1.1	1.1	0.3	9.4	9.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.8	0.0	3.3	0.2	0.0	3.4	0.4	3.1	3.1	1.1	18.1	17.7
Lane Grp Delay (d), s/veh	18.0	0.0	7.6	19.6	0.0	10.9	26.3	9.5	9.6	19.7	39.4	39.8
Lane Grp LOS	B		A	B		B	C	A	A	B	D	D
Approach Vol, veh/h		642			464			906			1305	
Approach Delay, s/veh		8.5			11.1			9.9			38.7	
Approach LOS		A			B			A			D	

Timer												
Assigned Phs	1	6		5	2		7	4		3	8	
Phs Duration (G+Y+Rc), s	6.3	53.1		4.2	51.0		5.0	51.2		6.8	53.0	
Change Period (Y+Rc), s	3.0	5.0		3.0	5.0		3.0	6.5		3.0	6.5	
Max Green Setting (Gmax), s	5.0	46.0		5.0	46.0		5.0	45.5		6.0	46.5	
Max Q Clear Time (g_c+I1), s	3.9	18.7		2.4	12.4		2.8	13.1		4.4	36.5	
Green Ext Time (p_c), s	0.0	5.1		0.0	5.2		0.0	13.0		0.0	6.6	

Intersection Summary	
HCM 2010 Ctrl Delay	21.1
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Volume (veh/h)	20	520	10	190	300	50	30	400	50	50	1070	70
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	186.3	186.3	190.0	186.3	186.3	190.0	186.3	186.3	190.0	186.3	193.7	190.0
Lanes	1	1	0	1	1	0	1	2	0	1	1	0
Cap, veh/h	173	446	9	151	434	73	108	1716	215	530	961	63
Arrive On Green	0.02	0.25	0.25	0.02	0.09	0.09	0.02	0.53	0.53	0.03	0.53	0.53
Sat Flow, veh/h	1774	1820	37	1774	1556	261	1774	3247	406	1774	1798	118
Grp Volume(v), veh/h	21	0	558	200	0	369	32	240	234	53	0	1200
Grp Sat Flow(s),veh/h/ln	1774	0	1856	1774	0	1817	1774	1863	1791	1774	0	1916
Q Serve(g_s), s	1.0	0.0	29.0	6.0	0.0	23.4	1.0	8.3	8.4	1.6	0.0	63.2
Cycle Q Clear(g_c), s	1.0	0.0	29.0	6.0	0.0	23.4	1.0	8.3	8.4	1.6	0.0	63.2
Prop In Lane	1.00		0.02	1.00		0.14	1.00		0.23	1.00		0.06
Lane Grp Cap(c), veh/h	173	0	455	151	0	507	108	984	946	530	0	1024
V/C Ratio(X)	0.12	0.00	1.23	1.33	0.00	0.73	0.30	0.24	0.25	0.10	0.00	1.17
Avail Cap(c_a), veh/h	218	0	455	151	0	507	144	984	946	555	0	1024
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.74	0.00	0.74	0.76	0.00	0.76	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	34.2	0.0	44.6	37.2	0.0	49.3	28.4	15.1	15.1	12.1	0.0	27.6
Incr Delay (d2), s/veh	0.2	0.0	115.7	177.2	0.0	4.0	1.5	0.6	0.6	0.1	0.0	88.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.5	0.0	28.4	7.4	0.0	12.2	1.0	3.9	3.8	0.7	0.0	54.9
Lane Grp Delay (d), s/veh	34.5	0.0	160.4	214.5	0.0	53.4	30.0	15.7	15.8	12.1	0.0	115.6
Lane Grp LOS	C		F	F		D	C	B	B	B		F
Approach Vol, veh/h		579			569			506			1253	
Approach Delay, s/veh		155.8			110.0			16.6			111.2	
Approach LOS		F			F			B			F	
Timer												
Assigned Phs	1	6		5	2		7	4		3	8	
Phs Duration (G+Y+Rc), s	5.0	34.0		9.0	38.0		5.6	69.0		6.3	69.7	
Change Period (Y+Rc), s	3.0	5.0		3.0	5.0		3.0	6.5		3.0	6.5	
Max Green Setting (Gmax), s	5.0	29.0		6.0	30.0		5.0	62.5		5.0	62.5	
Max Q Clear Time (g_c+I1), s	3.0	31.0		8.0	25.4		3.0	10.4		3.6	65.2	
Green Ext Time (p_c), s	0.0	0.0		0.0	1.8		0.0	9.1		0.0	0.0	
Intersection Summary												
HCM 2010 Ctrl Delay			103.4									
HCM 2010 LOS			F									
Notes												

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	120	0	20	80	220	70	0	1400	250	250	1350	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	9	12	9	11	11	11	12	10	12	12	10	12
Total Lost time (s)	3.9		3.9	3.0	3.0			3.6	4.6	4.6	3.6	
Lane Util. Factor	1.00		1.00	1.00	1.00			0.91	0.91	0.97	0.95	
Frt	1.00		0.85	1.00	0.96			1.00	0.85	1.00	1.00	
Flt Protected	0.95		1.00	0.95	1.00			1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1593		1425	1711	1735			3156	1441	3433	3292	
Flt Permitted	0.57		1.00	0.95	1.00			1.00	1.00	0.95	1.00	
Satd. Flow (perm)	962		1425	1711	1735			3156	1441	3433	3292	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	126	0	21	84	232	74	0	1474	263	263	1421	32
RTOR Reduction (vph)	0	0	17	0	9	0	0	1	91	0	1	0
Lane Group Flow (vph)	126	0	4	84	297	0	0	1499	146	263	1452	0
Turn Type	custom		custom	Perm	NA			NA	Perm	Prot	NA	
Protected Phases			8		4			6		5	2	
Permitted Phases	8			4					6			
Actuated Green, G (s)	21.8		21.8	26.3	26.3			52.4	52.4	11.4	68.4	
Effective Green, g (s)	22.8		22.8	27.3	27.3			53.4	52.4	11.4	69.4	
Actuated g/C Ratio	0.18		0.18	0.21	0.21			0.41	0.40	0.09	0.53	
Clearance Time (s)	4.9		4.9	4.0	4.0			4.6	4.6	4.6	4.6	
Vehicle Extension (s)	2.5		2.5	3.0	3.0			2.5	2.5	3.0	2.5	
Lane Grp Cap (vph)	168		249	359	364			1296	580	301	1757	
v/s Ratio Prot			0.00		c0.17			c0.47		0.08	c0.44	
v/s Ratio Perm	c0.13			0.05					0.10			
v/c Ratio	0.75		0.01	0.23	0.81			1.16	0.25	0.87	0.83	
Uniform Delay, d1	50.9		44.3	42.7	48.9			38.3	25.8	58.6	25.3	
Progression Factor	1.00		1.00	1.00	1.00			0.35	0.04	1.00	1.00	
Incremental Delay, d2	26.1		0.1	0.3	13.1			76.9	0.7	23.3	4.6	
Delay (s)	77.0		44.4	43.0	62.0			90.2	1.7	81.8	29.9	
Level of Service	E		D	D	E			F	A	F	C	
Approach Delay (s)		72.3			57.9			78.1			37.8	
Approach LOS		E			E			E			D	

Intersection Summary			
HCM 2000 Control Delay	58.6	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.98		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	15.1
Intersection Capacity Utilization	84.8%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	70	580	50	50	220	110	200	1450	60	70	1380	150
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	11	12	12	11	12	11	10	12	10	10	12
Total Lost time (s)	6.7	5.7	6.7		5.7	6.7	3.5	5.0		3.5	5.0	5.0
Lane Util. Factor	0.97	1.00	1.00		1.00	1.00	1.00	0.91		1.00	0.91	0.91
Frt	1.00	1.00	0.85		1.00	0.85	1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00		0.99	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3433	1801	1583		1784	1583	1711	4718		1652	3164	1441
Flt Permitted	0.25	1.00	1.00		0.59	1.00	0.07	1.00		0.08	1.00	1.00
Satd. Flow (perm)	903	1801	1583		1070	1583	130	4718		132	3164	1441
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	74	611	53	53	232	116	211	1526	63	74	1453	158
RTOR Reduction (vph)	0	0	46	0	0	89	0	3	0	0	0	65
Lane Group Flow (vph)	74	611	7	0	285	27	211	1586	0	74	1453	93
Turn Type	custom	NA	custom	Perm	NA	Perm	pm+pt	NA		pm+pt	NA	Perm
Protected Phases		6			2		7	4		3	8	
Permitted Phases	1		1	2		2	4			8		8
Actuated Green, G (s)	16.0	53.0	16.0		30.3	30.3	63.7	55.7		58.9	53.3	53.3
Effective Green, g (s)	16.0	54.0	16.0		31.3	30.3	62.7	56.7		57.9	54.3	54.3
Actuated g/C Ratio	0.12	0.42	0.12		0.24	0.23	0.48	0.44		0.45	0.42	0.42
Clearance Time (s)	6.7	6.7	6.7		6.7	6.7	3.0	6.0		3.0	6.0	6.0
Vehicle Extension (s)	2.5	2.5	2.5		2.5	2.5	2.0	2.5		3.0	2.5	2.5
Lane Grp Cap (vph)	111	748	194		257	368	153	2057		118	1321	601
v/s Ratio Prot		c0.34					c0.08	0.34		0.02	0.46	
v/s Ratio Perm	0.08		0.00		c0.27	0.02	c0.58			0.25		0.06
v/c Ratio	0.67	0.82	0.03		1.11	0.07	1.38	0.77		0.63	1.10	0.15
Uniform Delay, d1	54.5	33.6	50.2		49.4	38.9	34.8	31.1		24.9	37.9	23.6
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.58	0.50	0.11
Incremental Delay, d2	27.4	9.6	0.3		88.5	0.4	206.0	2.9		7.0	53.7	0.4
Delay (s)	81.9	43.2	50.5		137.9	39.3	240.8	34.0		46.3	72.8	3.0
Level of Service	F	D	D		F	D	F	C		D	E	A
Approach Delay (s)		47.6			109.3			58.2			65.1	
Approach LOS		D			F			E			E	

Intersection Summary			
HCM 2000 Control Delay	63.5	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.26		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	20.9
Intersection Capacity Utilization	112.7%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	10	680	10	280	250	0	50	10	10	10	10	100
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	186.3	186.3	190.0	186.3	186.3	190.0	190.0	186.3	190.0	190.0	186.3	190.0
Lanes	1	1	0	1	1	0	0	1	0	0	1	0
Cap, veh/h	869	1304	20	550	1401	0	124	26	16	45	22	144
Arrive On Green	0.01	0.71	0.70	0.10	1.00	0.00	0.10	0.10	0.10	0.10	0.10	0.10
Sat Flow, veh/h	1774	1830	28	1774	1863	0	626	247	150	78	212	1385
Grp Volume(v), veh/h	11	0	727	295	263	0	75	0	0	127	0	0
Grp Sat Flow(s),veh/h/ln	1774	0	1858	1774	1863	0	1023	0	0	1675	0	0
Q Serve(g_s), s	0.2	0.0	19.5	3.9	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.2	0.0	19.5	3.9	0.0	0.0	8.4	0.0	0.0	7.7	0.0	0.0
Prop In Lane	1.00		0.02	1.00		0.00	0.71		0.15	0.09		0.83
Lane Grp Cap(c), veh/h	869	0	1324	550	1401	0	165	0	0	212	0	0
V/C Ratio(X)	0.01	0.00	0.55	0.54	0.19	0.00	0.45	0.00	0.00	0.60	0.00	0.00
Avail Cap(c_a), veh/h	934	0	1324	596	1401	0	322	0	0	393	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.58	0.58	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	4.3	0.0	7.2	7.1	0.0	0.0	45.8	0.0	0.0	45.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	1.6	0.5	0.2	0.0	1.9	0.0	0.0	2.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.1	0.0	8.5	2.6	0.1	0.0	2.1	0.0	0.0	3.5	0.0	0.0
Lane Grp Delay (d), s/veh	4.4	0.0	8.8	7.5	0.2	0.0	47.7	0.0	0.0	48.5	0.0	0.0
Lane Grp LOS	A		A	A	A		D			D		
Approach Vol, veh/h		738			558			75			127	
Approach Delay, s/veh		8.7			4.1			47.7			48.5	
Approach LOS		A			A			D			D	

Timer												
Assigned Phs	1	6		5	2			4			8	
Phs Duration (G+Y+Rc), s	4.1	79.0		9.3	84.2			17.0			17.0	
Change Period (Y+Rc), s	3.0	5.0		3.0	5.0			6.0			6.0	
Max Green Setting (Gmax), s	5.0	74.0		9.0	78.0			23.0			23.0	
Max Q Clear Time (g_c+I1), s	2.2	21.5		5.9	2.0			10.4			9.7	
Green Ext Time (p_c), s	0.0	5.2		0.4	5.2			0.6			0.6	

Intersection Summary	
HCM 2010 Ctrl Delay	12.3
HCM 2010 LOS	B

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	30	650	20	10	520	60	30	720	40	20	1200	30
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	186.3	186.3	190.0	186.3	186.3	190.0	186.3	186.3	190.0	186.3	186.3	190.0
Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Cap, veh/h	200	766	24	135	679	78	173	1427	79	252	1457	37
Arrive On Green	0.02	0.43	0.43	0.01	0.41	0.41	0.02	0.41	0.40	0.03	0.81	0.79
Sat Flow, veh/h	1774	1798	55	1774	1640	189	1774	3498	194	1774	3618	92
Grp Volume(v), veh/h	32	0	705	11	0	610	32	404	396	21	650	645
Grp Sat Flow(s),veh/h/ln	1774	0	1853	1774	0	1829	1774	1863	1829	1774	1863	1847
Q Serve(g_s), s	1.2	0.0	40.7	0.4	0.0	33.8	1.2	18.9	18.9	0.8	25.9	26.0
Cycle Q Clear(g_c), s	1.2	0.0	40.7	0.4	0.0	33.8	1.2	18.9	18.9	0.8	25.9	26.0
Prop In Lane	1.00		0.03	1.00		0.10	1.00		0.11	1.00		0.05
Lane Grp Cap(c), veh/h	200	0	789	135	0	758	173	760	746	252	750	744
V/C Ratio(X)	0.16	0.00	0.89	0.08	0.00	0.81	0.18	0.53	0.53	0.08	0.87	0.87
Avail Cap(c_a), veh/h	237	0	789	194	0	758	211	760	746	299	750	744
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	0.80	0.00	0.80	0.93	0.00	0.93	1.00	1.00	1.00	0.49	0.49	0.49
Uniform Delay (d), s/veh	23.4	0.0	30.7	26.0	0.0	29.7	23.0	25.8	25.9	21.4	9.2	9.3
Incr Delay (d2), s/veh	0.3	0.0	12.1	0.2	0.0	8.3	0.5	2.6	2.7	0.1	6.9	7.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.5	0.0	21.5	0.2	0.0	17.2	0.6	9.4	9.3	0.4	6.2	6.2
Lane Grp Delay (d), s/veh	23.7	0.0	42.8	26.3	0.0	38.1	23.5	28.5	28.6	21.4	16.1	16.2
Lane Grp LOS	C		D	C		D	C	C	C	C	B	B
Approach Vol, veh/h		737			621			832			1316	
Approach Delay, s/veh		42.0			37.8			28.3			16.2	
Approach LOS		D			D			C			B	
Timer												
Assigned Phs	1	6		5	2		7	4		3	8	
Phs Duration (G+Y+Rc), s	5.6	54.2		4.2	52.8		5.6	52.1		5.0	51.5	
Change Period (Y+Rc), s	3.0	5.0		3.0	5.0		3.0	6.0		3.0	6.0	
Max Green Setting (Gmax), s	5.0	47.8		5.0	47.8		5.0	45.2		5.0	45.5	
Max Q Clear Time (g_c+I1), s	3.2	42.7		2.4	35.8		3.2	20.9		2.8	28.0	
Green Ext Time (p_c), s	0.0	2.8		0.0	5.1		0.0	8.6		0.0	7.6	
Intersection Summary												
HCM 2010 Ctrl Delay			28.3									
HCM 2010 LOS			C									
Notes												

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	30	680	590	0	20	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	12	11	12	12	11	12
Total Lost time (s)	2.0	4.0	5.0		4.3	
Lane Util. Factor	1.00	1.00	1.00		1.00	
Frt	1.00	1.00	1.00		0.93	
Flt Protected	0.95	1.00	1.00		0.98	
Satd. Flow (prot)	1770	1801	1900		1654	
Flt Permitted	0.39	1.00	1.00		0.98	
Satd. Flow (perm)	734	1801	1900		1654	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	32	716	621	0	21	21
RTOR Reduction (vph)	0	0	0	0	20	0
Lane Group Flow (vph)	32	716	621	0	22	0
Heavy Vehicles (%)	2%	2%	0%	0%	2%	0%
Turn Type	pm+pt	NA	NA		NA	
Protected Phases	1	6	2		8	
Permitted Phases	6					
Actuated Green, G (s)	104.9	104.9	98.4		5.8	
Effective Green, g (s)	105.9	105.9	98.4		5.8	
Actuated g/C Ratio	0.88	0.88	0.82		0.05	
Clearance Time (s)	3.0	5.0	5.0		4.3	
Vehicle Extension (s)	3.0	3.0	3.0		2.5	
Lane Grp Cap (vph)	686	1589	1558		79	
v/s Ratio Prot	0.00	c0.40	0.33		c0.01	
v/s Ratio Perm	0.04					
v/c Ratio	0.05	0.45	0.40		0.28	
Uniform Delay, d1	1.1	1.4	2.9		55.1	
Progression Factor	1.79	2.13	0.36		1.00	
Incremental Delay, d2	0.0	0.5	0.7		1.4	
Delay (s)	2.1	3.4	1.7		56.5	
Level of Service	A	A	A		E	
Approach Delay (s)		3.4	1.7		56.5	
Approach LOS		A	A		E	

Intersection Summary			
HCM 2000 Control Delay	4.2	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	11.3
Intersection Capacity Utilization	46.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	50	660	30	50	560	30	30	80	20	30	90	20
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	186.3	186.3	190.0	190.0	190.0	190.0	190.0	194.6	190.0	190.0	194.3	190.0
Lanes	1	1	0	1	1	0	0	1	0	0	1	0
Cap, veh/h	545	1210	56	611	1208	66	96	242	55	91	253	51
Arrive On Green	0.07	1.00	1.00	0.03	0.68	0.68	0.19	0.20	0.19	0.07	0.07	0.06
Sat Flow, veh/h	1774	1767	81	1810	1786	97	293	1210	272	267	1263	253
Grp Volume(v), veh/h	53	0	727	53	0	621	137	0	0	148	0	0
Grp Sat Flow(s),veh/h/ln	1774	0	1848	1810	0	1883	1776	0	0	1784	0	0
Q Serve(g_s), s	1.0	0.0	0.0	1.1	0.0	18.8	0.0	0.0	0.0	1.5	0.0	0.0
Cycle Q Clear(g_c), s	1.0	0.0	0.0	1.1	0.0	18.8	7.5	0.0	0.0	9.0	0.0	0.0
Prop In Lane	1.00		0.04	1.00		0.05	0.23		0.15	0.22		0.14
Lane Grp Cap(c), veh/h	545	0	1266	611	0	1273	378	0	0	394	0	0
V/C Ratio(X)	0.10	0.00	0.57	0.09	0.00	0.49	0.36	0.00	0.00	0.38	0.00	0.00
Avail Cap(c_a), veh/h	571	0	1266	637	0	1273	378	0	0	394	0	0
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	0.90	0.00	0.90	1.00	0.00	1.00	1.00	0.00	0.00	0.81	0.00	0.00
Uniform Delay (d), s/veh	6.1	0.0	0.0	5.3	0.0	9.3	41.0	0.0	0.0	48.3	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	1.7	0.1	0.0	1.3	2.7	0.0	0.0	2.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.4	0.0	0.6	0.4	0.0	8.6	3.9	0.0	0.0	4.8	0.0	0.0
Lane Grp Delay (d), s/veh	6.2	0.0	1.7	5.4	0.0	10.6	43.6	0.0	0.0	50.5	0.0	0.0
Lane Grp LOS	A		A	A		B	D			D		
Approach Vol, veh/h		780			674			137			148	
Approach Delay, s/veh		2.0			10.2			43.6			50.5	
Approach LOS		A			B			D			D	

Timer												
Assigned Phs	1	6		5	2			4			8	
Phs Duration (G+Y+Rc), s	6.3	85.0		6.3	85.0			27.0			27.0	
Change Period (Y+Rc), s	3.0	5.0		3.0	5.0			4.3			4.3	
Max Green Setting (Gmax), s	5.0	80.0		5.0	80.0			22.7			22.7	
Max Q Clear Time (g_c+I1), s	3.0	2.0		3.1	20.8			9.5			11.0	
Green Ext Time (p_c), s	0.0	8.0		0.0	8.0			0.7			0.7	

Intersection Summary		
HCM 2010 Ctrl Delay		12.6
HCM 2010 LOS		B

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	30	650	30	70	550	40	40	650	40	60	820	60
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	186.3	186.3	190.0	190.0	190.0	190.0	186.3	186.3	190.0	186.3	186.3	190.0
Lanes	1	1	0	1	1	0	1	2	0	1	2	1
Cap, veh/h	356	910	43	279	904	66	178	979	60	204	1088	456
Arrive On Green	0.03	0.52	0.51	0.03	0.52	0.52	0.03	0.28	0.27	0.07	0.58	0.56
Sat Flow, veh/h	1774	1766	83	1810	1751	127	1774	3475	213	1774	3725	1615
Grp Volume(v), veh/h	32	0	716	74	0	621	42	366	360	63	863	63
Grp Sat Flow(s),veh/h/ln	1774	0	1848	1810	0	1878	1774	1863	1825	1774	1863	1615
Q Serve(g_s), s	0.9	0.0	32.1	2.0	0.0	25.0	1.8	18.4	18.5	2.6	18.8	1.9
Cycle Q Clear(g_c), s	0.9	0.0	32.1	2.0	0.0	25.0	1.8	18.4	18.5	2.6	18.8	1.9
Prop In Lane	1.00		0.04	1.00		0.07	1.00		0.12	1.00		1.00
Lane Grp Cap(c), veh/h	356	0	953	279	0	970	178	525	514	204	1088	456
V/C Ratio(X)	0.09	0.00	0.75	0.27	0.00	0.64	0.24	0.70	0.70	0.31	0.79	0.14
Avail Cap(c_a), veh/h	400	0	953	304	0	970	215	733	718	240	1501	635
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.50	0.50	0.50
Uniform Delay (d), s/veh	13.7	0.0	20.1	16.9	0.0	18.3	28.0	33.6	33.7	26.0	19.3	16.8
Incr Delay (d2), s/veh	0.1	0.0	5.5	0.5	0.0	3.2	0.7	1.7	1.7	0.4	1.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.4	0.0	15.6	0.9	0.0	12.1	0.8	8.9	8.7	1.1	6.6	0.7
Lane Grp Delay (d), s/veh	13.8	0.0	25.6	17.4	0.0	21.5	28.6	35.3	35.5	26.5	20.4	16.8
Lane Grp LOS	B		C	B		C	C	D	D	C	C	B
Approach Vol, veh/h		748			695			768			989	
Approach Delay, s/veh		25.0			21.1			35.0			20.5	
Approach LOS		C			C			D			C	

Timer												
Assigned Phs	1	6		5	2		7	4		3	8	
Phs Duration (G+Y+Rc), s	5.4	58.0		6.6	59.1		5.8	33.3		6.9	34.4	
Change Period (Y+Rc), s	3.0	5.0		3.0	5.0		3.0	4.8		3.0	4.8	
Max Green Setting (Gmax), s	5.0	53.0		5.0	53.0		5.0	40.2		6.0	41.2	
Max Q Clear Time (g_c+I1), s	2.9	34.1		4.0	27.0		3.8	20.5		4.6	20.8	
Green Ext Time (p_c), s	0.0	6.4		0.0	7.1		0.0	8.1		0.0	8.2	

Intersection Summary	
HCM 2010 Ctrl Delay	25.2
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	50	650	20	60	570	40	70	540	30	50	570	40
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	186.3	186.3	190.0	190.0	190.0	190.0	190.0	186.3	190.0	190.0	186.5	190.0
Lanes	1	1	0	1	1	0	0	2	0	0	2	0
Cap, veh/h	522	910	28	261	877	61	126	902	50	87	902	62
Arrive On Green	0.04	0.51	0.50	0.06	1.00	1.00	0.37	0.37	0.37	0.73	0.75	0.73
Sat Flow, veh/h	1774	1798	55	1810	1755	123	235	2413	134	135	2413	166
Grp Volume(v), veh/h	53	0	705	63	0	642	276	0	398	272	0	423
Grp Sat Flow(s),veh/h/ln	1774	0	1853	1810	0	1878	1111	0	1671	1046	0	1668
Q Serve(g_s), s	1.7	0.0	35.9	2.0	0.0	0.1	13.6	0.0	23.2	8.9	0.0	15.4
Cycle Q Clear(g_c), s	1.7	0.0	35.9	2.0	0.0	0.1	29.1	0.0	23.2	32.1	0.0	15.4
Prop In Lane	1.00		0.03	1.00		0.07	0.27		0.08	0.19		0.10
Lane Grp Cap(c), veh/h	522	0	938	261	0	939	444	0	625	418	0	623
V/C Ratio(X)	0.10	0.00	0.75	0.24	0.00	0.68	0.62	0.00	0.64	0.65	0.00	0.68
Avail Cap(c_a), veh/h	548	0	938	284	0	939	444	0	625	418	0	623
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	0.81	0.00	0.81	1.00	0.00	1.00	0.56	0.00	0.56
Uniform Delay (d), s/veh	12.8	0.0	23.3	19.0	0.0	0.0	33.2	0.0	30.5	13.4	0.0	11.4
Incr Delay (d2), s/veh	0.1	0.0	5.5	0.4	0.0	3.3	6.4	0.0	4.9	2.0	0.0	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.7	0.0	17.7	0.9	0.0	0.9	8.2	0.0	10.7	2.5	0.0	4.1
Lane Grp Delay (d), s/veh	12.9	0.0	28.9	19.4	0.0	3.3	39.6	0.0	35.4	15.4	0.0	13.1
Lane Grp LOS	B		C	B		A	D		D	B		B
Approach Vol, veh/h		758			705			674			695	
Approach Delay, s/veh		27.8			4.7			37.1			14.0	
Approach LOS		C			A			D			B	

Timer												
Assigned Phs	1	6		5	2			4			8	
Phs Duration (G+Y+Rc), s	6.3	64.0		6.5	64.2			48.0			48.0	
Change Period (Y+Rc), s	3.0	5.0		3.0	5.0			4.7			4.7	
Max Green Setting (Gmax), s	5.0	59.0		5.0	59.0			43.3			43.3	
Max Q Clear Time (g_c+I1), s	3.7	37.9		4.0	2.1			31.1			34.1	
Green Ext Time (p_c), s	0.0	6.8		0.0	8.0			4.9			4.1	

Intersection Summary	
HCM 2010 Ctrl Delay	20.9
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	680	50	40	670	0	0	0	20	40	70	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	10	12	12	12	12	12	11	12	12	11	12
Total Lost time (s)		5.0			5.0				4.3		4.3	
Lane Util. Factor		1.00			1.00				1.00		1.00	
Frt		0.99			1.00				0.86		1.00	
Flt Protected		1.00			1.00				1.00		0.98	
Satd. Flow (prot)		1722			1858				1611		1769	
Flt Permitted		1.00			0.93				1.00		0.98	
Satd. Flow (perm)		1722			1730				1611		1769	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	716	53	42	705	0	0	0	21	42	74	0
RTOR Reduction (vph)	0	2	0	0	0	0	0	0	18	0	0	0
Lane Group Flow (vph)	0	767	0	0	747	0	0	0	3	0	116	0
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	0%	2%	2%	2%	2%	0%
Turn Type		NA		pm+pt	NA				custom	Perm	NA	
Protected Phases		6		5	2						8	
Permitted Phases				2					4	8		
Actuated Green, G (s)		93.0			93.0				17.7		17.7	
Effective Green, g (s)		93.0			93.0				17.7		17.7	
Actuated g/C Ratio		0.78			0.78				0.15		0.15	
Clearance Time (s)		5.0			5.0				4.3		4.3	
Vehicle Extension (s)		3.0			3.0				3.0		3.0	
Lane Grp Cap (vph)		1334			1340				237		260	
v/s Ratio Prot		c0.45										
v/s Ratio Perm					0.43				0.00		0.07	
v/c Ratio		0.58			0.56				0.01		0.45	
Uniform Delay, d1		5.5			5.3				43.7		46.7	
Progression Factor		0.19			1.34				1.00		1.00	
Incremental Delay, d2		1.1			0.4				0.1		1.2	
Delay (s)		2.1			7.6				43.8		47.9	
Level of Service		A			A				D		D	
Approach Delay (s)		2.1			7.6			43.8			47.9	
Approach LOS		A			A			D			D	

Intersection Summary			
HCM 2000 Control Delay	8.3	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.3
Intersection Capacity Utilization	81.6%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	40	630	10	30	590	30	30	200	10	30	150	20
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	186.3	186.3	190.0	186.3	186.3	190.0	190.0	186.3	190.0	190.0	186.3	190.0
Lanes	1	1	0	1	1	0	0	1	0	0	1	0
Cap, veh/h	573	1106	18	389	1057	54	71	397	20	78	355	44
Arrive On Green	0.03	0.61	0.61	0.04	1.00	1.00	0.26	0.26	0.26	0.50	0.51	0.51
Sat Flow, veh/h	1774	1827	30	1774	1756	91	142	1551	77	166	1387	172
Grp Volume(v), veh/h	42	0	674	32	0	653	254	0	0	211	0	0
Grp Sat Flow(s),veh/h/ln	1774	0	1857	1774	0	1847	1771	0	0	1725	0	0
Q Serve(g_s), s	1.1	0.0	26.5	0.8	0.0	0.0	3.8	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.1	0.0	26.5	0.8	0.0	0.0	14.3	0.0	0.0	8.7	0.0	0.0
Prop In Lane	1.00		0.02	1.00		0.05	0.13		0.04	0.15		0.10
Lane Grp Cap(c), veh/h	573	0	1124	389	0	1111	488	0	0	469	0	0
V/C Ratio(X)	0.07	0.00	0.60	0.08	0.00	0.59	0.52	0.00	0.00	0.45	0.00	0.00
Avail Cap(c_a), veh/h	603	0	1124	426	0	1111	488	0	0	469	0	0
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	0.81	0.00	0.81	0.50	0.00	0.50	1.00	0.00	0.00	0.56	0.00	0.00
Uniform Delay (d), s/veh	8.3	0.0	14.4	11.3	0.0	0.0	37.9	0.0	0.0	23.6	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	1.9	0.0	0.0	1.1	3.9	0.0	0.0	1.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.4	0.0	12.2	0.3	0.0	0.4	7.2	0.0	0.0	3.6	0.0	0.0
Lane Grp Delay (d), s/veh	8.3	0.0	16.4	11.3	0.0	1.1	41.8	0.0	0.0	25.3	0.0	0.0
Lane Grp LOS	A		B	B		A	D			C		
Approach Vol, veh/h		716			685			254			211	
Approach Delay, s/veh		15.9			1.6			41.8			25.3	
Approach LOS		B			A			D			C	

Timer												
Assigned Phs	1	6		5	2			4			8	
Phs Duration (G+Y+Rc), s	6.0	76.4		5.6	76.0			36.0			36.0	
Change Period (Y+Rc), s	3.0	5.0		3.0	5.0			5.8			5.8	
Max Green Setting (Gmax), s	5.0	71.0		5.0	71.0			30.2			30.2	
Max Q Clear Time (g_c+I1), s	3.1	28.5		2.8	2.0			16.3			10.7	
Green Ext Time (p_c), s	0.0	7.6		0.0	7.8			1.2			1.3	

Intersection Summary												
HCM 2010 Ctrl Delay			15.2									
HCM 2010 LOS			B									

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	40	600	20	0	680	30	30	530	30	0	0	0
Number	1	6	16	5	2	12	7	4	14			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow veh/h/ln	186.3	186.3	190.0	0.0	186.3	190.0	190.0	186.3	190.0			
Lanes	1	1	0	0	1	0	0	1	0			
Cap, veh/h	503	1123	37	0	1035	46	30	518	30			
Arrive On Green	0.02	0.63	0.53	0.00	1.00	1.00	0.31	0.31	0.31			
Sat Flow, veh/h	1774	1793	60	0	1770	79	95	1652	95			
Grp Volume(v), veh/h	42	0	653	0	0	748	622	0	0			
Grp Sat Flow(s),veh/h/ln	1774	0	1852	0	0	1849	1841	0	0			
Q Serve(g_s), s	1.4	0.0	30.5	0.0	0.0	0.0	47.0	0.0	0.0			
Cycle Q Clear(g_c), s	1.4	0.0	30.5	0.0	0.0	0.0	47.0	0.0	0.0			
Prop In Lane	1.00		0.03	0.00		0.04	0.05		0.05			
Lane Grp Cap(c), veh/h	503	0	1161	0	0	1081	577	0	0			
V/C Ratio(X)	0.08	0.00	0.56	0.00	0.00	0.69	1.08	0.00	0.00			
Avail Cap(c_a), veh/h	523	0	1161	0	0	1081	577	0	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00			
Upstream Filter(I)	0.74	0.00	0.74	0.00	0.00	0.90	1.00	0.00	0.00			
Uniform Delay (d), s/veh	11.1	0.0	16.1	0.0	0.0	0.0	51.5	0.0	0.0			
Incr Delay (d2), s/veh	0.1	0.0	1.5	0.0	0.0	3.3	60.3	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile Back of Q (50%), veh/ln	0.6	0.0	14.1	0.0	0.0	1.0	31.9	0.0	0.0			
Lane Grp Delay (d), s/veh	11.2	0.0	17.6	0.0	0.0	3.3	111.8	0.0	0.0			
Lane Grp LOS	B		B			A	F					
Approach Vol, veh/h		695			748			622				
Approach Delay, s/veh		17.2			3.3			111.8				
Approach LOS		B			A			F				

Timer												
Assigned Phs	1	6			2			4				
Phs Duration (G+Y+Rc), s	6.3	99.0			92.7			51.0				
Change Period (Y+Rc), s	3.0	5.0			5.0			4.0				
Max Green Setting (Gmax), s	5.0	94.0			86.0			47.0				
Max Q Clear Time (g_c+I1), s	3.4	32.5			2.0			49.0				
Green Ext Time (p_c), s	0.0	15.2			15.6			0.0				

Intersection Summary												
HCM 2010 Ctrl Delay			40.7									
HCM 2010 LOS			D									

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	530	50	150	480	0	0	0	0	460	400	200
Number	1	6	16	5	2	12				3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow veh/h/ln	0.0	167.6	167.6	167.6	167.6	0.0				167.6	167.6	171.0
Lanes	0	1	1	1	1	0				2	2	0
Cap, veh/h	0	1029	874	441	1152	0				727	497	246
Arrive On Green	0.00	0.61	0.61	0.10	1.00	0.00				0.08	0.08	0.08
Sat Flow, veh/h	0	1676	1425	1597	1676	0				3097	2118	1050
Grp Volume(v), veh/h	0	558	53	158	505	0				484	332	300
Grp Sat Flow(s),veh/h/ln	0	1676	1425	1597	1676	0				1549	1676	1491
Q Serve(g_s), s	0.0	27.2	2.1	5.3	0.0	0.0				21.4	27.6	28.0
Cycle Q Clear(g_c), s	0.0	27.2	2.1	5.3	0.0	0.0				21.4	27.6	28.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		0.70
Lane Grp Cap(c), veh/h	0	1029	874	441	1152	0				727	393	350
V/C Ratio(X)	0.00	0.54	0.06	0.36	0.44	0.00				0.67	0.84	0.86
Avail Cap(c_a), veh/h	0	1029	874	493	1152	0				922	499	444
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	1.00				0.33	0.33	0.33
Upstream Filter(I)	0.00	0.74	0.74	1.00	1.00	0.00				0.09	0.09	0.09
Uniform Delay (d), s/veh	0.0	15.8	10.9	11.2	0.0	0.0				59.7	62.6	62.7
Incr Delay (d2), s/veh	0.0	1.5	0.1	0.5	1.2	0.0				0.1	0.9	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.0	11.4	0.7	1.8	0.4	0.0				9.1	12.7	11.5
Lane Grp Delay (d), s/veh	0.0	17.3	11.0	11.7	1.2	0.0				59.8	63.4	63.8
Lane Grp LOS		B	B	B	A					E	E	E
Approach Vol, veh/h		611			663						1116	
Approach Delay, s/veh		16.8			3.7						61.9	
Approach LOS		B			A						E	

Timer				
Assigned Phs	6	5	2	8
Phs Duration (G+Y+Rc), s	91.6	10.4	102.0	39.1
Change Period (Y+Rc), s	5.0	3.0	5.0	6.0
Max Green Setting (Gmax), s	82.0	12.0	97.0	42.0
Max Q Clear Time (g_c+I1), s	29.2	7.3	2.0	30.0
Green Ext Time (p_c), s	9.4	0.2	9.6	3.1

Intersection Summary	
HCM 2010 Ctrl Delay	34.2
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	70	920	0	0	1100	120	50	350	50	140	0	320
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	167.6	167.6	0.0	0.0	167.6	171.0	167.6	167.6	171.0	171.0	167.6	171.0
Lanes	1	1	0	0	1	0	1	1	0	0	1	0
Cap, veh/h	101	905	0	0	723	79	48	567	82	99	6	169
Arrive On Green	0.07	1.00	0.00	0.00	0.65	0.65	0.40	0.40	0.40	0.40	0.00	0.40
Sat Flow, veh/h	1597	1676	0	0	1486	162	935	1434	206	171	16	427
Grp Volume(v), veh/h	74	968	0	0	0	1284	53	0	421	484	0	0
Grp Sat Flow(s),veh/h/ln	1597	1676	0	0	0	1648	935	0	1640	613	0	0
Q Serve(g_s), s	3.5	81.0	0.0	0.0	0.0	73.0	0.0	0.0	31.3	28.0	0.0	0.0
Cycle Q Clear(g_c), s	3.5	81.0	0.0	0.0	0.0	73.0	59.3	0.0	31.3	59.3	0.0	0.0
Prop In Lane	1.00		0.00	0.00		0.10	1.00		0.13	0.30		0.70
Lane Grp Cap(c), veh/h	101	905	0	0	0	802	48	0	648	274	0	0
V/C Ratio(X)	0.73	1.07	0.00	0.00	0.00	1.60	1.10	0.00	0.65	1.77	0.00	0.00
Avail Cap(c_a), veh/h	101	905	0	0	0	802	48	0	648	274	0	0
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	0.00	0.09	1.00	0.00	1.00	0.65	0.00	0.00
Uniform Delay (d), s/veh	34.7	0.0	0.0	0.0	0.0	26.5	75.0	0.0	36.9	59.3	0.0	0.0
Incr Delay (d2), s/veh	23.4	50.2	0.0	0.0	0.0	271.0	161.9	0.0	5.0	355.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	2.0	12.6	0.0	0.0	0.0	87.9	4.1	0.0	14.1	37.8	0.0	0.0
Lane Grp Delay (d), s/veh	58.1	50.2	0.0	0.0	0.0	297.4	236.9	0.0	41.9	414.7	0.0	0.0
Lane Grp LOS	E	F				F	F		D	F		
Approach Vol, veh/h		1042			1284			474			484	
Approach Delay, s/veh		50.8			297.4			63.7			414.7	
Approach LOS		D			F			E			F	

Timer												
Assigned Phs	1	6			2			4			8	
Phs Duration (G+Y+Rc), s	8.0	86.0			78.0			64.0			64.0	
Change Period (Y+Rc), s	3.0	5.0			5.0			4.7			4.7	
Max Green Setting (Gmax), s	5.0	81.0			73.0			59.3			59.3	
Max Q Clear Time (g_c+I1), s	5.5	83.0			75.0			61.3			61.3	
Green Ext Time (p_c), s	0.0	0.0			0.0			0.0			0.0	

Intersection Summary												
HCM 2010 Ctrl Delay			202.7									
HCM 2010 LOS			F									

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	100	830	100	40	940	40	100	700	20	50	380	90
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	166.0	166.0	171.0	166.0	166.0	171.0	166.0	166.0	171.0	166.0	166.0	171.0
Lanes	1	1	0	1	1	0	1	2	0	1	1	0
Cap, veh/h	101	841	101	90	896	38	111	807	23	119	326	77
Arrive On Green	0.03	0.58	0.58	0.03	0.75	0.75	0.03	0.25	0.25	0.07	0.50	0.50
Sat Flow, veh/h	1581	1455	175	1581	1581	67	1581	3213	92	1581	1298	308
Grp Volume(v), veh/h	105	0	979	42	0	1031	105	381	377	53	0	495
Grp Sat Flow(s),veh/h/ln	1581	0	1629	1581	0	1648	1581	1660	1644	1581	0	1606
Q Serve(g_s), s	5.0	0.0	86.7	1.7	0.0	85.0	5.0	33.4	33.4	3.7	0.0	37.7
Cycle Q Clear(g_c), s	5.0	0.0	86.7	1.7	0.0	85.0	5.0	33.4	33.4	3.7	0.0	37.7
Prop In Lane	1.00		0.11	1.00		0.04	1.00		0.06	1.00		0.19
Lane Grp Cap(c), veh/h	101	0	942	90	0	934	111	417	413	119	0	404
V/C Ratio(X)	1.04	0.00	1.04	0.47	0.00	1.10	0.94	0.91	0.91	0.45	0.00	1.23
Avail Cap(c_a), veh/h	101	0	942	108	0	934	111	417	413	119	0	404
HCM Platoon Ratio	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	0.09	0.00	0.09	0.13	0.00	0.13	1.00	1.00	1.00	0.95	0.00	0.95
Uniform Delay (d), s/veh	43.8	0.0	31.7	36.7	0.0	18.5	54.7	54.5	54.6	42.3	0.0	37.3
Incr Delay (d2), s/veh	38.7	0.0	21.6	0.5	0.0	49.2	67.1	26.8	27.0	2.5	0.0	121.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	5.1	0.0	41.0	0.9	0.0	41.7	2.1	17.6	17.5	1.5	0.0	27.2
Lane Grp Delay (d), s/veh	82.5	0.0	53.2	37.2	0.0	67.7	121.9	81.3	81.6	44.8	0.0	158.5
Lane Grp LOS	F		F	D		F	F	F	F	D		F
Approach Vol, veh/h		1084			1073			863			548	
Approach Delay, s/veh		56.0			66.5			86.4			147.5	
Approach LOS		E			E			F			F	

Timer												
Assigned Phs	1	6		5	2		7	4		3	8	
Phs Duration (G+Y+Rc), s	8.0	91.7		6.3	90.0		8.0	44.0		8.0	44.0	
Change Period (Y+Rc), s	3.0	5.0		3.0	5.0		3.0	6.3		3.0	6.3	
Max Green Setting (Gmax), s	5.0	85.0		5.0	85.0		5.0	37.7		5.0	37.7	
Max Q Clear Time (g_c+I1), s	7.0	88.7		3.7	87.0		7.0	35.4		5.7	39.7	
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0		0.0	0.9		0.0	0.0	

Intersection Summary	
HCM 2010 Ctrl Delay	80.6
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	800	100	140	910	0	0	0	0	110	1000	130
Number	1	6	16	5	2	12				3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow veh/h/ln	0.0	166.0	171.0	166.0	166.0	0.0				171.0	166.0	171.0
Lanes	0	1	0	1	1	0				0	2	0
Cap, veh/h	0	734	91	154	974	0				96	912	125
Arrive On Green	0.00	1.00	1.00	0.12	1.00	0.00				0.12	0.12	0.12
Sat Flow, veh/h	0	1448	181	1581	1660	0				276	2611	357
Grp Volume(v), veh/h	0	0	947	147	958	0				693	0	613
Grp Sat Flow(s),veh/h/ln	0	0	1628	1581	1660	0				1646	0	1597
Q Serve(g_s), s	0.0	0.0	72.9	8.2	0.0	0.0				52.4	0.0	52.4
Cycle Q Clear(g_c), s	0.0	0.0	72.9	8.2	0.0	0.0				52.4	0.0	52.4
Prop In Lane	0.00		0.11	1.00		0.00				0.17		0.22
Lane Grp Cap(c), veh/h	0	0	825	154	974	0				575	0	558
V/C Ratio(X)	0.00	0.00	1.15	0.96	0.98	0.00				1.20	0.00	1.10
Avail Cap(c_a), veh/h	0	0	825	154	974	0				575	0	558
HCM Platoon Ratio	1.00	2.00	2.00	2.00	2.00	1.00				0.33	0.33	0.33
Upstream Filter(I)	0.00	0.00	0.09	0.62	0.62	0.00				0.09	0.00	0.09
Uniform Delay (d), s/veh	0.0	0.0	0.0	38.6	0.0	0.0				66.4	0.0	66.4
Incr Delay (d2), s/veh	0.0	0.0	68.0	44.8	19.2	0.0				93.5	0.0	47.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.0	0.0	15.6	4.6	5.2	0.0				38.5	0.0	30.3
Lane Grp Delay (d), s/veh	0.0	0.0	68.0	83.4	19.2	0.0				159.8	0.0	114.1
Lane Grp LOS			F	F	B					F		F
Approach Vol, veh/h		947			1105						1306	
Approach Delay, s/veh		68.0			27.7						138.4	
Approach LOS		E			C						F	

Timer				
Assigned Phs		6	5	2	8
Phs Duration (G+Y+Rc), s		81.0	12.0	93.0	57.0
Change Period (Y+Rc), s		5.0	3.0	5.0	4.6
Max Green Setting (Gmax), s		76.0	9.0	88.0	52.4
Max Q Clear Time (g_c+I1), s		74.9	10.2	2.0	54.4
Green Ext Time (p_c), s		1.1	0.0	33.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	82.1
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	220	680	0	0	830	150	240	1040	20	0	0	0
Number	1	6	16	5	2	12	7	4	14			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow veh/h/ln	166.0	166.0	171.0	0.0	166.0	171.0	166.0	166.0	171.0			
Lanes	1	1	0	0	2	0	1	2	0			
Cap, veh/h	293	934	0	0	1216	220	587	1206	23			
Arrive On Green	0.20	1.00	0.00	0.00	0.44	0.44	0.37	0.37	0.37			
Sat Flow, veh/h	1581	1660	0	0	2738	495	1581	3247	62			
Grp Volume(v), veh/h	232	716	0	0	530	502	253	560	556			
Grp Sat Flow(s),veh/h/ln	1581	1660	0	0	1660	1573	1581	1660	1649			
Q Serve(g_s), s	12.0	0.0	0.0	0.0	38.0	38.0	17.4	46.6	46.6			
Cycle Q Clear(g_c), s	12.0	0.0	0.0	0.0	38.0	38.0	17.4	46.6	46.6			
Prop In Lane	1.00		0.00	0.00		0.31	1.00		0.04			
Lane Grp Cap(c), veh/h	293	934	0	0	737	698	587	617	613			
V/C Ratio(X)	0.79	0.77	0.00	0.00	0.72	0.72	0.43	0.91	0.91			
Avail Cap(c_a), veh/h	345	934	0	0	737	698	634	665	661			
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.09	0.09	0.00	0.00	0.09	0.09	1.00	1.00	1.00			
Uniform Delay (d), s/veh	23.7	0.0	0.0	0.0	33.1	33.1	34.3	43.4	43.4			
Incr Delay (d2), s/veh	1.0	0.6	0.0	0.0	0.6	0.6	0.5	15.7	15.8			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile Back of Q (50%), veh/ln	4.2	0.1	0.0	0.0	16.3	15.5	7.2	22.6	22.5			
Lane Grp Delay (d), s/veh	24.7	0.6	0.0	0.0	33.6	33.7	34.8	59.1	59.2			
Lane Grp LOS	C	A			C	C	C	E	E			
Approach Vol, veh/h		948			1032			1369				
Approach Delay, s/veh		6.5			33.7			54.6				
Approach LOS		A			C			D				

Timer												
Assigned Phs	1	6			2			4				
Phs Duration (G+Y+Rc), s	17.3	87.0			69.7			58.7				
Change Period (Y+Rc), s	3.0	5.0			5.0			4.6				
Max Green Setting (Gmax), s	19.0	82.0			60.0			58.4				
Max Q Clear Time (g_c+I1), s	14.0	2.0			40.0			48.6				
Green Ext Time (p_c), s	0.3	21.3			12.2			5.5				

Intersection Summary												
HCM 2010 Ctrl Delay			34.5									
HCM 2010 LOS			C									

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	60	630	60	320	460	200	400	1350	220	380	1340	130
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	166.0	166.0	171.0	166.0	166.0	166.0	166.0	166.0	166.0	166.0	166.0	166.0
Lanes	2	1	0	1	1	1	1	2	1	2	2	1
Cap, veh/h	86	450	43	155	617	524	177	1252	532	236	1135	483
Arrive On Green	0.03	0.30	0.30	0.10	0.37	0.37	0.11	0.38	0.38	0.15	0.68	0.68
Sat Flow, veh/h	3067	1493	142	1581	1660	1411	1581	3320	1411	3067	3320	1411
Grp Volume(v), veh/h	63	0	726	337	484	211	421	1421	232	400	1411	137
Grp Sat Flow(s),veh/h/ln	1534	0	1635	1581	1660	1411	1581	1660	1411	1534	1660	1411
Q Serve(g_s), s	2.9	0.0	43.0	14.0	36.9	15.8	16.0	53.8	17.5	11.0	48.8	5.4
Cycle Q Clear(g_c), s	2.9	0.0	43.0	14.0	36.9	15.8	16.0	53.8	17.5	11.0	48.8	5.4
Prop In Lane	1.00		0.09	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	86	0	493	155	617	524	177	1252	532	236	1135	483
V/C Ratio(X)	0.73	0.00	1.47	2.17	0.78	0.40	2.37	1.14	0.44	1.69	1.24	0.28
Avail Cap(c_a), veh/h	86	0	493	155	617	524	177	1252	532	236	1135	483
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	0.53	0.00	0.53	1.00	1.00	1.00	1.00	1.00	1.00	0.09	0.09	0.09
Uniform Delay (d), s/veh	68.8	0.0	49.9	64.3	39.8	33.1	63.3	44.4	33.1	60.3	22.5	15.7
Incr Delay (d2), s/veh	15.7	0.0	218.9	548.3	6.6	0.5	635.7	71.1	2.6	312.9	109.9	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	1.4	0.0	48.2	29.4	16.9	5.7	37.9	35.1	6.7	14.4	32.7	1.7
Lane Grp Delay (d), s/veh	84.5	0.0	268.8	612.7	46.4	33.6	699.1	115.6	35.7	373.3	132.5	15.8
Lane Grp LOS	F		F	F	D	C	F	F	D	F	F	B
Approach Vol, veh/h		789			1032			2074			1948	
Approach Delay, s/veh		254.1			228.7			225.1			173.7	
Approach LOS		F			F			F			F	

Timer												
Assigned Phs	3	8		7	4		1	6		5	2	
Phs Duration (G+Y+Rc), s	8.0	49.7		18.0	59.7		20.0	60.0		15.0	55.0	
Change Period (Y+Rc), s	4.0	6.7		4.0	6.7		4.0	6.2		4.0	6.2	
Max Green Setting (Gmax), s	4.0	43.0		14.0	50.3		16.0	53.8		11.0	48.8	
Max Q Clear Time (g_c+I1), s	4.9	45.0		16.0	38.9		18.0	55.8		13.0	50.8	
Green Ext Time (p_c), s	0.0	0.0		0.0	6.6		0.0	0.0		0.0	0.0	

Intersection Summary	
HCM 2010 Ctrl Delay	212.5
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	430	70	190	10	70	70	400	1850	350	280	1610	230
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.7	6.7		6.7	6.7	6.7	3.0	6.2		3.0	6.2	6.2
Lane Util. Factor	0.95	0.95		1.00	1.00	1.00	1.00	0.91		1.00	0.95	1.00
Frt	1.00	0.91		1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	0.99		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1498	1427		1577	1660	1411	1577	4424		1577	3154	1411
Flt Permitted	0.95	0.99		0.54	1.00	1.00	0.08	1.00		0.08	1.00	1.00
Satd. Flow (perm)	1498	1427		899	1660	1411	131	4424		139	3154	1411
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	453	74	200	11	74	74	421	1947	368	295	1695	242
RTOR Reduction (vph)	0	34	0	0	0	68	0	20	0	0	0	84
Lane Group Flow (vph)	376	317	0	11	74	6	421	2295	0	295	1695	158
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Split	NA		Perm	NA	Perm	pm+pt	NA		pm+pt	NA	Perm
Protected Phases	3	3			4		1	6		5	2	
Permitted Phases				4		4	6			2		2
Actuated Green, G (s)	30.6	30.6		11.5	11.5	11.5	78.3	61.8		61.3	47.8	47.8
Effective Green, g (s)	30.6	30.6		11.5	11.5	11.5	78.3	61.8		61.3	47.8	47.8
Actuated g/C Ratio	0.22	0.22		0.08	0.08	0.08	0.56	0.44		0.44	0.34	0.34
Clearance Time (s)	6.7	6.7		6.7	6.7	6.7	3.0	6.2		3.0	6.2	6.2
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	327	311		73	136	115	357	1952		199	1076	481
v/s Ratio Prot	c0.25	0.22			c0.04		c0.23	0.52		c0.14	c0.54	
v/s Ratio Perm				0.01		0.00	0.43			0.51		0.11
v/c Ratio	1.15	1.02		0.15	0.54	0.05	1.18	1.18		1.48	1.58	0.33
Uniform Delay, d1	54.7	54.7		59.7	61.7	59.2	46.0	39.1		42.4	46.1	34.2
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.82	0.47		1.00	1.00	1.00
Incremental Delay, d2	96.8	55.7		1.0	4.4	0.2	83.6	79.7		242.0	263.4	1.8
Delay (s)	151.5	110.4		60.7	66.1	59.4	167.2	98.1		284.4	309.5	36.0
Level of Service	F	F		E	E	E	F	F		F	F	D
Approach Delay (s)		131.7			62.6			108.7			276.5	
Approach LOS		F			E			F			F	

Intersection Summary			
HCM 2000 Control Delay	174.3	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.30		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	22.6
Intersection Capacity Utilization	116.5%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	130	740	0	0	580	100	160	890	30	0	0	0
Number	1	6	16	5	2	12	7	4	14			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow veh/h/ln	166.0	166.0	0.0	0.0	166.0	171.0	171.0	166.0	166.0			
Lanes	1	1	0	0	1	0	0	2	1			
Cap, veh/h	194	947	0	0	695	119	179	1055	528			
Arrive On Green	0.09	1.00	0.00	0.00	0.50	0.50	0.12	0.12	0.12			
Sat Flow, veh/h	1581	1660	0	0	1381	237	478	2818	1411			
Grp Volume(v), veh/h	137	779	0	0	0	716	575	530	32			
Grp Sat Flow(s),veh/h/ln	1581	1660	0	0	0	1618	1636	1660	1411			
Q Serve(g_s), s	6.5	0.0	0.0	0.0	0.0	58.7	51.9	46.6	3.0			
Cycle Q Clear(g_c), s	6.5	0.0	0.0	0.0	0.0	58.7	51.9	46.6	3.0			
Prop In Lane	1.00		0.00	0.00		0.15	0.29		1.00			
Lane Grp Cap(c), veh/h	194	947	0	0	0	815	613	621	528			
V/C Ratio(X)	0.71	0.82	0.00	0.00	0.00	0.88	0.94	0.85	0.06			
Avail Cap(c_a), veh/h	194	947	0	0	0	815	624	633	538			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33			
Upstream Filter(I)	0.09	0.09	0.00	0.00	0.00	0.38	0.09	0.09	0.09			
Uniform Delay (d), s/veh	29.5	0.0	0.0	0.0	0.0	32.9	63.6	61.3	42.2			
Incr Delay (d2), s/veh	1.1	0.8	0.0	0.0	0.0	5.6	3.2	1.1	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile Back of Q (50%), veh/ln	2.5	0.2	0.0	0.0	0.0	25.1	23.8	21.5	1.1			
Lane Grp Delay (d), s/veh	30.6	0.8	0.0	0.0	0.0	38.5	66.7	62.4	42.2			
Lane Grp LOS	C	A				D	E	E	D			
Approach Vol, veh/h		916			716			1137				
Approach Delay, s/veh		5.2			38.5			64.0				
Approach LOS		A			D			E				
Timer												
Assigned Phs	1	6			2			4				
Phs Duration (G+Y+Rc), s	10.0	89.0			79.0			60.0				
Change Period (Y+Rc), s	3.0	4.0			4.0			4.2				
Max Green Setting (Gmax), s	7.0	85.0			75.0			56.8				
Max Q Clear Time (g_c+I1), s	8.5	2.0			60.7			53.9				
Green Ext Time (p_c), s	0.0	18.1			8.9			1.9				
Intersection Summary												
HCM 2010 Ctrl Delay			38.0									
HCM 2010 LOS			D									
Notes												

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	740	190	110	580	0	0	0	0	150	1240	190
Number	1	6	16	5	2	12				3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow veh/h/ln	0.0	166.0	171.0	166.0	166.0	0.0				166.0	166.0	171.0
Lanes	0	1	0	1	1	0				1	1	0
Cap, veh/h	0	468	120	101	697	0				826	735	113
Arrive On Green	0.00	0.73	0.73	0.07	0.84	0.00				0.52	0.52	0.52
Sat Flow, veh/h	0	1275	327	1581	1660	0				1581	1407	216
Grp Volume(v), veh/h	0	0	979	116	611	0				158	0	1505
Grp Sat Flow(s),veh/h/ln	0	0	1602	1581	1660	0				1581	0	1622
Q Serve(g_s), s	0.0	0.0	55.0	5.0	33.5	0.0				7.9	0.0	78.4
Cycle Q Clear(g_c), s	0.0	0.0	55.0	5.0	33.5	0.0				7.9	0.0	78.4
Prop In Lane	0.00		0.20	1.00		0.00				1.00		0.13
Lane Grp Cap(c), veh/h	0	0	588	101	697	0				826	0	848
V/C Ratio(X)	0.00	0.00	1.67	1.15	0.88	0.00				0.19	0.00	1.78
Avail Cap(c_a), veh/h	0	0	588	101	697	0				826	0	848
HCM Platoon Ratio	1.00	2.00	2.00	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.09	0.37	0.37	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	20.0	43.3	9.6	0.0				19.0	0.0	35.8
Incr Delay (d2), s/veh	0.0	0.0	300.5	102.1	6.1	0.0				0.1	0.0	353.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.0	0.0	64.7	4.7	7.3	0.0				3.2	0.0	115.3
Lane Grp Delay (d), s/veh	0.0	0.0	320.5	145.4	15.8	0.0				19.1	0.0	389.4
Lane Grp LOS			F	F	B					B		F
Approach Vol, veh/h		979			727						1663	
Approach Delay, s/veh		320.5			36.4						354.2	
Approach LOS		F			D						F	

Timer												
Assigned Phs		6		5	2						8	
Phs Duration (G+Y+Rc), s		59.0		8.0	67.0						83.0	
Change Period (Y+Rc), s		4.0		3.0	4.0						4.6	
Max Green Setting (Gmax), s		55.0		5.0	63.0						78.4	
Max Q Clear Time (g_c+I1), s		57.0		7.0	35.5						80.4	
Green Ext Time (p_c), s		0.0		0.0	15.0						0.0	

Intersection Summary												
HCM 2010 Ctrl Delay			275.8									
HCM 2010 LOS			F									

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	160	780	100	60	560	70	120	1020	30	40	290	50
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	166.0	166.0	171.0	166.0	166.0	171.0	166.0	166.0	171.0	166.0	166.0	171.0
Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Cap, veh/h	354	723	92	98	668	84	340	1075	32	96	819	141
Arrive On Green	0.13	1.00	1.00	0.05	0.92	0.92	0.13	0.67	0.67	0.03	0.30	0.30
Sat Flow, veh/h	1581	1443	185	1581	1446	182	1581	3208	96	1581	2762	474
Grp Volume(v), veh/h	168	0	926	63	0	663	126	556	550	42	182	176
Grp Sat Flow(s),veh/h/ln	1581	0	1628	1581	0	1628	1581	1660	1643	1581	1660	1577
Q Serve(g_s), s	7.9	0.0	75.0	3.2	0.0	25.1	7.7	50.0	50.1	2.8	13.0	13.2
Cycle Q Clear(g_c), s	7.9	0.0	75.0	3.2	0.0	25.1	7.7	50.0	50.1	2.8	13.0	13.2
Prop In Lane	1.00		0.11	1.00		0.11	1.00		0.06	1.00		0.30
Lane Grp Cap(c), veh/h	354	0	815	98	0	752	340	556	551	96	492	468
V/C Ratio(X)	0.47	0.00	1.14	0.65	0.00	0.88	0.37	1.00	1.00	0.44	0.37	0.38
Avail Cap(c_a), veh/h	355	0	815	98	0	752	343	556	551	139	492	468
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.00	0.09	0.36	0.00	0.36	0.09	0.09	0.09	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.2	0.0	0.0	35.3	0.0	4.0	27.7	24.7	24.7	41.7	41.6	41.7
Incr Delay (d2), s/veh	0.1	0.0	62.6	5.2	0.0	5.8	0.1	11.3	11.4	3.1	2.1	2.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	2.7	0.0	14.2	2.5	0.0	3.3	2.8	18.4	18.2	1.7	5.9	5.7
Lane Grp Delay (d), s/veh	18.3	0.0	62.6	40.5	0.0	9.9	27.7	35.9	36.0	44.8	43.7	44.0
Lane Grp LOS	B		F	D		A	C	D	D	D	D	D
Approach Vol, veh/h		1094			726			1232			400	
Approach Delay, s/veh		55.8			12.5			35.1			44.0	
Approach LOS		E			B			D			D	

Timer												
Assigned Phs	1	6		5	2		7	4		3	8	
Phs Duration (G+Y+Rc), s	13.9	79.0		8.0	73.1		13.7	54.8		7.9	49.0	
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0		4.0	4.6		4.0	4.6	
Max Green Setting (Gmax), s	10.0	75.0		4.0	69.0		10.0	46.4		8.0	44.4	
Max Q Clear Time (g_c+I1), s	9.9	77.0		5.2	27.1		9.7	52.1		4.8	15.2	
Green Ext Time (p_c), s	0.0	0.0		0.0	18.0		0.0	0.0		0.0	11.8	

Intersection Summary	
HCM 2010 Ctrl Delay	38.0
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	40	880	170	330	380	90	60	280	80	0	0	0
Number	1	6	16	5	2	12	7	4	14			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow veh/h/ln	166.0	166.0	171.0	166.0	166.0	171.0	166.0	166.0	171.0			
Lanes	1	1	0	1	1	0	1	1	0			
Cap, veh/h	537	766	148	301	914	217	313	246	70			
Arrive On Green	0.04	1.00	1.00	0.27	1.00	1.00	0.26	0.26	0.26			
Sat Flow, veh/h	1581	1353	261	1581	1298	308	1581	1244	354			
Grp Volume(v), veh/h	42	0	1105	347	0	495	63	0	379			
Grp Sat Flow(s),veh/h/ln	1581	0	1614	1581	0	1606	1581	0	1598			
Q Serve(g_s), s	1.7	0.0	85.0	24.0	0.0	0.0	4.6	0.0	29.7			
Cycle Q Clear(g_c), s	1.7	0.0	85.0	24.0	0.0	0.0	4.6	0.0	29.7			
Prop In Lane	1.00		0.16	1.00		0.19	1.00		0.22			
Lane Grp Cap(c), veh/h	537	0	915	301	0	1132	313	0	316			
V/C Ratio(X)	0.08	0.00	1.21	1.15	0.00	0.44	0.20	0.00	1.20			
Avail Cap(c_a), veh/h	555	0	915	301	0	1132	313	0	316			
HCM Platoon Ratio	2.00	2.00	2.00	1.67	1.67	1.67	1.33	1.33	1.33			
Upstream Filter(I)	1.00	0.00	1.00	0.50	0.00	0.50	0.64	0.00	0.64			
Uniform Delay (d), s/veh	12.7	0.0	0.0	50.1	0.0	0.0	46.0	0.0	55.2			
Incr Delay (d2), s/veh	0.1	0.0	104.0	86.6	0.0	0.6	0.9	0.0	107.5			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile Back of Q (50%), veh/ln	0.6	0.0	26.4	18.7	0.0	0.2	2.0	0.0	21.5			
Lane Grp Delay (d), s/veh	12.8	0.0	104.0	136.7	0.0	0.6	47.0	0.0	162.7			
Lane Grp LOS	B		F	F		A	D		F			
Approach Vol, veh/h		1147			842			442				
Approach Delay, s/veh		100.6			56.7			146.2				
Approach LOS		F			E			F				
Timer												
Assigned Phs	1	6		5	2			4				
Phs Duration (G+Y+Rc), s	6.3	89.0		27.0	109.7			34.0				
Change Period (Y+Rc), s	3.0	4.0		3.0	4.0			4.3				
Max Green Setting (Gmax), s	5.0	85.0		24.0	104.0			29.7				
Max Q Clear Time (g_c+I1), s	3.7	87.0		26.0	2.0			31.7				
Green Ext Time (p_c), s	0.0	0.0		0.0	25.8			0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			93.7									
HCM 2010 LOS			F									
Notes												

Movement	EBT	EBR	WBL	WBT	SBL	SBT	SBR	SWL2	SWL	SWR
Lane Configurations										
Volume (vph)	880	40	190	290	90	130	20	350	940	130
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		3.0	4.0		7.0		7.0	7.0	
Lane Util. Factor	1.00		1.00	1.00		0.95		0.97	1.00	
Frt	0.99		1.00	1.00		0.99		1.00	0.98	
Flt Protected	1.00		0.95	1.00		0.98		0.95	0.96	
Satd. Flow (prot)	1667		1593	1676		3088		3090	1577	
Flt Permitted	1.00		0.09	1.00		0.98		0.95	0.96	
Satd. Flow (perm)	1667		145	1676		3088		3090	1577	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	926	42	200	305	95	137	21	368	989	137
RTOR Reduction (vph)	1	0	0	0	0	4	0	0	0	0
Lane Group Flow (vph)	967	0	200	305	0	249	0	368	1126	0
Turn Type	NA		pm+pt	NA	Perm	NA		Perm	NA	
Protected Phases	6		5	2		9			8	
Permitted Phases			2		9			8		
Actuated Green, G (s)	43.2		57.0	57.0		17.0		58.0	58.0	
Effective Green, g (s)	43.2		57.0	57.0		17.0		58.0	58.0	
Actuated g/C Ratio	0.29		0.38	0.38		0.11		0.39	0.39	
Clearance Time (s)	4.0		3.0	4.0		7.0		7.0	7.0	
Vehicle Extension (s)	3.0		3.0	3.0		3.0		3.0	3.0	
Lane Grp Cap (vph)	480		159	636		349		1194	609	
v/s Ratio Prot	c0.58		c0.09	0.18					c0.71	
v/s Ratio Perm			0.39			0.08		0.12		
v/c Ratio	2.01		1.26	0.48		0.71		0.31	1.85	
Uniform Delay, d1	53.4		41.4	35.3		64.1		32.0	46.0	
Progression Factor	1.00		1.33	1.18		1.00		1.00	1.00	
Incremental Delay, d2	463.5		155.1	2.4		6.7		0.1	388.4	
Delay (s)	516.9		210.1	44.0		70.9		32.2	434.4	
Level of Service	F		F	D		E		C	F	
Approach Delay (s)	516.9			109.8		70.9			335.3	
Approach LOS	F			F		E			F	

Intersection Summary			
HCM 2000 Control Delay	333.7	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.70		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	21.0
Intersection Capacity Utilization	158.5%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	40	760	20	30	330	30	30	400	20	60	360	40
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	186.3	186.3	190.0	186.3	186.3	190.0	186.3	186.3	190.0	190.0	193.7	190.0
Lanes	1	1	0	1	1	0	1	1	0	0	1	0
Cap, veh/h	425	800	21	124	840	77	102	731	36	36	123	12
Arrive On Green	0.00	0.59	0.59	0.03	0.50	0.49	0.04	0.83	0.83	0.37	0.37	0.37
Sat Flow, veh/h	1774	1807	47	1774	1680	155	1774	1759	88	1	336	32
Grp Volume(v), veh/h	42	0	821	32	0	379	32	0	442	484	0	0
Grp Sat Flow(s),veh/h/ln	1774	0	1854	1774	0	1835	1774	0	1847	368	0	0
Q Serve(g_s), s	0.1	0.0	50.9	1.0	0.0	15.0	1.1	0.0	8.9	0.1	0.0	0.0
Cycle Q Clear(g_c), s	0.1	0.0	50.9	1.0	0.0	15.0	1.1	0.0	8.9	42.3	0.0	0.0
Prop In Lane	1.00		0.03	1.00		0.08	1.00		0.05	0.13		0.09
Lane Grp Cap(c), veh/h	425	0	821	124	0	918	102	0	768	173	0	0
V/C Ratio(X)	0.10	0.00	1.00	0.26	0.00	0.41	0.31	0.00	0.58	2.80	0.00	0.00
Avail Cap(c_a), veh/h	501	0	821	161	0	918	140	0	768	173	0	0
HCM Platoon Ratio	1.33	1.33	1.33	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.87	0.00	0.87	0.70	0.00	0.70	1.00	0.00	0.00
Uniform Delay (d), s/veh	24.1	0.0	23.6	27.3	0.0	18.2	27.5	0.0	6.4	30.4	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	31.3	1.0	0.0	1.2	1.2	0.0	0.6	826.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.8	0.0	28.4	1.0	0.0	7.1	1.0	0.0	2.4	43.1	0.0	0.0
Lane Grp Delay (d), s/veh	24.2	0.0	54.9	28.2	0.0	19.4	28.8	0.0	7.1	857.1	0.0	0.0
Lane Grp LOS	C		D	C		B	C		A	F		
Approach Vol, veh/h		863			411			474			484	
Approach Delay, s/veh		53.4			20.1			8.5			857.1	
Approach LOS		D			C			A			F	

Timer												
Assigned Phs	1	6		5	2		7	4		3	8	
Phs Duration (G+Y+Rc), s	0.0	56.0		5.6	61.6		5.6	53.6		0.0	48.0	
Change Period (Y+Rc), s	3.0	5.0		3.0	5.0		3.0	5.7		3.0	5.7	
Max Green Setting (Gmax), s	5.0	51.0		5.0	51.0		5.0	42.3		5.0	42.3	
Max Q Clear Time (g_c+I1), s	0.0	52.9		3.0	17.0		3.1	10.9		0.0	44.3	
Green Ext Time (p_c), s	0.0	0.0		0.0	6.7		0.0	3.4		0.0	0.0	

Intersection Summary	
HCM 2010 Ctrl Delay	212.0
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	60	670	30	40	340	40	70	720	40	40	520	50
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99
Adj Sat Flow veh/h/ln	184.5	184.5	190.0	184.5	184.5	190.0	190.0	184.5	190.0	190.0	177.1	190.0
Lanes	1	1	0	1	1	0	0	2	0	0	2	0
Cap, veh/h	417	876	40	229	913	107	67	1167	31	56	1089	51
Arrive On Green	0.00	0.34	0.34	0.01	0.19	0.18	0.69	0.71	0.69	0.35	0.35	0.35
Sat Flow, veh/h	1757	1751	79	1757	1621	190	5	1576	87	3	1475	144
Grp Volume(v), veh/h	63	0	737	42	0	400	437	0	437	321	0	321
Grp Sat Flow(s),veh/h/ln	1757	0	1831	1757	0	1811	1565	0	1814	1508	0	1707
Q Serve(g_s), s	0.1	0.0	40.3	1.0	0.0	21.3	0.1	0.0	39.0	0.1	0.0	39.0
Cycle Q Clear(g_c), s	0.1	0.0	40.3	1.0	0.0	21.3	39.0	0.0	39.0	39.0	0.0	39.0
Prop In Lane	1.00		0.04	1.00		0.10	1.00		0.05	0.67		0.09
Lane Grp Cap(c), veh/h	417	0	916	229	0	1020	66	0	644	70	0	606
V/C Ratio(X)	0.15	0.00	0.80	0.18	0.00	0.39	6.67	0.00	0.68	4.56	0.00	0.53
Avail Cap(c_a), veh/h	495	0	916	263	0	1020	66	0	644	70	0	606
HCM Platoon Ratio	0.67	0.67	0.67	0.33	0.33	0.33	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	0.76	0.00	0.76	1.00	0.00	1.00	0.29	0.00	0.29	1.00	0.00	1.00
Uniform Delay (d), s/veh	23.5	0.0	31.6	20.0	0.0	28.2	35.6	0.0	16.0	46.5	0.0	35.5
Incr Delay (d2), s/veh	0.1	0.0	5.8	0.4	0.0	1.1	2560.6	0.0	1.7	1632.7	0.0	3.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	1.2	0.0	20.6	0.6	0.0	11.0	46.6	0.0	4.4	31.9	0.0	7.5
Lane Grp Delay (d), s/veh	23.7	0.0	37.4	20.4	0.0	29.4	2596.2	0.0	17.7	1679.2	0.0	38.8
Lane Grp LOS	C		D	C		C	F		B	F		D
Approach Vol, veh/h		800			442			874			642	
Approach Delay, s/veh		36.3			28.5			1306.9			859.0	
Approach LOS		D			C			F			F	

Timer												
Assigned Phs	1	6		5	2		7	4		3	8	
Phs Duration (G+Y+Rc), s	0.0	60.0		5.9	65.9		0.0	44.0		0.0	44.0	
Change Period (Y+Rc), s	3.0	5.0		3.0	5.0		3.0	6.0		3.0	6.0	
Max Green Setting (Gmax), s	5.0	55.0		5.0	55.0		5.0	38.0		5.0	38.0	
Max Q Clear Time (g_c+I1), s	0.0	42.3		3.0	23.3		0.0	41.0		0.0	41.0	
Green Ext Time (p_c), s	0.0	4.5		0.0	6.0		0.0	0.0		0.0	0.0	

Intersection Summary	
HCM 2010 Ctrl Delay	629.2
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	640	60	60	490	0	0	0	0	60	60	30
Number	1	6	16	5	2	12				3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow veh/h/ln	0.0	182.7	190.0	182.7	182.7	0.0				190.0	190.0	190.0
Lanes	0	1	0	1	1	0				0	1	0
Cap, veh/h	0	1118	104	609	1355	0				138	138	70
Arrive On Green	0.00	1.00	1.00	0.08	1.00	0.00				0.19	0.19	0.19
Sat Flow, veh/h	0	1646	154	1740	1827	0				718	718	365
Grp Volume(v), veh/h	0	0	737	63	516	0				158	0	0
Grp Sat Flow(s),veh/h/ln	0	0	1800	1740	1827	0				1800	0	0
Q Serve(g_s), s	0.0	0.0	0.0	1.2	0.0	0.0				9.3	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	1.2	0.0	0.0				9.3	0.0	0.0
Prop In Lane	0.00		0.09	1.00		0.00				0.40		0.20
Lane Grp Cap(c), veh/h	0	0	1222	609	1355	0				345	0	0
V/C Ratio(X)	0.00	0.00	0.60	0.10	0.38	0.00				0.46	0.00	0.00
Avail Cap(c_a), veh/h	0	0	1222	660	1355	0				345	0	0
HCM Platoon Ratio	1.00	2.00	2.00	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.49	0.87	0.87	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	4.0	0.0	0.0				43.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	1.1	0.1	0.7	0.0				4.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.0	0.0	0.4	0.4	0.3	0.0				4.7	0.0	0.0
Lane Grp Delay (d), s/veh	0.0	0.0	1.1	4.1	0.7	0.0				47.3	0.0	0.0
Lane Grp LOS			A	A	A					D		
Approach Vol, veh/h		737			579						158	
Approach Delay, s/veh		1.1			1.1						47.3	
Approach LOS		A			A						D	

Timer				
Assigned Phs	6	5	2	8
Phs Duration (G+Y+Rc), s	86.5	6.5	93.0	27.0
Change Period (Y+Rc), s	5.0	3.0	5.0	4.0
Max Green Setting (Gmax), s	78.0	7.0	88.0	23.0
Max Q Clear Time (g_c+I1), s	2.0	3.2	2.0	11.3
Green Ext Time (p_c), s	7.2	0.0	7.2	0.4

Intersection Summary	
HCM 2010 Ctrl Delay	6.0
HCM 2010 LOS	A

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	60	550	30	60	370	60	50	910	70	80	1270	60
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	184.5	184.5	190.0	184.5	184.5	190.0	184.5	184.5	190.0	184.5	184.5	190.0
Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Cap, veh/h	371	663	37	258	605	98	152	1412	109	295	1476	69
Arrive On Green	0.07	0.77	0.77	0.08	0.78	0.76	0.07	0.84	0.82	0.04	0.42	0.42
Sat Flow, veh/h	1757	1732	96	1757	1549	251	1757	3382	261	1757	3496	164
Grp Volume(v), veh/h	63	0	611	63	0	452	53	523	509	84	704	696
Grp Sat Flow(s),veh/h/ln	1757	0	1828	1757	0	1800	1757	1845	1799	1757	1845	1816
Q Serve(g_s), s	2.6	0.0	27.9	2.5	0.0	13.1	2.0	12.7	12.8	3.1	42.1	42.3
Cycle Q Clear(g_c), s	2.6	0.0	27.9	2.5	0.0	13.1	2.0	12.7	12.8	3.1	42.1	42.3
Prop In Lane	1.00		0.05	1.00		0.14	1.00		0.15	1.00		0.09
Lane Grp Cap(c), veh/h	371	0	699	258	0	703	152	770	751	295	779	767
V/C Ratio(X)	0.17	0.00	0.87	0.24	0.00	0.64	0.35	0.68	0.68	0.28	0.90	0.91
Avail Cap(c_a), veh/h	386	0	699	274	0	703	178	770	751	312	779	767
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	0.82	0.00	0.82	0.92	0.00	0.92	0.26	0.26	0.26	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.8	0.0	11.8	22.2	0.0	9.4	25.2	6.7	6.8	18.6	31.8	31.9
Incr Delay (d2), s/veh	0.2	0.0	12.1	0.5	0.0	4.2	0.4	1.3	1.3	0.5	16.0	16.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	1.1	0.0	9.1	1.1	0.0	4.1	0.8	3.0	3.0	1.4	23.0	22.8
Lane Grp Delay (d), s/veh	21.0	0.0	23.9	22.7	0.0	13.6	25.6	8.0	8.1	19.2	47.8	48.4
Lane Grp LOS	C		C	C		B	C	A	A	B	D	D
Approach Vol, veh/h		674			515			1085			1484	
Approach Delay, s/veh		23.6			14.7			8.9			46.4	
Approach LOS		C			B			A			D	

Timer												
Assigned Phs	1	6		5	2		7	4		3	8	
Phs Duration (G+Y+Rc), s	7.0	50.1		6.9	50.0		6.3	53.0		7.8	54.5	
Change Period (Y+Rc), s	3.0	5.0		3.0	5.0		3.0	4.8		3.0	4.8	
Max Green Setting (Gmax), s	5.0	45.0		5.0	45.0		5.0	48.2		6.0	49.2	
Max Q Clear Time (g_c+I1), s	4.6	29.9		4.5	15.1		4.0	14.8		5.1	44.3	
Green Ext Time (p_c), s	0.0	4.4		0.0	5.3		0.0	2.6		0.0	1.8	

Intersection Summary	
HCM 2010 Ctrl Delay	27.2
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	60	570	60	60	360	60	40	80	30	40	140	30
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	186.3	186.3	190.0	186.3	186.3	190.0	190.0	186.3	190.0	190.0	186.3	190.0
Lanes	1	1	0	1	1	0	0	1	0	0	1	0
Cap, veh/h	753	1093	115	663	1043	173	90	148	49	81	203	41
Arrive On Green	0.07	1.00	1.00	0.09	1.00	1.00	0.34	0.34	0.32	0.16	0.17	0.16
Sat Flow, veh/h	1774	1658	174	1774	1558	259	263	878	290	228	1204	242
Grp Volume(v), veh/h	63	0	663	63	0	442	158	0	0	221	0	0
Grp Sat Flow(s),veh/h/ln	1774	0	1832	1774	0	1817	1431	0	0	1674	0	0
Q Serve(g_s), s	1.1	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0	3.6	0.0	0.0
Cycle Q Clear(g_c), s	1.1	0.0	0.0	1.1	0.0	0.0	9.2	0.0	0.0	12.8	0.0	0.0
Prop In Lane	1.00		0.10	1.00		0.14	0.27		0.20	0.19		0.14
Lane Grp Cap(c), veh/h	753	0	1208	663	0	1217	287	0	0	308	0	0
V/C Ratio(X)	0.08	0.00	0.55	0.09	0.00	0.36	0.55	0.00	0.00	0.72	0.00	0.00
Avail Cap(c_a), veh/h	818	0	1208	711	0	1217	558	0	0	596	0	0
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.75	0.00	0.75	0.83	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	4.7	0.0	0.0	4.1	0.0	0.0	30.4	0.0	0.0	39.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	1.8	0.0	0.0	0.6	1.0	0.0	0.0	2.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.4	0.0	0.6	0.4	0.0	0.2	3.0	0.0	0.0	5.7	0.0	0.0
Lane Grp Delay (d), s/veh	4.8	0.0	1.8	4.1	0.0	0.6	31.4	0.0	0.0	42.3	0.0	0.0
Lane Grp LOS	A		A	A		A	C			D		
Approach Vol, veh/h		726			505			158			221	
Approach Delay, s/veh		2.1			1.1			31.4			42.3	
Approach LOS		A			A			C			D	

Timer												
Assigned Phs	1	6		5	2			4			8	
Phs Duration (G+Y+Rc), s	7.3	71.0		7.3	71.0			21.8			21.8	
Change Period (Y+Rc), s	4.0	5.0		4.0	5.0			5.9			5.9	
Max Green Setting (Gmax), s	7.0	66.0		6.0	65.0			33.1			33.1	
Max Q Clear Time (g_c+I1), s	3.1	2.0		3.1	2.0			11.2			14.8	
Green Ext Time (p_c), s	0.0	5.9		0.0	5.9			1.1			1.1	

Intersection Summary	
HCM 2010 Ctrl Delay	10.1
HCM 2010 LOS	B

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	30	480	30	60	390	40	50	1060	50	40	1270	30
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	186.3	186.3	190.0	186.3	186.3	190.0	186.3	186.3	190.0	186.3	186.3	190.0
Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Cap, veh/h	243	651	41	316	656	67	133	1501	71	244	1531	37
Arrive On Green	0.04	0.75	0.75	0.01	0.13	0.13	0.05	0.85	0.83	0.03	0.42	0.41
Sat Flow, veh/h	1774	1734	110	1774	1663	170	1774	3528	168	1774	3624	87
Grp Volume(v), veh/h	32	0	537	63	0	453	53	589	580	42	687	682
Grp Sat Flow(s),veh/h/ln	1774	0	1843	1774	0	1833	1774	1863	1833	1774	1863	1847
Q Serve(g_s), s	1.3	0.0	20.4	2.4	0.0	27.4	2.0	15.0	15.2	1.6	39.5	39.6
Cycle Q Clear(g_c), s	1.3	0.0	20.4	2.4	0.0	27.4	2.0	15.0	15.2	1.6	39.5	39.6
Prop In Lane	1.00		0.06	1.00		0.09	1.00		0.09	1.00		0.05
Lane Grp Cap(c), veh/h	243	0	692	316	0	723	133	793	780	244	787	780
V/C Ratio(X)	0.13	0.00	0.78	0.20	0.00	0.63	0.40	0.74	0.74	0.17	0.87	0.87
Avail Cap(c_a), veh/h	279	0	692	334	0	723	158	793	780	275	787	780
HCM Platoon Ratio	2.00	2.00	2.00	0.33	0.33	0.33	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.00	0.09	1.00	0.00	1.00	0.21	0.21	0.21	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.1	0.0	11.6	21.6	0.0	42.8	26.3	6.1	6.2	19.9	31.0	31.0
Incr Delay (d2), s/veh	0.0	0.0	0.8	0.3	0.0	4.1	0.4	0.8	0.8	0.3	12.8	13.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.6	0.0	5.4	1.1	0.0	14.4	0.9	3.0	3.0	0.7	21.1	21.0
Lane Grp Delay (d), s/veh	24.1	0.0	12.4	21.9	0.0	46.9	26.7	6.9	7.0	20.2	43.8	44.0
Lane Grp LOS	C		B	C		D	C	A	A	C	D	D
Approach Vol, veh/h		569			516			1222			1411	
Approach Delay, s/veh		13.1			43.8			7.8			43.2	
Approach LOS		B			D			A			D	

Timer												
Assigned Phs	1	6		5	2		7	4		3	8	
Phs Duration (G+Y+Rc), s	5.6	49.0		6.8	50.2		6.3	55.4		6.0	55.0	
Change Period (Y+Rc), s	3.0	5.0		3.0	5.0		3.0	6.5		3.0	6.5	
Max Green Setting (Gmax), s	5.0	44.0		5.0	44.0		5.0	48.5		5.0	48.5	
Max Q Clear Time (g_c+I1), s	3.3	22.4		4.4	29.4		4.0	17.2		3.6	41.6	
Green Ext Time (p_c), s	0.0	4.5		0.0	4.0		0.0	16.7		0.0	5.6	

Intersection Summary	
HCM 2010 Ctrl Delay	27.1
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Volume (veh/h)	20	370	20	210	230	50	80	510	60	60	1100	160
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	186.3	186.3	190.0	186.3	186.3	190.0	186.3	186.3	190.0	186.3	193.7	190.0
Lanes	1	1	0	1	1	0	1	2	0	1	1	0
Cap, veh/h	144	280	15	180	311	68	119	1953	228	534	981	142
Arrive On Green	0.02	0.21	0.21	0.02	0.07	0.07	0.03	0.60	0.60	0.03	0.59	0.59
Sat Flow, veh/h	1774	1752	95	1774	1481	324	1774	3275	383	1774	1655	240
Grp Volume(v), veh/h	21	0	410	221	0	295	84	305	295	63	0	1326
Grp Sat Flow(s),veh/h/ln	1774	0	1846	1774	0	1806	1774	1863	1795	1774	0	1895
Q Serve(g_s), s	1.2	0.0	19.0	8.0	0.0	19.1	2.2	9.4	9.4	1.7	0.0	70.5
Cycle Q Clear(g_c), s	1.2	0.0	19.0	8.0	0.0	19.1	2.2	9.4	9.4	1.7	0.0	70.5
Prop In Lane	1.00		0.05	1.00		0.18	1.00		0.21	1.00		0.13
Lane Grp Cap(c), veh/h	144	0	295	180	0	379	119	1111	1071	534	0	1123
V/C Ratio(X)	0.15	0.00	1.39	1.23	0.00	0.78	0.70	0.27	0.28	0.12	0.00	1.18
Avail Cap(c_a), veh/h	189	0	295	180	0	379	135	1111	1071	557	0	1123
HCM Platoon Ratio	1.33	1.33	1.33	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.65	0.00	0.65	0.76	0.00	0.76	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	41.3	0.0	46.8	40.3	0.0	52.6	29.7	11.6	11.6	9.2	0.0	24.2
Incr Delay (d2), s/veh	0.3	0.0	188.9	134.1	0.0	7.6	13.3	0.6	0.6	0.1	0.0	90.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.5	0.0	24.2	8.3	0.0	10.2	1.9	4.4	4.3	0.7	0.0	60.4
Lane Grp Delay (d), s/veh	41.6	0.0	235.7	174.4	0.0	60.2	43.0	12.2	12.2	9.3	0.0	114.9
Lane Grp LOS	D		F	F		E	D	B	B	A		F
Approach Vol, veh/h		431			516			684			1389	
Approach Delay, s/veh		226.2			109.1			16.0			110.1	
Approach LOS		F			F			B			F	
Timer												
Assigned Phs	1	6		5	2		7	4		3	8	
Phs Duration (G+Y+Rc), s	5.0	24.0		11.0	30.0		6.9	77.4		6.5	77.0	
Change Period (Y+Rc), s	3.0	5.0		3.0	5.0		3.0	6.5		3.0	6.5	
Max Green Setting (Gmax), s	5.0	19.0		8.0	22.0		5.0	70.5		5.0	70.5	
Max Q Clear Time (g_c+I1), s	3.2	21.0		10.0	21.1		4.2	11.4		3.7	72.5	
Green Ext Time (p_c), s	0.0	0.0		0.0	0.3		0.0	12.7		0.0	0.0	
Intersection Summary												
HCM 2010 Ctrl Delay			105.2									
HCM 2010 LOS			F									
Notes												

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	180	0	50	190	120	190	0	2030	190	190	2100	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	9	12	9	11	11	11	12	10	12	12	10	12
Total Lost time (s)	3.9		3.9	3.0	3.0			3.6	4.6	4.6	3.6	
Lane Util. Factor	1.00		1.00	1.00	1.00			0.91	0.91	0.97	0.95	
Frt	1.00		0.85	1.00	0.91			1.00	0.85	1.00	1.00	
Flt Protected	0.95		1.00	0.95	1.00			1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1593		1425	1711	1635			3160	1441	3433	3294	
Flt Permitted	0.56		1.00	0.95	1.00			1.00	1.00	0.95	1.00	
Satd. Flow (perm)	945		1425	1711	1635			3160	1441	3433	3294	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	189	0	53	200	126	200	0	2137	200	200	2211	42
RTOR Reduction (vph)	0	0	43	0	49	0	0	1	55	0	1	0
Lane Group Flow (vph)	189	0	10	200	277	0	0	2156	125	200	2252	0
Turn Type	custom		custom	Perm	NA			NA	Perm	Prot	NA	
Protected Phases			8		4			6		5	2	
Permitted Phases	8			4					6			
Actuated Green, G (s)	21.5		21.5	23.5	23.5			50.4	50.4	6.5	61.5	
Effective Green, g (s)	22.5		22.5	24.5	24.5			51.4	50.4	6.5	62.5	
Actuated g/C Ratio	0.19		0.19	0.20	0.20			0.43	0.42	0.05	0.52	
Clearance Time (s)	4.9		4.9	4.0	4.0			4.6	4.6	4.6	4.6	
Vehicle Extension (s)	2.5		2.5	3.0	3.0			2.5	2.5	3.0	2.5	
Lane Grp Cap (vph)	177		267	349	333			1353	605	185	1715	
v/s Ratio Prot			0.01		c0.17			c0.68		0.06	c0.68	
v/s Ratio Perm	c0.20			0.12					0.09			
v/c Ratio	1.07		0.04	0.57	0.83			1.59	0.21	1.08	1.31	
Uniform Delay, d1	48.8		39.9	43.0	45.8			34.3	22.1	56.8	28.8	
Progression Factor	1.00		1.00	0.78	0.72			0.31	0.07	1.00	1.00	
Incremental Delay, d2	86.8		0.3	1.2	9.1			268.2	0.2	89.4	145.2	
Delay (s)	135.6		40.1	35.0	41.9			278.9	1.8	146.2	173.9	
Level of Service	F		D	C	D			F	A	F	F	
Approach Delay (s)		114.7			39.3			257.5			171.7	
Approach LOS		F			D			F			F	

Intersection Summary			
HCM 2000 Control Delay	192.8	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.31		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	15.1
Intersection Capacity Utilization	105.3%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	90	570	80	0	290	70	250	2160	150	90	1900	130
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	11	12	12	11	12	11	10	12	10	10	12
Total Lost time (s)	6.7	5.7	6.7		5.7	6.7	3.5	5.0		3.5	5.0	5.0
Lane Util. Factor	0.97	1.00	1.00		1.00	1.00	1.00	0.91		1.00	0.91	0.91
Frt	1.00	1.00	0.85		1.00	0.85	1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3433	1801	1583		1801	1583	1711	4700		1652	3164	1441
Flt Permitted	0.25	1.00	1.00		1.00	1.00	0.07	1.00		0.07	1.00	1.00
Satd. Flow (perm)	903	1801	1583		1801	1583	121	4700		124	3164	1441
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	95	600	84	0	305	74	263	2274	158	95	2000	137
RTOR Reduction (vph)	0	0	73	0	0	64	0	6	0	0	0	71
Lane Group Flow (vph)	95	600	11	0	305	10	263	2426	0	95	2000	66
Turn Type	custom	NA	custom		NA	Perm	pm+pt	NA		pm+pt	NA	Perm
Protected Phases		6			2		7	4		3	8	
Permitted Phases	1		1			2	4			8		8
Actuated Green, G (s)	16.0	38.7	16.0		16.0	16.0	68.6	60.6		61.6	56.6	56.6
Effective Green, g (s)	16.0	39.7	16.0		17.0	16.0	68.1	61.6		60.6	57.6	57.6
Actuated g/C Ratio	0.13	0.33	0.13		0.14	0.13	0.57	0.51		0.51	0.48	0.48
Clearance Time (s)	6.7	6.7	6.7		6.7	6.7	3.0	6.0		3.0	6.0	6.0
Vehicle Extension (s)	2.5	2.5	2.5		2.5	2.5	2.0	2.5		3.0	2.5	2.5
Lane Grp Cap (vph)	120	595	211		255	211	181	2412		119	1518	691
v/s Ratio Prot		c0.33			c0.17		c0.10	0.52		0.03	0.63	
v/s Ratio Perm	0.11		0.01			0.01	c0.72			0.37		0.05
v/c Ratio	0.79	1.01	0.05		1.20	0.05	1.45	1.01		0.80	1.32	0.10
Uniform Delay, d1	50.4	40.1	45.4		51.5	45.3	36.5	29.2		26.5	31.2	17.0
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.83	0.61	0.72
Incremental Delay, d2	40.0	39.0	0.5		119.9	0.4	231.9	19.7		3.5	143.3	0.0
Delay (s)	90.3	79.1	45.9		171.4	45.8	268.4	48.9		52.0	162.4	12.2
Level of Service	F	E	D		F	D	F	D		D	F	B
Approach Delay (s)		76.9			146.9			70.3			148.5	
Approach LOS		E			F			E			F	

Intersection Summary			
HCM 2000 Control Delay	104.6	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.39		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	20.9
Intersection Capacity Utilization	110.0%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	20	690	20	140	190	0	60	60	30	20	70	130
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	186.3	186.3	190.0	186.3	186.3	190.0	190.0	186.3	190.0	190.0	186.3	190.0
Lanes	1	1	0	1	1	0	0	1	0	0	1	0
Cap, veh/h	863	1189	34	607	1263	0	104	97	39	51	106	175
Arrive On Green	0.03	1.00	1.00	0.09	1.00	0.00	0.18	0.18	0.18	0.18	0.18	0.18
Sat Flow, veh/h	1774	1801	52	1774	1863	0	329	551	223	88	598	989
Grp Volume(v), veh/h	21	0	747	147	200	0	158	0	0	232	0	0
Grp Sat Flow(s),veh/h/ln	1774	0	1854	1774	1863	0	1103	0	0	1675	0	0
Q Serve(g_s), s	0.4	0.0	0.0	2.7	0.0	0.0	1.8	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.4	0.0	0.0	2.7	0.0	0.0	16.2	0.0	0.0	14.4	0.0	0.0
Prop In Lane	1.00		0.03	1.00		0.00	0.40		0.20	0.09		0.59
Lane Grp Cap(c), veh/h	863	0	1223	607	1263	0	241	0	0	332	0	0
V/C Ratio(X)	0.02	0.00	0.61	0.24	0.16	0.00	0.66	0.00	0.00	0.70	0.00	0.00
Avail Cap(c_a), veh/h	914	0	1223	691	1263	0	344	0	0	447	0	0
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.93	0.93	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	6.0	0.0	0.0	4.0	0.0	0.0	43.0	0.0	0.0	42.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	2.3	0.2	0.2	0.0	3.0	0.0	0.0	3.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.2	0.0	0.8	0.9	0.1	0.0	4.5	0.0	0.0	6.5	0.0	0.0
Lane Grp Delay (d), s/veh	6.0	0.0	2.3	4.2	0.2	0.0	46.0	0.0	0.0	45.9	0.0	0.0
Lane Grp LOS	A		A	A	A		D			D		
Approach Vol, veh/h		768			347			158			232	
Approach Delay, s/veh		2.4			1.9			46.0			45.9	
Approach LOS		A			A			D			D	

Timer												
Assigned Phs	1	6		5	2			4			8	
Phs Duration (G+Y+Rc), s	4.9	76.0		7.8	79.0			25.3			25.3	
Change Period (Y+Rc), s	3.0	5.0		3.0	5.0			6.0			6.0	
Max Green Setting (Gmax), s	5.0	69.0		10.0	74.0			27.0			27.0	
Max Q Clear Time (g_c+I1), s	2.4	2.0		4.7	2.0			18.2			16.4	
Green Ext Time (p_c), s	0.0	5.0		0.2	5.0			1.1			1.2	

Intersection Summary	
HCM 2010 Ctrl Delay	13.6
HCM 2010 LOS	B

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	40	740	30	40	260	30	30	1130	80	60	1400	20
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	186.3	186.3	190.0	186.3	186.3	190.0	186.3	186.3	190.0	186.3	186.3	190.0
Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Cap, veh/h	498	730	30	118	673	79	107	1354	96	148	1483	21
Arrive On Green	0.05	0.82	0.82	0.05	0.82	0.82	0.02	0.39	0.39	0.07	0.81	0.79
Sat Flow, veh/h	1774	1777	73	1774	1638	191	1774	3440	243	1774	3664	52
Grp Volume(v), veh/h	42	0	811	42	0	306	32	643	630	63	749	746
Grp Sat Flow(s),veh/h/ln	1774	0	1850	1774	0	1829	1774	1863	1820	1774	1863	1854
Q Serve(g_s), s	1.6	0.0	48.0	1.6	0.0	5.2	1.3	37.4	37.5	2.5	45.7	46.0
Cycle Q Clear(g_c), s	1.6	0.0	48.0	1.6	0.0	5.2	1.3	37.4	37.5	2.5	45.7	46.0
Prop In Lane	1.00		0.04	1.00		0.10	1.00		0.13	1.00		0.03
Lane Grp Cap(c), veh/h	498	0	760	118	0	751	107	733	716	148	754	750
V/C Ratio(X)	0.08	0.00	1.07	0.36	0.00	0.41	0.30	0.88	0.88	0.42	0.99	0.99
Avail Cap(c_a), veh/h	529	0	760	149	0	751	144	733	716	165	754	750
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	0.73	0.00	0.73	0.98	0.00	0.98	1.00	1.00	1.00	0.35	0.35	0.35
Uniform Delay (d), s/veh	18.6	0.0	10.4	27.9	0.0	6.6	29.4	32.8	32.9	26.2	11.0	11.0
Incr Delay (d2), s/veh	0.1	0.0	47.7	1.8	0.0	1.6	1.5	14.0	14.4	0.7	17.8	18.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.7	0.0	17.9	0.7	0.0	2.0	0.6	20.2	19.9	1.1	12.5	12.6
Lane Grp Delay (d), s/veh	18.7	0.0	58.1	29.6	0.0	8.2	30.9	46.8	47.4	26.9	28.7	29.2
Lane Grp LOS	B		F	C		A	C	D	D	C	C	C
Approach Vol, veh/h		853			348			1305			1558	
Approach Delay, s/veh		56.2			10.8			46.7			28.9	
Approach LOS		E			B			D			C	

Timer												
Assigned Phs	1	6		5	2		7	4		3	8	
Phs Duration (G+Y+Rc), s	6.0	53.0		6.0	53.0		5.6	51.0		6.9	52.3	
Change Period (Y+Rc), s	3.0	5.0		3.0	5.0		3.0	6.0		3.0	6.0	
Max Green Setting (Gmax), s	5.0	48.0		5.0	48.0		5.0	45.0		5.0	45.3	
Max Q Clear Time (g_c+I1), s	3.6	50.0		3.6	7.2		3.3	39.5		4.5	48.0	
Green Ext Time (p_c), s	0.0	0.0		0.0	6.3		0.0	4.4		0.0	0.0	

Intersection Summary	
HCM 2010 Ctrl Delay	38.8
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	40	880	330	0	30	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	12	11	12	12	11	12
Total Lost time (s)	2.0	4.0	5.0		4.3	
Lane Util. Factor	1.00	1.00	1.00		1.00	
Frt	1.00	1.00	1.00		0.93	
Flt Protected	0.95	1.00	1.00		0.98	
Satd. Flow (prot)	1770	1801	1900		1654	
Flt Permitted	0.54	1.00	1.00		0.98	
Satd. Flow (perm)	1002	1801	1900		1654	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	42	926	347	0	32	32
RTOR Reduction (vph)	0	0	0	0	30	0
Lane Group Flow (vph)	42	926	347	0	34	0
Heavy Vehicles (%)	2%	2%	0%	0%	2%	0%
Turn Type	pm+pt	NA	NA		NA	
Protected Phases	1	6	2		8	
Permitted Phases	6					
Actuated Green, G (s)	104.0	104.0	96.2		6.7	
Effective Green, g (s)	105.0	105.0	96.2		6.7	
Actuated g/C Ratio	0.88	0.88	0.80		0.06	
Clearance Time (s)	3.0	5.0	5.0		4.3	
Vehicle Extension (s)	3.0	3.0	3.0		2.5	
Lane Grp Cap (vph)	913	1575	1523		92	
v/s Ratio Prot	0.00	c0.51	0.18		c0.02	
v/s Ratio Perm	0.04					
v/c Ratio	0.05	0.59	0.23		0.37	
Uniform Delay, d1	1.0	1.9	2.9		54.6	
Progression Factor	0.37	1.24	1.08		1.00	
Incremental Delay, d2	0.0	0.4	0.3		1.8	
Delay (s)	0.4	2.8	3.5		56.4	
Level of Service	A	A	A		E	
Approach Delay (s)		2.7	3.5		56.4	
Approach LOS		A	A		E	

Intersection Summary			
HCM 2000 Control Delay	5.4	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	11.3
Intersection Capacity Utilization	56.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	40	920	40	40	230	40	60	90	30	60	110	30
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	186.3	186.3	190.0	190.0	190.0	190.0	190.0	195.0	190.0	190.0	194.3	190.0
Lanes	1	1	0	1	1	0	0	1	0	0	1	0
Cap, veh/h	806	1217	53	491	1070	186	118	170	50	113	187	46
Arrive On Green	0.07	1.00	1.00	0.03	0.68	0.68	0.19	0.20	0.19	0.40	0.40	0.38
Sat Flow, veh/h	1774	1772	77	1810	1578	274	383	844	249	364	930	231
Grp Volume(v), veh/h	42	0	1010	42	0	284	190	0	0	211	0	0
Grp Sat Flow(s),veh/h/ln	1774	0	1849	1810	0	1852	1476	0	0	1524	0	0
Q Serve(g_s), s	0.8	0.0	0.0	0.8	0.0	6.9	0.4	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.8	0.0	0.0	0.8	0.0	6.9	15.0	0.0	0.0	14.5	0.0	0.0
Prop In Lane	1.00		0.04	1.00		0.15	0.33		0.17	0.30		0.15
Lane Grp Cap(c), veh/h	806	0	1269	491	0	1255	325	0	0	346	0	0
V/C Ratio(X)	0.05	0.00	0.80	0.09	0.00	0.23	0.59	0.00	0.00	0.61	0.00	0.00
Avail Cap(c_a), veh/h	836	0	1269	522	0	1255	325	0	0	346	0	0
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	0.80	0.00	0.80	1.00	0.00	1.00	1.00	0.00	0.00	0.73	0.00	0.00
Uniform Delay (d), s/veh	4.8	0.0	0.0	5.3	0.0	7.2	43.3	0.0	0.0	32.2	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	4.2	0.1	0.0	0.4	7.5	0.0	0.0	5.8	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.3	0.0	1.5	0.3	0.0	3.0	6.1	0.0	0.0	5.2	0.0	0.0
Lane Grp Delay (d), s/veh	4.8	0.0	4.2	5.4	0.0	7.6	50.8	0.0	0.0	37.9	0.0	0.0
Lane Grp LOS	A		A	A		A	D			D		
Approach Vol, veh/h		1052			326			190			211	
Approach Delay, s/veh		4.2			7.4			50.8			37.9	
Approach LOS		A			A			D			D	

Timer												
Assigned Phs	1	6		5	2			4			8	
Phs Duration (G+Y+Rc), s	6.0	85.0		6.0	85.0			27.0			27.0	
Change Period (Y+Rc), s	3.0	5.0		3.0	5.0			4.3			4.3	
Max Green Setting (Gmax), s	5.0	80.0		5.0	80.0			22.7			22.7	
Max Q Clear Time (g_c+I1), s	2.8	2.0		2.8	8.9			17.0			16.5	
Green Ext Time (p_c), s	0.0	8.9		0.0	8.9			0.7			0.7	

Intersection Summary	
HCM 2010 Ctrl Delay	13.8
HCM 2010 LOS	B

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	80	810	30	40	240	50	30	960	90	110	1350	40
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	186.3	186.3	190.0	190.0	190.0	190.0	186.3	186.3	190.0	186.3	186.3	190.0
Lanes	1	1	0	1	1	0	1	2	0	1	2	1
Cap, veh/h	516	840	32	118	686	144	106	1127	106	172	1359	575
Arrive On Green	0.05	0.47	0.46	0.03	0.45	0.45	0.02	0.34	0.33	0.10	0.73	0.71
Sat Flow, veh/h	1774	1784	67	1810	1524	319	1774	3355	315	1774	3725	1615
Grp Volume(v), veh/h	84	0	885	42	0	306	32	561	545	116	1421	42
Grp Sat Flow(s),veh/h/ln	1774	0	1851	1810	0	1844	1774	1863	1807	1774	1863	1615
Q Serve(g_s), s	2.8	0.0	55.5	1.5	0.0	12.9	1.4	33.7	33.8	4.8	43.0	0.9
Cycle Q Clear(g_c), s	2.8	0.0	55.5	1.5	0.0	12.9	1.4	33.7	33.8	4.8	43.0	0.9
Prop In Lane	1.00		0.04	1.00		0.17	1.00		0.17	1.00		1.00
Lane Grp Cap(c), veh/h	516	0	871	118	0	829	106	626	607	172	1359	575
V/C Ratio(X)	0.16	0.00	1.02	0.36	0.00	0.37	0.30	0.90	0.90	0.67	1.05	0.07
Avail Cap(c_a), veh/h	524	0	871	149	0	829	143	651	632	172	1359	575
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.20	0.20	0.20
Uniform Delay (d), s/veh	14.8	0.0	31.2	28.3	0.0	21.4	31.5	37.2	37.3	27.1	15.9	11.0
Incr Delay (d2), s/veh	0.1	0.0	34.5	1.8	0.0	1.3	1.6	14.9	15.3	2.1	25.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	1.2	0.0	33.8	0.7	0.0	6.2	1.0	18.6	18.2	2.0	17.2	0.4
Lane Grp Delay (d), s/veh	15.0	0.0	65.7	30.1	0.0	22.7	33.1	52.0	52.6	29.2	41.3	11.0
Lane Grp LOS	B		F	C		C	C	D	D	C	F	B
Approach Vol, veh/h		969			348			1138			1579	
Approach Delay, s/veh		61.3			23.5			51.8			39.6	
Approach LOS		E			C			D			D	

Timer												
Assigned Phs	1	6		5	2		7	4		3	8	
Phs Duration (G+Y+Rc), s	7.5	59.5		6.0	58.0		5.6	43.4		9.0	46.8	
Change Period (Y+Rc), s	3.0	5.0		3.0	5.0		3.0	4.8		3.0	4.8	
Max Green Setting (Gmax), s	5.0	53.0		5.0	53.0		5.0	40.2		6.0	41.2	
Max Q Clear Time (g_c+I1), s	4.8	57.5		3.5	14.9		3.4	35.8		6.8	45.0	
Green Ext Time (p_c), s	0.0	0.0		0.0	7.0		0.0	2.8		0.0	0.0	

Intersection Summary	
HCM 2010 Ctrl Delay	46.9
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	80	840	50	30	240	30	50	740	40	60	470	40
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	186.3	186.3	190.0	190.0	190.0	190.0	190.0	186.3	190.0	190.0	186.5	190.0
Lanes	1	1	0	1	1	0	0	2	0	0	2	0
Cap, veh/h	722	957	57	147	875	111	56	651	34	60	522	44
Arrive On Green	0.04	0.55	0.54	0.04	1.00	1.00	0.33	0.34	0.33	0.66	0.68	0.66
Sat Flow, veh/h	1774	1740	104	1810	1654	209	51	1922	101	0	1543	131
Grp Volume(v), veh/h	84	0	937	32	0	285	179	0	695	63	0	537
Grp Sat Flow(s),veh/h/ln	1774	0	1844	1810	0	1863	397	0	1677	0	0	1674
Q Serve(g_s), s	2.3	0.0	55.4	1.0	0.0	0.0	4.9	0.0	40.3	0.0	0.0	34.4
Cycle Q Clear(g_c), s	2.3	0.0	55.4	1.0	0.0	0.0	39.3	0.0	40.3	39.3	0.0	34.4
Prop In Lane	1.00		0.06	1.00		0.11	0.30		0.06	1.00		0.08
Lane Grp Cap(c), veh/h	722	0	1014	147	0	986	170	0	568	60	0	567
V/C Ratio(X)	0.12	0.00	0.92	0.22	0.00	0.29	1.05	0.00	1.22	1.04	0.00	0.95
Avail Cap(c_a), veh/h	736	0	1014	183	0	986	170	0	568	60	0	567
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	0.98	0.00	0.98	1.00	0.00	1.00	0.69	0.00	0.69
Uniform Delay (d), s/veh	9.8	0.0	24.6	24.5	0.0	0.0	41.9	0.0	39.4	39.7	0.0	18.4
Incr Delay (d2), s/veh	0.1	0.0	15.0	0.7	0.0	0.7	83.6	0.0	115.9	108.2	0.0	19.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.9	0.0	29.0	0.5	0.0	0.2	9.2	0.0	35.3	3.5	0.0	13.4
Lane Grp Delay (d), s/veh	9.9	0.0	39.6	25.2	0.0	0.7	125.5	0.0	155.3	147.9	0.0	38.2
Lane Grp LOS	A		D	C		A	F		F	F		D
Approach Vol, veh/h		1021			317			874			600	
Approach Delay, s/veh		37.1			3.2			149.2			49.7	
Approach LOS		D			A			F			D	

Timer												
Assigned Phs	1	6		5	2			4			8	
Phs Duration (G+Y+Rc), s	7.1	69.5		5.6	68.0			44.0			44.0	
Change Period (Y+Rc), s	3.0	5.0		3.0	5.0			4.7			4.7	
Max Green Setting (Gmax), s	5.0	63.0		5.0	63.0			39.3			39.3	
Max Q Clear Time (g_c+I1), s	4.3	57.4		3.0	2.0			42.3			41.3	
Green Ext Time (p_c), s	0.0	3.0		0.0	7.8			0.0			0.0	

Intersection Summary	
HCM 2010 Ctrl Delay	70.8
HCM 2010 LOS	E

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	880	60	30	240	0	0	0	50	30	80	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	10	12	12	12	12	12	11	12	12	11	12
Total Lost time (s)		4.0			4.0				4.3		4.3	
Lane Util. Factor		1.00			1.00				1.00		1.00	
Frt		0.99			1.00				0.86		0.95	
Flt Protected		1.00			0.99				1.00		0.99	
Satd. Flow (prot)		1724			1852				1611		1712	
Flt Permitted		1.00			0.84				1.00		0.99	
Satd. Flow (perm)		1724			1564				1611		1712	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	926	63	32	253	0	0	0	53	32	84	63
RTOR Reduction (vph)	0	2	0	0	0	0	0	0	43	0	16	0
Lane Group Flow (vph)	0	987	0	0	285	0	0	0	10	0	163	0
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	0%	2%	2%	2%	2%	0%
Turn Type		NA		Perm	NA				custom	Perm	NA	
Protected Phases		6			2						8	
Permitted Phases				2					4	8		
Actuated Green, G (s)		89.0			89.0				22.7		22.7	
Effective Green, g (s)		89.0			89.0				22.7		22.7	
Actuated g/C Ratio		0.74			0.74				0.19		0.19	
Clearance Time (s)		4.0			4.0				4.3		4.3	
Vehicle Extension (s)		3.0			3.0				3.0		3.0	
Lane Grp Cap (vph)		1278			1159				304		323	
v/s Ratio Prot		c0.57										
v/s Ratio Perm					0.18				0.01		0.10	
v/c Ratio		0.77			0.25				0.03		0.50	
Uniform Delay, d1		9.4			4.9				39.7		43.6	
Progression Factor		0.37			1.61				1.00		1.00	
Incremental Delay, d2		1.4			0.5				0.2		1.2	
Delay (s)		4.8			8.4				39.9		44.8	
Level of Service		A			A				D		D	
Approach Delay (s)		4.8			8.4			39.9			44.8	
Approach LOS		A			A			D			D	

Intersection Summary			
HCM 2000 Control Delay	11.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.3
Intersection Capacity Utilization	73.3%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	60	770	20	20	220	20	20	380	20	80	250	30
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	186.3	186.3	190.0	186.3	186.3	190.0	190.0	186.3	190.0	190.0	186.3	190.0
Lanes	1	1	0	1	1	0	0	1	0	0	1	0
Cap, veh/h	546	938	24	423	852	77	47	565	29	108	310	35
Arrive On Green	0.06	1.00	1.00	0.01	0.17	0.17	0.35	0.35	0.35	0.69	0.70	0.70
Sat Flow, veh/h	1774	1808	47	1774	1683	152	43	1626	83	205	893	101
Grp Volume(v), veh/h	63	0	832	21	0	253	442	0	0	379	0	0
Grp Sat Flow(s),veh/h/ln	1774	0	1854	1774	0	1836	1752	0	0	1199	0	0
Q Serve(g_s), s	2.0	0.0	0.0	0.7	0.0	14.2	0.0	0.0	0.0	10.3	0.0	0.0
Cycle Q Clear(g_c), s	2.0	0.0	0.0	0.7	0.0	14.2	25.3	0.0	0.0	35.6	0.0	0.0
Prop In Lane	1.00		0.03	1.00		0.08	0.05		0.05	0.22		0.08
Lane Grp Cap(c), veh/h	546	0	962	423	0	930	641	0	0	449	0	0
V/C Ratio(X)	0.12	0.00	0.86	0.05	0.00	0.27	0.69	0.00	0.00	0.84	0.00	0.00
Avail Cap(c_a), veh/h	569	0	962	468	0	930	641	0	0	449	0	0
HCM Platoon Ratio	2.00	2.00	2.00	0.33	0.33	0.33	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	0.59	0.00	0.59	0.94	0.00	0.94	1.00	0.00	0.00	0.54	0.00	0.00
Uniform Delay (d), s/veh	13.1	0.0	0.0	13.8	0.0	30.3	33.2	0.0	0.0	17.4	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	6.4	0.0	0.0	0.7	6.0	0.0	0.0	10.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.8	0.0	1.7	0.3	0.0	7.3	12.5	0.0	0.0	9.8	0.0	0.0
Lane Grp Delay (d), s/veh	13.1	0.0	6.4	13.8	0.0	31.0	39.2	0.0	0.0	27.5	0.0	0.0
Lane Grp LOS	B		A	B		C	D			C		
Approach Vol, veh/h		895			274			442			379	
Approach Delay, s/veh		6.9			29.7			39.2			27.5	
Approach LOS		A			C			D			C	
Timer												
Assigned Phs	1	6		5	2			4			8	
Phs Duration (G+Y+Rc), s	6.5	66.5		5.0	65.0			47.0			47.0	
Change Period (Y+Rc), s	3.0	5.0		3.0	5.0			5.8			5.8	
Max Green Setting (Gmax), s	5.0	60.0		5.0	60.0			41.2			41.2	
Max Q Clear Time (g_c+I1), s	4.0	2.0		2.7	16.2			27.3			37.6	
Green Ext Time (p_c), s	0.0	6.2		0.0	6.2			2.4			1.1	
Intersection Summary												
HCM 2010 Ctrl Delay			21.1									
HCM 2010 LOS			C									
Notes												

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	90	780	0	0	250	30	40	590	40	0	0	0
Number	1	6	16	5	2	12	7	4	14			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow veh/h/ln	186.3	186.3	0.0	0.0	186.3	190.0	190.0	186.3	190.0			
Lanes	1	1	0	0	1	0	0	1	0			
Cap, veh/h	676	1080	0	0	858	104	39	583	39			
Arrive On Green	0.03	0.58	0.00	0.00	1.00	1.00	0.36	0.36	0.36			
Sat Flow, veh/h	1774	1863	0	0	1629	198	109	1619	109			
Grp Volume(v), veh/h	95	821	0	0	0	295	705	0	0			
Grp Sat Flow(s),veh/h/ln	1774	1863	0	0	0	1828	1838	0	0			
Q Serve(g_s), s	3.6	49.7	0.0	0.0	0.0	0.0	54.0	0.0	0.0			
Cycle Q Clear(g_c), s	3.6	49.7	0.0	0.0	0.0	0.0	54.0	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		0.11	0.06		0.06			
Lane Grp Cap(c), veh/h	676	1080	0	0	0	963	662	0	0			
V/C Ratio(X)	0.14	0.76	0.00	0.00	0.00	0.31	1.07	0.00	0.00			
Avail Cap(c_a), veh/h	676	1080	0	0	0	963	662	0	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00			
Upstream Filter(I)	0.34	0.34	0.00	0.00	0.00	0.99	1.00	0.00	0.00			
Uniform Delay (d), s/veh	14.4	23.7	0.0	0.0	0.0	0.0	48.0	0.0	0.0			
Incr Delay (d2), s/veh	0.0	1.7	0.0	0.0	0.0	0.8	53.7	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile Back of Q (50%), veh/ln	1.6	23.3	0.0	0.0	0.0	0.2	35.4	0.0	0.0			
Lane Grp Delay (d), s/veh	14.5	25.4	0.0	0.0	0.0	0.8	101.7	0.0	0.0			
Lane Grp LOS	B	C				A	F					
Approach Vol, veh/h		916			295			705				
Approach Delay, s/veh		24.3			0.8			101.7				
Approach LOS		C			A			F				

Timer					
Assigned Phs	1	6		2		4
Phs Duration (G+Y+Rc), s	8.0	92.0		84.0		58.0
Change Period (Y+Rc), s	3.0	5.0		5.0		4.0
Max Green Setting (Gmax), s	5.0	87.0		79.0		54.0
Max Q Clear Time (g_c+I1), s	5.6	51.7		2.0		56.0
Green Ext Time (p_c), s	0.0	10.1		11.1		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	49.2
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	800	50	780	190	0	0	0	0	620	790	100
Number	1	6	16	5	2	12				3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow veh/h/ln	0.0	167.6	167.6	167.6	167.6	0.0				167.6	167.6	171.0
Lanes	0	1	1	1	1	0				2	2	0
Cap, veh/h	0	659	560	516	1185	0				681	642	81
Arrive On Green	0.00	0.39	0.39	0.49	1.00	0.00				0.07	0.07	0.07
Sat Flow, veh/h	0	1676	1425	1597	1676	0				3097	2919	368
Grp Volume(v), veh/h	0	842	53	821	200	0				653	478	459
Grp Sat Flow(s),veh/h/ln	0	1676	1425	1597	1676	0				1549	1676	1611
Q Serve(g_s), s	0.0	59.0	3.5	44.0	0.0	0.0				31.5	33.0	33.0
Cycle Q Clear(g_c), s	0.0	59.0	3.5	44.0	0.0	0.0				31.5	33.0	33.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		0.23
Lane Grp Cap(c), veh/h	0	659	560	516	1185	0				681	369	355
V/C Ratio(X)	0.00	1.28	0.09	1.59	0.17	0.00				0.96	1.30	1.30
Avail Cap(c_a), veh/h	0	659	560	516	1185	0				681	369	355
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.00				0.33	0.33	0.33
Upstream Filter(I)	0.00	0.41	0.41	1.00	1.00	0.00				0.09	0.09	0.09
Uniform Delay (d), s/veh	0.0	45.5	28.7	32.0	0.0	0.0				68.9	69.6	69.6
Incr Delay (d2), s/veh	0.0	129.5	0.1	274.6	0.3	0.0				4.1	134.8	134.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.0	49.0	1.3	45.6	0.1	0.0				13.7	28.9	27.8
Lane Grp Delay (d), s/veh	0.0	175.0	28.8	306.6	0.3	0.0				73.0	204.4	204.5
Lane Grp LOS		F	C	F	A					E	F	F
Approach Vol, veh/h		895			1021						1590	
Approach Delay, s/veh		166.4			246.6						150.4	
Approach LOS		F			F						F	

Timer												
Assigned Phs		6		5	2						8	
Phs Duration (G+Y+Rc), s		64.0		47.0	111.0						39.0	
Change Period (Y+Rc), s		5.0		3.0	5.0						6.0	
Max Green Setting (Gmax), s		59.0		44.0	106.0						33.0	
Max Q Clear Time (g_c+I1), s		61.0		46.0	2.0						35.0	
Green Ext Time (p_c), s		0.0		0.0	10.7						0.0	

Intersection Summary												
HCM 2010 Ctrl Delay			182.5									
HCM 2010 LOS			F									

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	70	1300	0	0	1170	70	30	330	120	110	0	420
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	167.6	167.6	0.0	0.0	167.6	171.0	167.6	167.6	171.0	171.0	167.6	171.0
Lanes	1	1	0	0	1	0	1	1	0	0	1	0
Cap, veh/h	101	872	0	0	731	44	48	488	177	73	8	199
Arrive On Green	0.04	0.69	0.00	0.00	0.62	0.62	0.42	0.42	0.42	0.42	0.00	0.42
Sat Flow, veh/h	1597	1676	0	0	1566	94	849	1175	427	105	20	479
Grp Volume(v), veh/h	74	1368	0	0	0	1306	32	0	473	558	0	0
Grp Sat Flow(s),veh/h/ln	1597	1676	0	0	0	1660	849	0	1601	605	0	0
Q Serve(g_s), s	3.6	78.0	0.0	0.0	0.0	70.0	0.0	0.0	36.8	25.5	0.0	0.0
Cycle Q Clear(g_c), s	3.6	78.0	0.0	0.0	0.0	70.0	62.3	0.0	36.8	62.3	0.0	0.0
Prop In Lane	1.00		0.00	0.00		0.06	1.00		0.27	0.21		0.79
Lane Grp Cap(c), veh/h	101	872	0	0	0	775	48	0	665	280	0	0
V/C Ratio(X)	0.73	1.57	0.00	0.00	0.00	1.69	0.67	0.00	0.71	1.99	0.00	0.00
Avail Cap(c_a), veh/h	101	872	0	0	0	775	48	0	665	280	0	0
HCM Platoon Ratio	1.33	1.33	1.00	1.00	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	0.00	0.09	1.00	0.00	1.00	0.09	0.00	0.00
Uniform Delay (d), s/veh	35.5	23.1	0.0	0.0	0.0	28.5	75.0	0.0	36.4	56.7	0.0	0.0
Incr Delay (d2), s/veh	23.4	261.7	0.0	0.0	0.0	309.2	54.9	0.0	6.4	446.9	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	2.0	92.3	0.0	0.0	0.0	93.4	2.0	0.0	16.2	45.9	0.0	0.0
Lane Grp Delay (d), s/veh	58.9	284.9	0.0	0.0	0.0	337.7	129.9	0.0	42.7	503.6	0.0	0.0
Lane Grp LOS	E	F				F	F		D	F		
Approach Vol, veh/h		1442			1306			505			558	
Approach Delay, s/veh		273.3			337.7			48.3			503.6	
Approach LOS		F			F			D			F	

Timer												
Assigned Phs	1	6			2			4			8	
Phs Duration (G+Y+Rc), s	8.0	83.0			75.0			67.0			67.0	
Change Period (Y+Rc), s	3.0	5.0			5.0			4.7			4.7	
Max Green Setting (Gmax), s	5.0	78.0			70.0			62.3			62.3	
Max Q Clear Time (g_c+I1), s	5.6	80.0			72.0			64.3			64.3	
Green Ext Time (p_c), s	0.0	0.0			0.0			0.0			0.0	

Intersection Summary												
HCM 2010 Ctrl Delay			299.2									
HCM 2010 LOS			F									

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	220	1200	140	80	1000	50	80	1250	40	60	300	40
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	166.0	166.0	171.0	166.0	166.0	171.0	166.0	166.0	171.0	166.0	166.0	171.0
Lanes	1	1	0	1	1	0	1	2	0	1	1	0
Cap, veh/h	164	789	92	105	784	39	194	890	28	105	390	52
Arrive On Green	0.07	0.54	0.54	0.04	0.67	0.67	0.04	0.28	0.28	0.07	0.54	0.54
Sat Flow, veh/h	1581	1460	170	1581	1567	79	1581	3200	102	1581	1436	191
Grp Volume(v), veh/h	232	0	1410	84	0	1106	84	682	676	63	0	358
Grp Sat Flow(s),veh/h/ln	1581	0	1630	1581	0	1646	1581	1660	1642	1581	0	1627
Q Serve(g_s), s	11.0	0.0	81.0	4.0	0.0	75.0	5.7	41.7	41.7	4.4	0.0	27.0
Cycle Q Clear(g_c), s	11.0	0.0	81.0	4.0	0.0	75.0	5.7	41.7	41.7	4.4	0.0	27.0
Prop In Lane	1.00		0.10	1.00		0.05	1.00		0.06	1.00		0.12
Lane Grp Cap(c), veh/h	164	0	880	105	0	823	194	462	457	105	0	441
V/C Ratio(X)	1.42	0.00	1.60	0.80	0.00	1.34	0.43	1.48	1.48	0.60	0.00	0.81
Avail Cap(c_a), veh/h	164	0	880	105	0	823	194	462	457	105	0	441
HCM Platoon Ratio	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	0.09	0.00	0.09	0.09	0.00	0.09	1.00	1.00	1.00	0.90	0.00	0.90
Uniform Delay (d), s/veh	51.5	0.0	34.5	35.5	0.0	25.1	39.7	54.2	54.2	41.7	0.0	31.2
Incr Delay (d2), s/veh	190.1	0.0	271.3	4.0	0.0	155.4	1.5	226.5	227.7	8.1	0.0	13.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	12.1	0.0	99.1	1.7	0.0	63.4	2.4	47.1	46.8	2.6	0.0	11.3
Lane Grp Delay (d), s/veh	241.6	0.0	305.8	39.5	0.0	180.5	41.2	280.7	281.9	49.8	0.0	44.8
Lane Grp LOS	F		F	D		F	D	F	F	D		D
Approach Vol, veh/h		1642			1190			1442			421	
Approach Delay, s/veh		296.7			170.6			267.3			45.5	
Approach LOS		F			F			F			D	

Timer												
Assigned Phs	1	6		5	2		7	4		3	8	
Phs Duration (G+Y+Rc), s	14.0	86.0		8.0	80.0		9.0	48.0		8.0	47.0	
Change Period (Y+Rc), s	3.0	5.0		3.0	5.0		3.0	6.3		3.0	6.3	
Max Green Setting (Gmax), s	11.0	81.0		5.0	75.0		6.0	41.7		5.0	40.7	
Max Q Clear Time (g_c+I1), s	13.0	83.0		6.0	77.0		7.7	43.7		6.4	29.0	
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0		0.0	0.0		0.0	3.8	

Intersection Summary	
HCM 2010 Ctrl Delay	233.2
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	1150	270	80	1000	0	0	0	0	240	1030	110
Number	1	6	16	5	2	12				3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow veh/h/ln	0.0	166.0	171.0	166.0	166.0	0.0				171.0	166.0	171.0
Lanes	0	1	0	1	1	0				0	2	0
Cap, veh/h	0	754	177	111	1051	0				164	736	82
Arrive On Green	0.00	1.00	1.00	0.07	1.00	0.00				0.10	0.10	0.10
Sat Flow, veh/h	0	1301	305	1581	1660	0				541	2433	272
Grp Volume(v), veh/h	0	0	1495	84	1053	0				764	0	689
Grp Sat Flow(s),veh/h/ln	0	0	1606	1581	1660	0				1633	0	1612
Q Serve(g_s), s	0.0	0.0	82.4	3.2	0.0	0.0				45.4	0.0	45.4
Cycle Q Clear(g_c), s	0.0	0.0	82.4	3.2	0.0	0.0				45.4	0.0	45.4
Prop In Lane	0.00		0.19	1.00		0.00				0.33		0.17
Lane Grp Cap(c), veh/h	0	0	931	111	1051	0				494	0	488
V/C Ratio(X)	0.00	0.00	1.61	0.76	1.00	0.00				1.55	0.00	1.41
Avail Cap(c_a), veh/h	0	0	931	115	1051	0				494	0	488
HCM Platoon Ratio	1.00	2.00	2.00	2.00	2.00	1.00				0.33	0.33	0.33
Upstream Filter(I)	0.00	0.00	0.09	0.72	0.72	0.00				0.09	0.00	0.09
Uniform Delay (d), s/veh	0.0	0.0	0.0	35.9	0.0	0.0				67.5	0.0	67.5
Incr Delay (d2), s/veh	0.0	0.0	273.0	18.1	23.9	0.0				246.7	0.0	186.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.0	0.0	70.6	2.4	7.0	0.0				54.2	0.0	45.3
Lane Grp Delay (d), s/veh	0.0	0.0	273.0	54.0	23.9	0.0				314.2	0.0	253.8
Lane Grp LOS			F	D	F					F		F
Approach Vol, veh/h		1495			1137						1453	
Approach Delay, s/veh		273.0			26.1						285.6	
Approach LOS		F			C						F	

Timer												
Assigned Phs		6		5	2						8	
Phs Duration (G+Y+Rc), s		91.9		8.1	100.0						50.0	
Change Period (Y+Rc), s		5.0		3.0	5.0						4.6	
Max Green Setting (Gmax), s		86.5		5.5	95.0						45.4	
Max Q Clear Time (g_c+I1), s		84.4		5.2	2.0						47.4	
Green Ext Time (p_c), s		2.0		0.0	74.7						0.0	

Intersection Summary												
HCM 2010 Ctrl Delay			208.8									
HCM 2010 LOS			F									

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	180	1330	0	0	1080	70	110	930	50	0	0	0
Number	1	6	16	5	2	12	7	4	14			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow veh/h/ln	166.0	166.0	171.0	0.0	166.0	171.0	166.0	166.0	171.0			
Lanes	1	1	0	0	2	0	1	2	0			
Cap, veh/h	292	1118	0	0	1817	118	415	820	44			
Arrive On Green	0.13	1.00	0.00	0.00	0.59	0.59	0.26	0.26	0.26			
Sat Flow, veh/h	1581	1660	0	0	3084	201	1581	3122	169			
Grp Volume(v), veh/h	189	1400	0	0	612	599	116	521	511			
Grp Sat Flow(s),veh/h/ln	1581	1660	0	0	1660	1625	1581	1660	1630			
Q Serve(g_s), s	7.3	0.0	0.0	0.0	36.0	36.0	8.8	39.4	39.4			
Cycle Q Clear(g_c), s	7.3	0.0	0.0	0.0	36.0	36.0	8.8	39.4	39.4			
Prop In Lane	1.00		0.00	0.00		0.12	1.00		0.10			
Lane Grp Cap(c), veh/h	292	1118	0	0	978	957	415	436	428			
V/C Ratio(X)	0.65	1.25	0.00	0.00	0.63	0.63	0.28	1.19	1.19			
Avail Cap(c_a), veh/h	381	1118	0	0	978	957	415	436	428			
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.09	0.09	0.00	0.00	0.09	0.09	1.00	1.00	1.00			
Uniform Delay (d), s/veh	16.8	0.0	0.0	0.0	20.0	20.1	44.0	55.3	55.3			
Incr Delay (d2), s/veh	0.2	114.3	0.0	0.0	0.3	0.3	0.4	107.8	108.2			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile Back of Q (50%), veh/ln	2.8	35.5	0.0	0.0	14.9	14.6	3.7	30.1	29.6			
Lane Grp Delay (d), s/veh	17.0	114.3	0.0	0.0	20.3	20.3	44.4	163.1	163.5			
Lane Grp LOS	B	F			C	C	D	F	F			
Approach Vol, veh/h		1589			1211			1148				
Approach Delay, s/veh		102.7			20.3			151.3				
Approach LOS		F			C			F				

Timer				
Assigned Phs	1	6	2	4
Phs Duration (G+Y+Rc), s	12.6	106.0	93.4	44.0
Change Period (Y+Rc), s	3.0	5.0	5.0	4.6
Max Green Setting (Gmax), s	18.0	101.0	80.0	39.4
Max Q Clear Time (g_c+I1), s	9.3	2.0	38.0	41.4
Green Ext Time (p_c), s	0.3	68.7	35.4	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	91.6
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	220	1210	90	380	720	310	250	2090	320	540	1260	170
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	166.0	166.0	171.0	166.0	166.0	166.0	166.0	166.0	166.0	166.0	166.0	166.0
Lanes	2	1	0	1	1	1	1	2	1	2	2	1
Cap, veh/h	172	503	37	155	617	524	122	1159	492	236	1159	492
Arrive On Green	0.06	0.33	0.33	0.10	0.37	0.37	0.08	0.35	0.35	0.15	0.70	0.70
Sat Flow, veh/h	3067	1526	114	1581	1660	1411	1581	3320	1411	3067	3320	1411
Grp Volume(v), veh/h	232	0	1369	400	758	326	263	2200	337	568	1326	179
Grp Sat Flow(s),veh/h/ln	1534	0	1640	1581	1660	1411	1581	1660	1411	1534	1660	1411
Q Serve(g_s), s	8.0	0.0	47.0	14.0	53.0	26.9	11.0	49.8	29.1	11.0	49.8	7.3
Cycle Q Clear(g_c), s	8.0	0.0	47.0	14.0	53.0	26.9	11.0	49.8	29.1	11.0	49.8	7.3
Prop In Lane	1.00		0.07	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	172	0	540	155	617	524	122	1159	492	236	1159	492
V/C Ratio(X)	1.35	0.00	2.53	2.58	1.23	0.62	2.16	1.90	0.68	2.40	1.14	0.36
Avail Cap(c_a), veh/h	172	0	540	155	617	524	122	1159	492	236	1159	492
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	0.09	0.00	0.09	1.00	1.00	1.00	1.00	1.00	1.00	0.09	0.09	0.09
Uniform Delay (d), s/veh	67.3	0.0	47.9	64.3	44.8	36.7	65.8	46.4	39.7	60.3	21.5	15.1
Incr Delay (d2), s/veh	160.7	0.0	690.9	728.8	117.0	2.3	547.2	407.6	7.5	632.2	66.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	7.0	0.0	123.5	37.2	42.6	10.0	23.1	86.8	11.5	24.9	25.9	2.1
Lane Grp Delay (d), s/veh	228.0	0.0	738.8	793.2	161.8	38.9	613.1	454.1	47.3	692.5	87.6	15.3
Lane Grp LOS	F		F	F	F	D	F	F	D	F	F	B
Approach Vol, veh/h		1601			1484			2800			2073	
Approach Delay, s/veh		664.8			305.0			420.0			247.1	
Approach LOS		F			F			F			F	

Timer												
Assigned Phs	3	8		7	4		1	6		5	2	
Phs Duration (G+Y+Rc), s	12.0	53.7		18.0	59.7		15.0	56.0		15.0	56.0	
Change Period (Y+Rc), s	4.0	6.7		4.0	6.7		4.0	6.2		4.0	6.2	
Max Green Setting (Gmax), s	8.0	47.0		14.0	50.3		11.0	49.8		11.0	49.8	
Max Q Clear Time (g_c+I1), s	10.0	49.0		16.0	55.0		13.0	51.8		13.0	51.8	
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	

Intersection Summary	
HCM 2010 Ctrl Delay	402.8
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	230	60	130	110	400	170	370	1770	20	30	2050	110
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.7	6.7		6.7	6.7	6.7	3.0	6.2		3.0	6.2	6.2
Lane Util. Factor	0.95	0.95		1.00	1.00	1.00	1.00	0.91		1.00	0.95	1.00
Frt	1.00	0.91		1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85
Flt Protected	0.95	0.99		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1498	1425		1577	1660	1411	1577	4525		1577	3154	1411
Flt Permitted	0.95	0.99		0.61	1.00	1.00	0.08	1.00		0.08	1.00	1.00
Satd. Flow (perm)	1498	1425		1016	1660	1411	131	4525		139	3154	1411
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	242	63	137	116	421	179	389	1863	21	32	2158	116
RTOR Reduction (vph)	0	43	0	0	0	115	0	1	0	0	0	76
Lane Group Flow (vph)	218	181	0	116	421	64	389	1883	0	32	2158	40
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Split	NA		Perm	NA	Perm	pm+pt	NA		pm+pt	NA	Perm
Protected Phases	3	3			4		1	6		5	2	
Permitted Phases				4		4	6			2		2
Actuated Green, G (s)	24.9	24.9		21.7	21.7	21.7	73.8	66.3		52.3	47.8	47.8
Effective Green, g (s)	24.9	24.9		21.7	21.7	21.7	73.8	66.3		52.3	47.8	47.8
Actuated g/C Ratio	0.18	0.18		0.15	0.15	0.15	0.53	0.47		0.37	0.34	0.34
Clearance Time (s)	6.7	6.7		6.7	6.7	6.7	3.0	6.2		3.0	6.2	6.2
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	266	253		157	257	218	306	2142		98	1076	481
v/s Ratio Prot	c0.15	0.13			c0.25		c0.21	0.42		0.01	c0.68	
v/s Ratio Perm				0.11		0.05	0.46			0.11		0.03
v/c Ratio	0.82	0.72		0.74	1.64	0.29	1.27	0.88		0.33	2.01	0.08
Uniform Delay, d1	55.4	54.2		56.4	59.1	52.4	46.1	33.2		29.9	46.1	31.2
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.78	0.48		1.00	1.00	1.00
Incremental Delay, d2	17.6	9.3		16.5	304.1	0.8	124.5	0.5		1.9	455.8	0.3
Delay (s)	73.0	63.5		73.0	363.3	53.1	206.6	16.5		31.8	501.9	31.6
Level of Service	E	E		E	F	D	F	B		C	F	C
Approach Delay (s)		68.2			238.7			49.0			471.7	
Approach LOS		E			F			D			F	

Intersection Summary			
HCM 2000 Control Delay	244.1	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.54		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	22.6
Intersection Capacity Utilization	142.0%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	360	410	0	0	810	150	220	1390	40	0	0	0
Number	1	6	16	5	2	12	7	4	14			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow veh/h/ln	166.0	166.0	0.0	0.0	166.0	171.0	171.0	166.0	166.0			
Lanes	1	1	0	0	1	0	0	2	1			
Cap, veh/h	238	952	0	0	591	109	160	1067	525			
Arrive On Green	0.24	1.00	0.00	0.00	0.43	0.43	0.12	0.12	0.12			
Sat Flow, veh/h	1581	1660	0	0	1363	252	429	2869	1411			
Grp Volume(v), veh/h	379	432	0	0	0	1011	885	810	42			
Grp Sat Flow(s),veh/h/ln	1581	1660	0	0	0	1616	1639	1660	1411			
Q Serve(g_s), s	18.0	0.0	0.0	0.0	0.0	65.0	55.8	55.8	4.0			
Cycle Q Clear(g_c), s	18.0	0.0	0.0	0.0	0.0	65.0	55.8	55.8	4.0			
Prop In Lane	1.00		0.00	0.00		0.16	0.26		1.00			
Lane Grp Cap(c), veh/h	238	952	0	0	0	700	610	618	525			
V/C Ratio(X)	1.59	0.45	0.00	0.00	0.00	1.44	1.45	1.31	0.08			
Avail Cap(c_a), veh/h	238	952	0	0	0	700	610	618	525			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33			
Upstream Filter(I)	0.28	0.28	0.00	0.00	0.00	0.09	0.09	0.09	0.09			
Uniform Delay (d), s/veh	42.1	0.0	0.0	0.0	0.0	42.5	65.8	65.8	43.1			
Incr Delay (d2), s/veh	273.0	0.4	0.0	0.0	0.0	200.6	204.4	141.1	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile Back of Q (50%), veh/ln	21.8	0.1	0.0	0.0	0.0	65.6	59.7	49.6	1.5			
Lane Grp Delay (d), s/veh	315.0	0.4	0.0	0.0	0.0	243.1	270.2	206.9	43.1			
Lane Grp LOS	F	A				F	F	F	D			
Approach Vol, veh/h		811			1011			1737				
Approach Delay, s/veh		147.5			243.1			235.2				
Approach LOS		F			F			F				

Timer												
Assigned Phs	1	6			2			4				
Phs Duration (G+Y+Rc), s	21.0	90.0			69.0			60.0				
Change Period (Y+Rc), s	3.0	4.0			4.0			4.2				
Max Green Setting (Gmax), s	18.0	86.0			65.0			55.8				
Max Q Clear Time (g_c+I1), s	20.0	2.0			67.0			57.8				
Green Ext Time (p_c), s	0.0	19.2			0.0			0.0				

Intersection Summary	
HCM 2010 Ctrl Delay	217.4
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	410	200	140	780	0	0	0	0	300	1350	110
Number	1	6	16	5	2	12				3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow veh/h/ln	0.0	166.0	171.0	166.0	166.0	0.0				166.0	166.0	171.0
Lanes	0	1	0	1	1	0				1	1	0
Cap, veh/h	0	351	172	101	642	0				879	842	69
Arrive On Green	0.00	0.67	0.67	0.07	0.77	0.00				0.56	0.56	0.56
Sat Flow, veh/h	0	1054	515	1581	1660	0				1581	1515	124
Grp Volume(v), veh/h	0	0	643	147	821	0				316	0	1537
Grp Sat Flow(s),veh/h/ln	0	0	1569	1581	1660	0				1581	0	1638
Q Serve(g_s), s	0.0	0.0	50.0	5.0	58.0	0.0				16.6	0.0	83.4
Cycle Q Clear(g_c), s	0.0	0.0	50.0	5.0	58.0	0.0				16.6	0.0	83.4
Prop In Lane	0.00		0.33	1.00		0.00				1.00		0.08
Lane Grp Cap(c), veh/h	0	0	523	101	642	0				879	0	911
V/C Ratio(X)	0.00	0.00	1.23	1.46	1.28	0.00				0.36	0.00	1.69
Avail Cap(c_a), veh/h	0	0	523	101	642	0				879	0	911
HCM Platoon Ratio	1.00	2.00	2.00	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.61	0.09	0.09	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	25.0	45.8	17.0	0.0				18.5	0.0	33.3
Incr Delay (d2), s/veh	0.0	0.0	113.4	211.9	126.7	0.0				0.2	0.0	314.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.0	0.0	32.2	7.7	38.3	0.0				6.6	0.0	113.6
Lane Grp Delay (d), s/veh	0.0	0.0	138.4	257.6	143.7	0.0				18.7	0.0	347.4
Lane Grp LOS			F	F	F					B		F
Approach Vol, veh/h		643			968						1853	
Approach Delay, s/veh		138.4			161.0						291.3	
Approach LOS		F			F						F	

Timer												
Assigned Phs		6		5	2						8	
Phs Duration (G+Y+Rc), s		54.0		8.0	62.0						88.0	
Change Period (Y+Rc), s		4.0		3.0	4.0						4.6	
Max Green Setting (Gmax), s		50.0		5.0	58.0						83.4	
Max Q Clear Time (g_c+I1), s		52.0		7.0	60.0						85.4	
Green Ext Time (p_c), s		0.0		0.0	0.0						0.0	

Intersection Summary												
HCM 2010 Ctrl Delay			226.5									
HCM 2010 LOS			F									

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	210	380	260	40	840	40	90	730	90	80	370	80
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	166.0	166.0	171.0	166.0	166.0	171.0	166.0	166.0	171.0	166.0	166.0	171.0
Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Cap, veh/h	189	526	360	424	798	38	224	705	87	137	630	135
Arrive On Green	0.14	0.96	0.96	0.04	1.00	1.00	0.11	0.49	0.49	0.05	0.24	0.24
Sat Flow, veh/h	1581	919	630	1581	1572	75	1581	2899	358	1581	2653	567
Grp Volume(v), veh/h	221	0	674	42	0	926	95	440	423	84	242	231
Grp Sat Flow(s),veh/h/ln	1581	0	1549	1581	0	1647	1581	1660	1597	1581	1660	1560
Q Serve(g_s), s	13.0	0.0	10.5	1.9	0.0	74.9	6.7	36.4	36.4	6.0	19.5	19.8
Cycle Q Clear(g_c), s	13.0	0.0	10.5	1.9	0.0	74.9	6.7	36.4	36.4	6.0	19.5	19.8
Prop In Lane	1.00		0.41	1.00		0.05	1.00		0.22	1.00		0.36
Lane Grp Cap(c), veh/h	189	0	887	424	0	836	224	404	388	137	394	370
V/C Ratio(X)	1.17	0.00	0.76	0.10	0.00	1.11	0.42	1.09	1.09	0.61	0.61	0.62
Avail Cap(c_a), veh/h	189	0	887	431	0	836	239	404	388	140	394	370
HCM Platoon Ratio	1.67	1.67	1.67	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.00	0.09	0.09	0.00	0.09	0.09	0.09	0.09	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.7	0.0	1.6	16.6	0.0	0.0	38.1	38.5	38.5	44.1	51.0	51.1
Incr Delay (d2), s/veh	80.8	0.0	0.6	0.0	0.0	50.4	0.1	44.7	45.1	7.4	7.0	7.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	11.3	0.0	1.3	0.7	0.0	11.7	2.6	18.6	18.0	3.6	9.2	8.9
Lane Grp Delay (d), s/veh	129.5	0.0	2.2	16.6	0.0	50.4	38.2	83.2	83.6	51.5	57.9	58.8
Lane Grp LOS	F		A	B		F	D	F	F	D	E	E
Approach Vol, veh/h		895			968			958			557	
Approach Delay, s/veh		33.6			48.9			78.9			57.3	
Approach LOS		C			D			E			E	

Timer												
Assigned Phs	1	6		5	2		7	4		3	8	
Phs Duration (G+Y+Rc), s	17.0	89.7		7.3	80.0		12.6	41.0		11.7	40.2	
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0		4.0	4.6		4.0	4.6	
Max Green Setting (Gmax), s	13.0	85.0		4.0	76.0		10.0	36.4		8.0	34.4	
Max Q Clear Time (g_c+I1), s	15.0	12.5		3.9	76.9		8.7	38.4		8.0	21.8	
Green Ext Time (p_c), s	0.0	21.7		0.0	0.0		0.0	0.0		0.0	6.7	

Intersection Summary	
HCM 2010 Ctrl Delay	54.8
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	100	680	170	430	560	120	40	520	90	0	0	0
Number	1	6	16	5	2	12	7	4	14			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow veh/h/ln	166.0	166.0	171.0	166.0	166.0	171.0	166.0	166.0	171.0			
Lanes	1	1	0	1	1	0	1	1	0			
Cap, veh/h	388	564	141	343	787	168	471	411	71			
Arrive On Green	0.07	0.88	0.88	0.37	1.00	1.00	0.30	0.30	0.30			
Sat Flow, veh/h	1581	1283	321	1581	1326	284	1581	1379	239			
Grp Volume(v), veh/h	105	0	895	453	0	715	42	0	642			
Grp Sat Flow(s),veh/h/ln	1581	0	1604	1581	0	1610	1581	0	1618			
Q Serve(g_s), s	5.0	0.0	66.0	28.0	0.0	0.0	2.9	0.0	44.7			
Cycle Q Clear(g_c), s	5.0	0.0	66.0	28.0	0.0	0.0	2.9	0.0	44.7			
Prop In Lane	1.00		0.20	1.00		0.18	1.00		0.15			
Lane Grp Cap(c), veh/h	388	0	706	343	0	955	471	0	482			
V/C Ratio(X)	0.27	0.00	1.27	1.32	0.00	0.75	0.09	0.00	1.33			
Avail Cap(c_a), veh/h	388	0	706	343	0	955	471	0	482			
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	0.00	1.00	0.09	0.00	0.09	0.50	0.00	0.50			
Uniform Delay (d), s/veh	21.6	0.0	9.0	40.7	0.0	0.0	38.0	0.0	52.7			
Incr Delay (d2), s/veh	0.4	0.0	131.8	146.0	0.0	0.5	0.2	0.0	156.4			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile Back of Q (50%), veh/ln	2.2	0.0	32.1	20.1	0.0	0.1	1.2	0.0	39.8			
Lane Grp Delay (d), s/veh	22.0	0.0	140.8	186.7	0.0	0.5	38.2	0.0	209.0			
Lane Grp LOS	C		F	F		A	D		F			
Approach Vol, veh/h		1000			1168			684				
Approach Delay, s/veh		128.4			72.7			198.5				
Approach LOS		F			E			F				
Timer												
Assigned Phs	1	6		5	2			4				
Phs Duration (G+Y+Rc), s	8.0	70.0		31.0	93.0			49.0				
Change Period (Y+Rc), s	3.0	4.0		3.0	4.0			4.3				
Max Green Setting (Gmax), s	5.0	66.0		28.0	89.0			44.7				
Max Q Clear Time (g_c+I1), s	7.0	68.0		30.0	2.0			46.7				
Green Ext Time (p_c), s	0.0	0.0		0.0	22.4			0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			122.4									
HCM 2010 LOS			F									
Notes												

Movement	EBT	EBR	WBL	WBT	SBL	SBT	SBR	SWL2	SWL	SWR
Lane Configurations										
Volume (vph)	890	90	150	490	170	250	20	660	1010	160
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		3.0	4.0		7.0		7.0	7.0	
Lane Util. Factor	1.00		1.00	1.00		0.95		0.97	1.00	
Frt	0.99		1.00	1.00		0.99		1.00	0.98	
Flt Protected	1.00		0.95	1.00		0.98		0.95	0.96	
Satd. Flow (prot)	1656		1593	1676		3104		3090	1574	
Flt Permitted	1.00		0.08	1.00		0.98		0.95	0.96	
Satd. Flow (perm)	1656		131	1676		3104		3090	1574	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	937	95	158	516	179	263	21	695	1063	168
RTOR Reduction (vph)	3	0	0	0	0	3	0	0	0	0
Lane Group Flow (vph)	1029	0	158	516	0	460	0	695	1231	0
Turn Type	NA		pm+pt	NA	Perm	NA		Perm	NA	
Protected Phases	6		5	2		9			8	
Permitted Phases			2		9			8		
Actuated Green, G (s)	48.0		57.0	57.0		21.0		54.0	54.0	
Effective Green, g (s)	48.0		57.0	57.0		21.0		54.0	54.0	
Actuated g/C Ratio	0.32		0.38	0.38		0.14		0.36	0.36	
Clearance Time (s)	4.0		3.0	4.0		7.0		7.0	7.0	
Vehicle Extension (s)	3.0		3.0	3.0		3.0		3.0	3.0	
Lane Grp Cap (vph)	529		108	636		434		1112	566	
v/s Ratio Prot	c0.62		c0.06	0.31					c0.78	
v/s Ratio Perm			0.49			0.15		0.22		
v/c Ratio	1.95		1.46	0.81		1.06		0.62	2.17	
Uniform Delay, d1	51.0		42.3	41.7		64.5		39.6	48.0	
Progression Factor	1.00		1.00	1.00		1.00		1.00	1.00	
Incremental Delay, d2	432.5		251.9	10.8		60.3		1.1	534.5	
Delay (s)	483.5		294.2	52.5		124.8		40.7	582.5	
Level of Service	F		F	D		F		D	F	
Approach Delay (s)	483.5			109.1		124.8			387.0	
Approach LOS	F			F		F			F	

Intersection Summary			
HCM 2000 Control Delay	335.9	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.87		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	21.0
Intersection Capacity Utilization	172.6%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	70	820	20	30	550	20	30	270	20	50	220	20
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	186.3	186.3	190.0	186.3	186.3	190.0	186.3	186.3	190.0	190.0	193.7	190.0
Lanes	1	1	0	1	1	0	1	1	0	0	1	0
Cap, veh/h	394	1015	25	208	1091	40	90	545	40	31	91	7
Arrive On Green	0.00	0.56	0.56	0.03	0.61	0.60	0.04	0.64	0.64	0.28	0.28	0.28
Sat Flow, veh/h	1774	1811	44	1774	1787	65	1774	1714	127	1	330	24
Grp Volume(v), veh/h	74	0	884	32	0	600	32	0	305	306	0	0
Grp Sat Flow(s),veh/h/ln	1774	0	1855	1774	0	1851	1774	0	1840	355	0	0
Q Serve(g_s), s	0.1	0.0	54.3	0.9	0.0	25.3	1.6	0.0	12.2	0.1	0.0	0.0
Cycle Q Clear(g_c), s	0.1	0.0	54.3	0.9	0.0	25.3	1.6	0.0	12.2	37.3	0.0	0.0
Prop In Lane	1.00		0.02	1.00		0.04	1.00		0.07	0.17		0.07
Lane Grp Cap(c), veh/h	394	0	1040	208	0	1130	90	0	585	130	0	0
V/C Ratio(X)	0.19	0.00	0.85	0.15	0.00	0.53	0.36	0.00	0.52	2.35	0.00	0.00
Avail Cap(c_a), veh/h	458	0	1040	236	0	1130	119	0	585	130	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.48	0.00	0.48	0.70	0.00	0.70	1.00	0.00	0.00
Uniform Delay (d), s/veh	24.9	0.0	25.0	23.3	0.0	15.2	35.6	0.0	19.1	38.6	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.0	8.7	0.2	0.0	0.9	1.7	0.0	0.5	632.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	1.6	0.0	27.3	0.5	0.0	11.6	1.1	0.0	4.5	26.3	0.0	0.0
Lane Grp Delay (d), s/veh	25.1	0.0	33.7	23.4	0.0	16.1	37.3	0.0	19.5	671.1	0.0	0.0
Lane Grp LOS	C		C	C		B	D		B	F		
Approach Vol, veh/h		958			632			337			306	
Approach Delay, s/veh		33.1			16.5			21.2			671.1	
Approach LOS		C			B			C			F	

Timer												
Assigned Phs	1	6		5	2		7	4		3	8	
Phs Duration (G+Y+Rc), s	0.0	81.0		5.8	86.8		5.8	48.8		0.0	43.0	
Change Period (Y+Rc), s	3.0	5.0		3.0	5.0		3.0	5.7		3.0	5.7	
Max Green Setting (Gmax), s	5.0	76.0		5.0	76.0		5.0	37.3		5.0	37.3	
Max Q Clear Time (g_c+I1), s	0.0	56.3		2.9	27.3		3.6	14.2		0.0	39.3	
Green Ext Time (p_c), s	0.0	7.7		0.0	9.7		0.0	2.0		0.0	0.0	

Intersection Summary	
HCM 2010 Ctrl Delay	114.0
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	80	750	50	50	500	40	60	640	50	80	740	40
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99
Adj Sat Flow veh/h/ln	184.5	184.5	190.0	184.5	184.5	190.0	190.0	184.5	190.0	190.0	177.1	190.0
Lanes	1	1	0	1	1	0	0	2	0	0	2	0
Cap, veh/h	352	800	54	127	885	71	57	1286	49	57	1243	33
Arrive On Green	0.00	0.47	0.47	0.05	0.70	0.69	0.80	0.81	0.80	0.40	0.41	0.40
Sat Flow, veh/h	1757	1710	115	1757	1686	135	3	1537	121	3	1504	81
Grp Volume(v), veh/h	84	0	842	53	0	568	395	0	395	453	0	453
Grp Sat Flow(s),veh/h/ln	1757	0	1824	1757	0	1821	1486	0	1802	1416	0	1728
Q Serve(g_s), s	0.1	0.0	59.5	1.7	0.0	21.1	0.1	0.0	53.0	0.1	0.0	53.0
Cycle Q Clear(g_c), s	0.1	0.0	59.5	1.7	0.0	21.1	53.0	0.0	53.0	53.0	0.0	53.0
Prop In Lane	1.00		0.06	1.00		0.07	1.00		0.07	1.00		0.05
Lane Grp Cap(c), veh/h	352	0	853	127	0	955	55	0	732	55	0	702
V/C Ratio(X)	0.24	0.00	0.99	0.42	0.00	0.59	7.15	0.00	0.54	8.20	0.00	0.64
Avail Cap(c_a), veh/h	418	0	853	148	0	955	55	0	732	55	0	702
HCM Platoon Ratio	1.00	1.00	1.00	1.33	1.33	1.33	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	0.56	0.00	0.56	1.00	0.00	1.00	0.11	0.00	0.11	1.00	0.00	1.00
Uniform Delay (d), s/veh	29.8	0.0	34.3	30.6	0.0	12.6	38.9	0.0	12.3	65.3	0.0	38.8
Incr Delay (d2), s/veh	0.2	0.0	20.2	2.2	0.0	2.7	2773.7	0.0	0.3	3275.0	0.0	4.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	2.0	0.0	31.9	1.8	0.0	8.8	42.5	0.0	2.7	50.2	0.0	13.0
Lane Grp Delay (d), s/veh	29.9	0.0	54.5	32.7	0.0	15.3	2812.6	0.0	12.7	3340.3	0.0	43.3
Lane Grp LOS	C		D	C		B	F		B	F		D
Approach Vol, veh/h		926			621			790			905	
Approach Delay, s/veh		52.3			16.8			1412.6			1691.8	
Approach LOS		D			B			F			F	

Timer												
Assigned Phs	1	6		5	2		7	4		3	8	
Phs Duration (G+Y+Rc), s	0.0	66.0		6.4	72.4		0.0	58.0		0.0	58.0	
Change Period (Y+Rc), s	3.0	5.0		3.0	5.0		3.0	6.0		3.0	6.0	
Max Green Setting (Gmax), s	5.0	61.0		5.0	61.0		5.0	52.0		5.0	52.0	
Max Q Clear Time (g_c+I1), s	0.0	61.5		3.7	23.1		0.0	55.0		0.0	55.0	
Green Ext Time (p_c), s	0.0	0.0		0.0	8.6		0.0	0.0		0.0	0.0	

Intersection Summary	
HCM 2010 Ctrl Delay	834.6
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	880	60	60	600	0	0	0	0	30	60	30
Number	1	6	16	5	2	12				3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow veh/h/ln	0.0	182.7	190.0	182.7	182.7	0.0				190.0	190.0	190.0
Lanes	0	1	0	1	1	0				0	1	0
Cap, veh/h	0	1212	82	512	1409	0				78	153	78
Arrive On Green	0.00	1.00	1.00	0.07	1.00	0.00				0.17	0.17	0.17
Sat Flow, veh/h	0	1692	115	1740	1827	0				453	892	453
Grp Volume(v), veh/h	0	0	989	63	632	0				127	0	0
Grp Sat Flow(s),veh/h/ln	0	0	1807	1740	1827	0				1797	0	0
Q Serve(g_s), s	0.0	0.0	0.0	1.2	0.0	0.0				8.8	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	1.2	0.0	0.0				8.8	0.0	0.0
Prop In Lane	0.00		0.06	1.00		0.00				0.25		0.25
Lane Grp Cap(c), veh/h	0	0	1295	512	1409	0				308	0	0
V/C Ratio(X)	0.00	0.00	0.76	0.12	0.45	0.00				0.41	0.00	0.00
Avail Cap(c_a), veh/h	0	0	1295	528	1409	0				308	0	0
HCM Platoon Ratio	1.00	2.00	2.00	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.17	0.58	0.58	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	3.7	0.0	0.0				51.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.8	0.1	0.6	0.0				4.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.0	0.0	0.3	0.4	0.2	0.0				4.5	0.0	0.0
Lane Grp Delay (d), s/veh	0.0	0.0	0.8	3.7	0.6	0.0				55.7	0.0	0.0
Lane Grp LOS			A	A	A					E		
Approach Vol, veh/h		989			695						127	
Approach Delay, s/veh		0.8			0.9						55.7	
Approach LOS		A			A						E	

Timer				
Assigned Phs	6	5	2	8
Phs Duration (G+Y+Rc), s	105.3	6.7	112.0	28.0
Change Period (Y+Rc), s	5.0	3.0	5.0	4.0
Max Green Setting (Gmax), s	99.0	5.0	107.0	24.0
Max Q Clear Time (g_c+I1), s	2.0	3.2	2.0	10.8
Green Ext Time (p_c), s	12.3	0.0	12.3	0.3

Intersection Summary	
HCM 2010 Ctrl Delay	4.7
HCM 2010 LOS	A

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	50	750	50	60	500	40	30	810	70	120	1200	50
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	184.5	184.5	190.0	184.5	184.5	190.0	184.5	184.5	190.0	184.5	184.5	190.0
Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Cap, veh/h	420	768	52	123	776	62	120	1194	104	270	1355	57
Arrive On Green	0.04	0.60	0.60	0.07	0.92	0.91	0.06	0.71	0.70	0.06	0.39	0.39
Sat Flow, veh/h	1757	1710	115	1757	1686	135	1757	3348	290	1757	3516	147
Grp Volume(v), veh/h	53	0	842	63	0	568	32	470	457	126	662	654
Grp Sat Flow(s),veh/h/ln	1757	0	1824	1757	0	1821	1757	1845	1793	1757	1845	1819
Q Serve(g_s), s	2.2	0.0	62.0	2.6	0.0	9.2	1.6	20.5	20.6	5.8	47.5	47.6
Cycle Q Clear(g_c), s	2.2	0.0	62.0	2.6	0.0	9.2	1.6	20.5	20.6	5.8	47.5	47.6
Prop In Lane	1.00		0.06	1.00		0.07	1.00		0.16	1.00		0.08
Lane Grp Cap(c), veh/h	420	0	820	123	0	838	120	658	640	270	711	701
V/C Ratio(X)	0.13	0.00	1.03	0.51	0.00	0.68	0.27	0.71	0.71	0.47	0.93	0.93
Avail Cap(c_a), veh/h	437	0	820	133	0	838	148	658	640	286	711	701
HCM Platoon Ratio	1.33	1.33	1.33	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	0.69	0.00	0.69	0.88	0.00	0.88	0.46	0.46	0.46	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.6	0.0	27.7	31.3	0.0	3.4	32.8	15.7	15.8	25.5	40.6	40.7
Incr Delay (d2), s/veh	0.1	0.0	33.2	2.9	0.0	3.9	0.5	3.1	3.2	1.3	20.6	21.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	1.0	0.0	33.5	1.2	0.0	2.6	0.7	7.3	7.2	2.6	26.3	26.1
Lane Grp Delay (d), s/veh	19.7	0.0	60.9	34.3	0.0	7.3	33.3	18.8	19.0	26.7	61.3	61.8
Lane Grp LOS	B		F	C		A	C	B	B	C	E	E
Approach Vol, veh/h		895			631			959			1442	
Approach Delay, s/veh		58.5			10.0			19.4			58.5	
Approach LOS		E			A			B			E	

Timer												
Assigned Phs	1	6		5	2		7	4		3	8	
Phs Duration (G+Y+Rc), s	6.7	67.0		7.2	67.5		5.8	53.0		10.8	57.9	
Change Period (Y+Rc), s	3.0	5.0		3.0	5.0		3.0	4.8		3.0	4.8	
Max Green Setting (Gmax), s	5.0	62.0		5.0	62.0		5.0	48.2		9.0	52.2	
Max Q Clear Time (g_c+I1), s	4.2	64.0		4.6	11.2		3.6	22.6		7.8	49.6	
Green Ext Time (p_c), s	0.0	0.0		0.0	8.9		0.0	2.3		0.0	1.1	

Intersection Summary	
HCM 2010 Ctrl Delay	41.1
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	60	800	40	60	480	40	40	90	30	40	110	30
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	186.3	186.3	190.0	186.3	186.3	190.0	190.0	186.3	190.0	190.0	186.3	190.0
Lanes	1	1	0	1	1	0	0	1	0	0	1	0
Cap, veh/h	714	1251	62	568	1220	101	74	140	42	71	157	39
Arrive On Green	0.06	1.00	1.00	0.07	1.00	1.00	0.05	0.05	0.05	0.15	0.16	0.15
Sat Flow, veh/h	1774	1759	88	1774	1697	141	242	865	259	227	970	242
Grp Volume(v), veh/h	63	0	884	63	0	547	169	0	0	190	0	0
Grp Sat Flow(s),veh/h/ln	1774	0	1847	1774	0	1838	1365	0	0	1439	0	0
Q Serve(g_s), s	1.3	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0
Cycle Q Clear(g_c), s	1.3	0.0	0.0	1.2	0.0	0.0	16.4	0.0	0.0	17.1	0.0	0.0
Prop In Lane	1.00		0.05	1.00		0.08	0.25		0.19	0.22		0.17
Lane Grp Cap(c), veh/h	714	0	1313	568	0	1321	255	0	0	255	0	0
V/C Ratio(X)	0.09	0.00	0.67	0.11	0.00	0.41	0.66	0.00	0.00	0.74	0.00	0.00
Avail Cap(c_a), veh/h	733	0	1313	588	0	1321	369	0	0	372	0	0
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.69	0.00	0.69	0.90	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	4.4	0.0	0.0	3.9	0.0	0.0	58.3	0.0	0.0	52.3	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	2.8	0.1	0.0	0.7	2.0	0.0	0.0	3.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.5	0.0	1.0	0.4	0.0	0.2	6.0	0.0	0.0	6.6	0.0	0.0
Lane Grp Delay (d), s/veh	4.5	0.0	2.8	4.0	0.0	0.7	60.3	0.0	0.0	55.8	0.0	0.0
Lane Grp LOS	A		A	A		A	E			E		
Approach Vol, veh/h		947			610			169			190	
Approach Delay, s/veh		2.9			1.0			60.3			55.8	
Approach LOS		A			A			E			E	
Timer												
Assigned Phs	1	6		5	2			4			8	
Phs Duration (G+Y+Rc), s	6.6	97.0		6.6	97.0			25.8			25.8	
Change Period (Y+Rc), s	3.0	5.0		3.0	5.0			5.9			5.9	
Max Green Setting (Gmax), s	5.0	92.0		5.0	92.0			29.1			29.1	
Max Q Clear Time (g_c+I1), s	3.3	2.0		3.2	2.0			18.4			19.1	
Green Ext Time (p_c), s	0.0	9.4		0.0	9.4			0.8			0.8	
Intersection Summary												
HCM 2010 Ctrl Delay			12.6									
HCM 2010 LOS			B									
Notes												

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	60	650	30	10	480	50	30	990	60	80	1390	120
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	186.3	186.3	190.0	186.3	186.3	190.0	186.3	186.3	190.0	186.3	186.3	190.0
Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Cap, veh/h	225	715	33	146	648	68	86	1482	90	277	1503	129
Arrive On Green	0.06	0.81	0.81	0.02	0.52	0.51	0.03	0.85	0.84	0.04	0.44	0.44
Sat Flow, veh/h	1774	1766	83	1774	1658	174	1774	3478	210	1774	3385	290
Grp Volume(v), veh/h	63	0	716	11	0	558	32	558	547	84	801	788
Grp Sat Flow(s),veh/h/ln	1774	0	1848	1774	0	1832	1774	1863	1826	1774	1863	1812
Q Serve(g_s), s	2.8	0.0	44.7	0.5	0.0	33.8	1.4	15.2	15.3	3.5	57.6	58.7
Cycle Q Clear(g_c), s	2.8	0.0	44.7	0.5	0.0	33.8	1.4	15.2	15.3	3.5	57.6	58.7
Prop In Lane	1.00		0.04	1.00		0.09	1.00		0.12	1.00		0.16
Lane Grp Cap(c), veh/h	225	0	749	146	0	716	86	793	778	277	827	804
V/C Ratio(X)	0.28	0.00	0.96	0.08	0.00	0.78	0.37	0.70	0.70	0.30	0.97	0.98
Avail Cap(c_a), veh/h	234	0	749	193	0	716	114	813	797	286	827	804
HCM Platoon Ratio	2.00	2.00	2.00	1.33	1.33	1.33	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.00	0.09	1.00	0.00	1.00	0.66	0.66	0.66	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.4	0.0	12.0	30.5	0.0	28.2	33.7	7.0	7.0	20.6	37.2	37.6
Incr Delay (d2), s/veh	0.1	0.0	3.9	0.2	0.0	8.2	1.8	1.8	1.8	0.6	24.6	27.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	1.2	0.0	11.2	0.2	0.0	16.4	0.7	3.5	3.5	1.6	32.8	33.0
Lane Grp Delay (d), s/veh	26.5	0.0	15.9	30.7	0.0	36.4	35.4	8.7	8.9	21.3	61.8	64.7
Lane Grp LOS	C		B	C		D	D	A	A	C	E	E
Approach Vol, veh/h		779			569			1137			1673	
Approach Delay, s/veh		16.8			36.3			9.5			61.1	
Approach LOS		B			D			A			E	

Timer												
Assigned Phs	1	6		5	2		7	4		3	8	
Phs Duration (G+Y+Rc), s	7.4	60.6		4.4	57.6		5.8	63.9		8.3	66.4	
Change Period (Y+Rc), s	3.0	5.0		3.0	5.0		3.0	6.5		3.0	6.5	
Max Green Setting (Gmax), s	5.0	52.6		5.0	52.6		5.0	58.9		6.0	59.9	
Max Q Clear Time (g_c+I1), s	4.8	46.7		2.5	35.8		3.4	17.3		5.5	60.7	
Green Ext Time (p_c), s	0.0	3.1		0.0	5.8		0.0	21.5		0.0	0.0	

Intersection Summary	
HCM 2010 Ctrl Delay	35.3
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Volume (veh/h)	20	660	10	230	360	60	40	440	60	60	1230	90
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	186.3	186.3	190.0	186.3	186.3	190.0	186.3	186.3	190.0	186.3	193.7	190.0
Lanes	1	1	0	1	1	0	1	2	0	1	1	0
Cap, veh/h	154	487	8	167	491	82	98	1654	224	480	927	68
Arrive On Green	0.02	0.27	0.27	0.02	0.10	0.10	0.02	0.51	0.51	0.03	0.52	0.52
Sat Flow, veh/h	1774	1829	29	1774	1558	259	1774	3214	435	1774	1783	131
Grp Volume(v), veh/h	21	0	706	242	0	442	42	267	259	63	0	1390
Grp Sat Flow(s),veh/h/ln	1774	0	1858	1774	0	1817	1774	1863	1786	1774	0	1914
Q Serve(g_s), s	1.2	0.0	37.0	9.0	0.0	32.9	1.6	11.3	11.4	2.3	0.0	72.2
Cycle Q Clear(g_c), s	1.2	0.0	37.0	9.0	0.0	32.9	1.6	11.3	11.4	2.3	0.0	72.2
Prop In Lane	1.00		0.02	1.00		0.14	1.00		0.24	1.00		0.07
Lane Grp Cap(c), veh/h	154	0	495	167	0	573	98	959	919	480	0	995
V/C Ratio(X)	0.14	0.00	1.43	1.45	0.00	0.77	0.43	0.28	0.28	0.13	0.00	1.40
Avail Cap(c_a), veh/h	189	0	495	167	0	573	121	959	919	493	0	995
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.49	0.00	0.49	0.55	0.00	0.55	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	38.7	0.0	51.0	40.4	0.0	57.4	33.5	19.1	19.1	15.3	0.0	33.4
Incr Delay (d2), s/veh	0.2	0.0	198.0	220.7	0.0	3.6	2.9	0.7	0.8	0.1	0.0	184.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.6	0.0	44.9	16.5	0.0	17.0	1.6	5.5	5.3	1.0	0.0	85.3
Lane Grp Delay (d), s/veh	38.9	0.0	249.0	261.1	0.0	61.0	36.4	19.8	19.9	15.4	0.0	218.1
Lane Grp LOS	D		F	F		E	D	B	B	B		F
Approach Vol, veh/h		727			684			568			1453	
Approach Delay, s/veh		242.9			131.8			21.1			209.3	
Approach LOS		F			F			C			F	
Timer												
Assigned Phs	1	6		5	2		7	4		3	8	
Phs Duration (G+Y+Rc), s	5.2	42.0		12.0	48.8		6.2	78.0		6.9	78.7	
Change Period (Y+Rc), s	3.0	5.0		3.0	5.0		3.0	6.5		3.0	6.5	
Max Green Setting (Gmax), s	5.0	37.0		9.0	41.0		5.0	71.5		5.0	71.5	
Max Q Clear Time (g_c+I1), s	3.2	39.0		11.0	34.9		3.6	13.4		4.3	74.2	
Green Ext Time (p_c), s	0.0	0.0		0.0	2.8		0.0	13.9		0.0	0.0	
Intersection Summary												
HCM 2010 Ctrl Delay			169.8									
HCM 2010 LOS			F									
Notes												

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	140	0	30	100	260	90	0	1780	320	320	1710	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	9	12	9	11	11	11	12	10	12	12	10	12
Total Lost time (s)	3.9		3.9	3.0	3.0			3.6	4.6	4.6	3.6	
Lane Util. Factor	1.00		1.00	1.00	1.00			0.91	0.91	0.97	0.95	
Frt	1.00		0.85	1.00	0.96			1.00	0.85	1.00	1.00	
Flt Protected	0.95		1.00	0.95	1.00			1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1593		1425	1711	1731			3156	1441	3433	3295	
Flt Permitted	0.54		1.00	0.95	1.00			1.00	1.00	0.95	1.00	
Satd. Flow (perm)	908		1425	1711	1731			3156	1441	3433	3295	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	147	0	32	105	274	95	0	1874	337	337	1800	32
RTOR Reduction (vph)	0	0	27	0	10	0	0	1	91	0	1	0
Lane Group Flow (vph)	147	0	5	105	359	0	0	1907	212	337	1831	0
Turn Type	custom		custom	Perm	NA			NA	Perm	Prot	NA	
Protected Phases			8		4			6		5	2	
Permitted Phases	8			4					6			
Actuated Green, G (s)	18.9		18.9	29.2	29.2			52.4	52.4	11.4	68.4	
Effective Green, g (s)	19.9		19.9	30.2	30.2			53.4	52.4	11.4	69.4	
Actuated g/C Ratio	0.15		0.15	0.23	0.23			0.41	0.40	0.09	0.53	
Clearance Time (s)	4.9		4.9	4.0	4.0			4.6	4.6	4.6	4.6	
Vehicle Extension (s)	2.5		2.5	3.0	3.0			2.5	2.5	3.0	2.5	
Lane Grp Cap (vph)	138		218	397	402			1296	580	301	1759	
v/s Ratio Prot			0.00		c0.21			c0.60		0.10	c0.56	
v/s Ratio Perm	c0.16			0.06					0.15			
v/c Ratio	1.07		0.02	0.26	0.89			1.47	0.37	1.12	1.04	
Uniform Delay, d1	55.1		46.8	40.8	48.3			38.3	27.2	59.3	30.3	
Progression Factor	1.00		1.00	1.00	1.00			0.23	0.01	1.00	1.00	
Incremental Delay, d2	95.1		0.2	0.4	21.3			213.6	0.6	88.0	33.0	
Delay (s)	150.1		47.0	41.2	69.7			222.5	0.9	147.3	63.3	
Level of Service	F		D	D	E			F	A	F	E	
Approach Delay (s)		131.7			63.4			192.1			76.3	
Approach LOS		F			E			F			E	

Intersection Summary			
HCM 2000 Control Delay	128.0	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.22		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	15.1
Intersection Capacity Utilization	102.5%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	80	690	60	100	260	140	250	1840	80	90	1750	190
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	11	12	12	11	12	11	10	12	10	10	12
Total Lost time (s)	6.7	5.7	6.7		5.7	6.7	3.5	5.0		3.5	5.0	5.0
Lane Util. Factor	0.97	1.00	1.00		1.00	1.00	1.00	0.91		1.00	0.91	0.91
Frt	1.00	1.00	0.85		1.00	0.85	1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00		0.99	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3433	1801	1583		1776	1583	1711	4717		1652	3164	1441
Flt Permitted	0.25	1.00	1.00		0.18	1.00	0.07	1.00		0.08	1.00	1.00
Satd. Flow (perm)	903	1801	1583		316	1583	134	4717		132	3164	1441
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	84	726	63	105	274	147	263	1937	84	95	1842	200
RTOR Reduction (vph)	0	0	55	0	0	113	0	3	0	0	0	65
Lane Group Flow (vph)	84	726	8	0	379	34	263	2018	0	95	1842	135
Turn Type	custom	NA	custom	Perm	NA	Perm	pm+pt	NA		pm+pt	NA	Perm
Protected Phases		6			2		7	4		3	8	
Permitted Phases	1		1	2		2	4			8		8
Actuated Green, G (s)	16.0	53.0	16.0		30.3	30.3	62.3	54.3		60.3	53.3	53.3
Effective Green, g (s)	16.0	54.0	16.0		31.3	30.3	61.3	55.3		59.3	54.3	54.3
Actuated g/C Ratio	0.12	0.42	0.12		0.24	0.23	0.47	0.43		0.46	0.42	0.42
Clearance Time (s)	6.7	6.7	6.7		6.7	6.7	3.0	6.0		3.0	6.0	6.0
Vehicle Extension (s)	2.5	2.5	2.5		2.5	2.5	2.0	2.5		3.0	2.5	2.5
Lane Grp Cap (vph)	111	748	194		76	368	154	2006		136	1321	601
v/s Ratio Prot		c0.40					c0.10	0.43		0.03	0.58	
v/s Ratio Perm	0.09		0.00		c1.20	0.02	c0.71			0.28		0.09
v/c Ratio	0.76	0.97	0.04		4.99	0.09	1.71	1.01		0.70	1.39	0.22
Uniform Delay, d1	55.1	37.2	50.2		49.4	39.1	34.5	37.4		29.4	37.9	24.3
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.72	0.61	0.49
Incremental Delay, d2	37.6	26.5	0.4		1823.2	0.5	344.6	21.5		6.6	179.5	0.4
Delay (s)	92.7	63.7	50.6		1872.6	39.6	379.0	58.8		57.3	202.5	12.2
Level of Service	F	E	D		F	D	F	E		E	F	B
Approach Delay (s)		65.5			1360.3			95.7			178.3	
Approach LOS		E			F			F			F	

Intersection Summary			
HCM 2000 Control Delay	235.8	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	2.57		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	20.9
Intersection Capacity Utilization	136.8%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	10	810	10	330	290	0	60	0	20	20	10	130
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	186.3	186.3	190.0	186.3	186.3	190.0	190.0	186.3	190.0	190.0	186.3	190.0
Lanes	1	1	0	1	1	0	0	1	0	0	1	0
Cap, veh/h	809	1276	16	451	1395	0	122	7	27	49	25	185
Arrive On Green	0.01	0.70	0.69	0.12	1.00	0.00	0.13	0.00	0.13	0.13	0.13	0.13
Sat Flow, veh/h	1774	1835	24	1774	1863	0	550	51	200	136	186	1377
Grp Volume(v), veh/h	11	0	864	347	305	0	84	0	0	169	0	0
Grp Sat Flow(s),veh/h/ln	1774	0	1859	1774	1863	0	801	0	0	1699	0	0
Q Serve(g_s), s	0.2	0.0	34.6	5.9	0.0	0.0	2.6	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.2	0.0	34.6	5.9	0.0	0.0	15.0	0.0	0.0	12.5	0.0	0.0
Prop In Lane	1.00		0.01	1.00		0.00	0.75		0.25	0.12		0.81
Lane Grp Cap(c), veh/h	809	0	1293	451	1395	0	156	0	0	259	0	0
V/C Ratio(X)	0.01	0.00	0.67	0.77	0.22	0.00	0.54	0.00	0.00	0.65	0.00	0.00
Avail Cap(c_a), veh/h	859	0	1293	691	1395	0	210	0	0	324	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.26	0.26	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	6.0	0.0	11.3	17.1	0.0	0.0	56.2	0.0	0.0	54.6	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	2.8	0.8	0.1	0.0	2.9	0.0	0.0	3.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.1	0.0	15.6	7.2	0.0	0.0	2.9	0.0	0.0	5.8	0.0	0.0
Lane Grp Delay (d), s/veh	6.0	0.0	14.1	17.8	0.1	0.0	59.1	0.0	0.0	57.8	0.0	0.0
Lane Grp LOS	A		B	B	A		E			E		
Approach Vol, veh/h		875			652			84			169	
Approach Delay, s/veh		14.0			9.5			59.1			57.8	
Approach LOS		B			A			E			E	

Timer												
Assigned Phs	1	6		5	2			4			8	
Phs Duration (G+Y+Rc), s	4.3	95.0		12.3	103.0			23.5			23.5	
Change Period (Y+Rc), s	3.0	5.0		3.0	5.0			6.0			6.0	
Max Green Setting (Gmax), s	5.0	76.0		27.0	98.0			23.0			23.0	
Max Q Clear Time (g_c+I1), s	2.2	36.6		7.9	2.0			17.0			14.5	
Green Ext Time (p_c), s	0.0	6.8		1.4	6.9			0.5			0.6	

Intersection Summary	
HCM 2010 Ctrl Delay	18.6
HCM 2010 LOS	B

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	40	780	20	10	620	80	40	910	40	20	1520	30
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	186.3	186.3	190.0	186.3	186.3	190.0	186.3	186.3	190.0	186.3	186.3	190.0
Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Cap, veh/h	144	778	20	80	675	87	94	1511	66	197	1526	30
Arrive On Green	0.05	0.86	0.86	0.02	0.83	0.83	0.02	0.43	0.42	0.03	0.84	0.82
Sat Flow, veh/h	1774	1808	46	1774	1618	208	1774	3543	155	1774	3640	73
Grp Volume(v), veh/h	42	0	842	11	0	737	42	504	496	21	818	814
Grp Sat Flow(s),veh/h/ln	1774	0	1855	1774	0	1826	1774	1863	1835	1774	1863	1850
Q Serve(g_s), s	1.8	0.0	58.8	0.5	0.0	47.5	1.8	29.1	29.1	0.9	57.3	57.3
Cycle Q Clear(g_c), s	1.8	0.0	58.8	0.5	0.0	47.5	1.8	29.1	29.1	0.9	57.3	57.3
Prop In Lane	1.00		0.02	1.00		0.11	1.00		0.08	1.00		0.04
Lane Grp Cap(c), veh/h	144	0	798	80	0	762	94	794	783	197	781	776
V/C Ratio(X)	0.29	0.00	1.05	0.14	0.00	0.97	0.45	0.63	0.63	0.11	1.05	1.05
Avail Cap(c_a), veh/h	168	0	798	127	0	762	118	794	783	233	781	776
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	0.63	0.00	0.63	0.89	0.00	0.89	1.00	1.00	1.00	0.13	0.13	0.13
Uniform Delay (d), s/veh	29.5	0.0	9.5	33.5	0.0	10.5	33.8	30.8	30.8	25.2	11.0	11.1
Incr Delay (d2), s/veh	0.7	0.0	41.1	0.7	0.0	23.9	3.3	3.8	3.9	0.0	26.4	27.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.8	0.0	16.9	0.2	0.0	14.2	1.6	14.6	14.4	0.4	16.6	16.8
Lane Grp Delay (d), s/veh	30.2	0.0	50.7	34.2	0.0	34.4	37.1	34.6	34.7	25.2	37.4	38.8
Lane Grp LOS	C		F	C		C	D	C	C	C	F	F
Approach Vol, veh/h		884			748			1042			1653	
Approach Delay, s/veh		49.7			34.4			34.8			37.9	
Approach LOS		D			C			C			D	
Timer												
Assigned Phs	1	6		5	2		7	4		3	8	
Phs Duration (G+Y+Rc), s	6.2	63.8		4.4	62.0		6.2	63.3		5.2	62.3	
Change Period (Y+Rc), s	3.0	5.0		3.0	5.0		3.0	6.0		3.0	6.0	
Max Green Setting (Gmax), s	5.0	57.0		5.0	57.0		5.0	56.0		5.0	56.3	
Max Q Clear Time (g_c+I1), s	3.8	60.8		2.5	49.5		3.8	31.1		2.9	59.3	
Green Ext Time (p_c), s	0.0	0.0		0.0	4.6		0.0	12.4		0.0	0.0	
Intersection Summary												
HCM 2010 Ctrl Delay			39.0									
HCM 2010 LOS			D									
Notes												

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	30	820	710	0	20	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	12	11	12	12	11	12
Total Lost time (s)	2.0	4.0	5.0		4.3	
Lane Util. Factor	1.00	1.00	1.00		1.00	
Frt	1.00	1.00	1.00		0.93	
Flt Protected	0.95	1.00	1.00		0.98	
Satd. Flow (prot)	1770	1801	1900		1654	
Flt Permitted	0.34	1.00	1.00		0.98	
Satd. Flow (perm)	638	1801	1900		1654	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	32	863	747	0	21	21
RTOR Reduction (vph)	0	0	0	0	20	0
Lane Group Flow (vph)	32	863	747	0	22	0
Heavy Vehicles (%)	2%	2%	0%	0%	2%	0%
Turn Type	pm+pt	NA	NA		NA	
Protected Phases	1	6	2		8	
Permitted Phases	6					
Actuated Green, G (s)	124.6	124.6	118.1		6.1	
Effective Green, g (s)	125.6	125.6	118.1		6.1	
Actuated g/C Ratio	0.90	0.90	0.84		0.04	
Clearance Time (s)	3.0	5.0	5.0		4.3	
Vehicle Extension (s)	3.0	3.0	3.0		2.5	
Lane Grp Cap (vph)	608	1615	1602		72	
v/s Ratio Prot	0.00	c0.48	0.39		c0.01	
v/s Ratio Perm	0.05					
v/c Ratio	0.05	0.53	0.47		0.30	
Uniform Delay, d1	1.3	1.4	2.8		64.9	
Progression Factor	0.20	1.97	1.14		1.00	
Incremental Delay, d2	0.0	0.1	0.8		1.7	
Delay (s)	0.3	2.9	4.0		66.6	
Level of Service	A	A	A		E	
Approach Delay (s)		2.8	4.0		66.6	
Approach LOS		A	A		E	

Intersection Summary			
HCM 2000 Control Delay	4.9	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	11.3
Intersection Capacity Utilization	53.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	60	780	40	60	690	40	40	90	30	40	110	30
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	186.3	186.3	190.0	190.0	190.0	190.0	190.0	194.7	190.0	190.0	194.4	190.0
Lanes	1	1	0	1	1	0	0	1	0	0	1	0
Cap, veh/h	460	1242	64	555	1245	72	86	190	57	84	213	54
Arrive On Green	0.07	1.00	1.00	0.03	0.70	0.70	0.19	0.19	0.19	0.06	0.06	0.06
Sat Flow, veh/h	1774	1757	90	1810	1779	103	281	985	296	272	1105	279
Grp Volume(v), veh/h	63	0	863	63	0	768	169	0	0	190	0	0
Grp Sat Flow(s),veh/h/ln	1774	0	1847	1810	0	1882	1561	0	0	1656	0	0
Q Serve(g_s), s	1.3	0.0	0.0	1.4	0.0	28.7	0.0	0.0	0.0	1.7	0.0	0.0
Cycle Q Clear(g_c), s	1.3	0.0	0.0	1.4	0.0	28.7	14.1	0.0	0.0	15.9	0.0	0.0
Prop In Lane	1.00		0.05	1.00		0.05	0.25		0.19	0.22		0.17
Lane Grp Cap(c), veh/h	460	0	1305	555	0	1317	322	0	0	351	0	0
V/C Ratio(X)	0.14	0.00	0.66	0.11	0.00	0.58	0.53	0.00	0.00	0.54	0.00	0.00
Avail Cap(c_a), veh/h	477	0	1305	573	0	1317	322	0	0	351	0	0
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	0.84	0.00	0.84	1.00	0.00	1.00	1.00	0.00	0.00	0.70	0.00	0.00
Uniform Delay (d), s/veh	7.8	0.0	0.0	5.4	0.0	10.6	50.4	0.0	0.0	59.5	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	2.2	0.1	0.0	1.9	6.0	0.0	0.0	4.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.5	0.0	0.8	0.6	0.0	13.3	6.2	0.0	0.0	7.4	0.0	0.0
Lane Grp Delay (d), s/veh	7.9	0.0	2.2	5.5	0.0	12.5	56.5	0.0	0.0	63.6	0.0	0.0
Lane Grp LOS	A		A	A		B	E			E		
Approach Vol, veh/h		926			831			169			190	
Approach Delay, s/veh		2.6			11.9			56.5			63.6	
Approach LOS		A			B			E			E	

Timer												
Assigned Phs	1	6		5	2			4			8	
Phs Duration (G+Y+Rc), s	6.6	102.0		6.6	102.0			30.0			30.0	
Change Period (Y+Rc), s	3.0	5.0		3.0	5.0			4.3			4.3	
Max Green Setting (Gmax), s	5.0	97.0		5.0	97.0			25.7			25.7	
Max Q Clear Time (g_c+I1), s	3.3	2.0		3.4	30.7			16.1			17.9	
Green Ext Time (p_c), s	0.0	11.8		0.0	11.7			0.8			0.7	

Intersection Summary			
HCM 2010 Ctrl Delay			16.1
HCM 2010 LOS			B

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	40	780	30	80	660	50	50	830	50	70	1050	80
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	186.3	186.3	190.0	190.0	190.0	190.0	186.3	186.3	190.0	186.3	186.3	190.0
Lanes	1	1	0	1	1	0	1	2	0	1	2	1
Cap, veh/h	247	904	35	169	893	68	136	1109	67	168	1212	514
Arrive On Green	0.03	0.51	0.50	0.04	0.51	0.51	0.03	0.32	0.31	0.07	0.65	0.64
Sat Flow, veh/h	1774	1781	69	1810	1744	133	1774	3477	211	1774	3725	1615
Grp Volume(v), veh/h	42	0	853	84	0	748	53	468	459	74	1105	84
Grp Sat Flow(s),veh/h/ln	1774	0	1850	1810	0	1877	1774	1863	1826	1774	1863	1615
Q Serve(g_s), s	1.5	0.0	57.2	3.0	0.0	44.0	2.8	31.1	31.1	3.8	34.6	2.9
Cycle Q Clear(g_c), s	1.5	0.0	57.2	3.0	0.0	44.0	2.8	31.1	31.1	3.8	34.6	2.9
Prop In Lane	1.00		0.04	1.00		0.07	1.00		0.12	1.00		1.00
Lane Grp Cap(c), veh/h	247	0	940	169	0	961	136	594	582	168	1212	514
V/C Ratio(X)	0.17	0.00	0.91	0.50	0.00	0.78	0.39	0.79	0.79	0.44	0.91	0.16
Avail Cap(c_a), veh/h	271	0	940	172	0	961	148	647	634	168	1294	549
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.18	0.18	0.18
Uniform Delay (d), s/veh	21.8	0.0	30.6	29.2	0.0	26.9	35.1	42.1	42.2	32.5	22.0	17.4
Incr Delay (d2), s/veh	0.3	0.0	14.1	2.3	0.0	6.2	1.8	6.0	6.1	0.3	2.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.7	0.0	30.0	1.5	0.0	22.2	1.3	15.8	15.5	1.7	12.9	0.0
Lane Grp Delay (d), s/veh	22.2	0.0	44.7	31.5	0.0	33.1	36.9	48.1	48.3	32.8	24.0	17.4
Lane Grp LOS	C		D	C		C	D	D	D	C	C	B
Approach Vol, veh/h		895			832			980			1263	
Approach Delay, s/veh		43.6			32.9			47.6			24.1	
Approach LOS		D			C			D			C	
Timer												
Assigned Phs	1	6		5	2		7	4		3	8	
Phs Duration (G+Y+Rc), s	6.2	73.0		7.8	74.6		7.1	47.1		8.0	48.0	
Change Period (Y+Rc), s	3.0	5.0		3.0	5.0		3.0	4.8		3.0	4.8	
Max Green Setting (Gmax), s	5.0	68.0		5.0	68.0		5.0	46.2		5.0	46.2	
Max Q Clear Time (g_c+I1), s	3.5	59.2		5.0	46.0		4.8	33.1		5.8	36.6	
Green Ext Time (p_c), s	0.0	5.2		0.0	8.9		0.0	8.3		0.0	6.6	
Intersection Summary												
HCM 2010 Ctrl Delay			36.1									
HCM 2010 LOS			D									
Notes												

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	60	780	30	70	680	50	90	690	30	60	730	50
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	186.3	186.3	190.0	190.0	190.0	190.0	190.0	186.3	190.0	190.0	186.5	190.0
Lanes	1	1	0	1	1	0	0	2	0	0	2	0
Cap, veh/h	352	841	33	122	820	61	52	673	30	52	655	45
Arrive On Green	0.04	0.47	0.47	0.07	0.94	0.94	0.41	0.42	0.41	0.82	0.83	0.82
Sat Flow, veh/h	1774	1781	69	1810	1748	129	0	1612	71	0	1570	108
Grp Volume(v), veh/h	63	0	853	74	0	769	95	0	758	63	0	821
Grp Sat Flow(s),veh/h/ln	1774	0	1850	1810	0	1877	0	0	1683	0	0	1678
Q Serve(g_s), s	2.5	0.0	63.0	3.0	0.0	19.4	0.0	0.0	58.3	0.0	0.0	58.3
Cycle Q Clear(g_c), s	2.5	0.0	63.0	3.0	0.0	19.4	57.3	0.0	58.3	57.3	0.0	58.3
Prop In Lane	1.00		0.04	1.00		0.07	1.00		0.04	1.00		0.06
Lane Grp Cap(c), veh/h	352	0	874	122	0	881	52	0	702	52	0	700
V/C Ratio(X)	0.18	0.00	0.98	0.61	0.00	0.87	1.84	0.00	1.08	1.22	0.00	1.17
Avail Cap(c_a), veh/h	363	0	874	126	0	881	52	0	702	52	0	700
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	0.69	0.00	0.69	1.00	0.00	1.00	0.18	0.00	0.18
Uniform Delay (d), s/veh	18.8	0.0	36.1	32.1	0.0	2.9	69.6	0.0	40.7	41.1	0.0	11.6
Incr Delay (d2), s/veh	0.2	0.0	25.1	5.4	0.0	8.4	444.6	0.0	57.5	127.7	0.0	80.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	1.1	0.0	35.5	2.8	0.0	3.8	8.3	0.0	36.2	3.6	0.0	26.5
Lane Grp Delay (d), s/veh	19.1	0.0	61.2	37.5	0.0	11.3	514.2	0.0	98.2	168.9	0.0	92.3
Lane Grp LOS	B		E	D		B	F		F	F		F
Approach Vol, veh/h		916			843			853			884	
Approach Delay, s/veh		58.3			13.6			144.5			97.8	
Approach LOS		E			B			F			F	

Timer												
Assigned Phs	1	6		5	2			4			8	
Phs Duration (G+Y+Rc), s	7.1	70.0		7.7	70.6			62.0			62.0	
Change Period (Y+Rc), s	3.0	5.0		3.0	5.0			4.7			4.7	
Max Green Setting (Gmax), s	5.0	65.0		5.0	65.0			57.3			57.3	
Max Q Clear Time (g_c+I1), s	4.5	65.0		5.0	21.4			60.3			60.3	
Green Ext Time (p_c), s	0.0	0.0		0.0	11.1			0.0			0.0	

Intersection Summary	
HCM 2010 Ctrl Delay	78.5
HCM 2010 LOS	E

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	810	60	50	800	0	0	0	30	50	80	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	10	12	12	12	12	12	11	12	12	11	12
Total Lost time (s)		5.0			5.0				4.3		4.3	
Lane Util. Factor		1.00			1.00				1.00		1.00	
Frt		0.99			1.00				0.86		1.00	
Flt Protected		1.00			1.00				1.00		0.98	
Satd. Flow (prot)		1722			1857				1611		1766	
Flt Permitted		1.00			0.90				1.00		0.98	
Satd. Flow (perm)		1722			1670				1611		1766	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	853	63	53	842	0	0	0	32	53	84	0
RTOR Reduction (vph)	0	1	0	0	0	0	0	0	28	0	0	0
Lane Group Flow (vph)	0	915	0	0	895	0	0	0	4	0	137	0
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	0%	2%	2%	2%	2%	0%
Turn Type		NA		pm+pt	NA				custom	Perm	NA	
Protected Phases		6		5	2						8	
Permitted Phases				2					4	8		
Actuated Green, G (s)		111.7			111.7				19.0		19.0	
Effective Green, g (s)		111.7			111.7				19.0		19.0	
Actuated g/C Ratio		0.80			0.80				0.14		0.14	
Clearance Time (s)		5.0			5.0				4.3		4.3	
Vehicle Extension (s)		3.0			3.0				3.0		3.0	
Lane Grp Cap (vph)		1373			1332				218		239	
v/s Ratio Prot		0.53										
v/s Ratio Perm					c0.54				0.00		0.08	
v/c Ratio		0.67			0.67				0.02		0.57	
Uniform Delay, d1		6.1			6.2				52.4		56.7	
Progression Factor		0.51			0.77				1.00		1.00	
Incremental Delay, d2		0.2			1.0				0.2		3.3	
Delay (s)		3.3			5.8				52.6		60.0	
Level of Service		A			A				D		E	
Approach Delay (s)		3.3			5.8			52.6			60.0	
Approach LOS		A			A			D			E	

Intersection Summary			
HCM 2000 Control Delay	9.2	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	12.3
Intersection Capacity Utilization	97.8%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	50	750	20	40	700	30	40	260	10	40	200	30
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	186.3	186.3	190.0	186.3	186.3	190.0	190.0	186.3	190.0	190.0	186.3	190.0
Lanes	1	1	0	1	1	0	0	1	0	0	1	0
Cap, veh/h	509	1073	29	490	1049	46	74	424	16	74	345	49
Arrive On Green	0.05	1.00	1.00	0.05	1.00	1.00	0.28	0.28	0.28	0.56	0.57	0.57
Sat Flow, veh/h	1774	1806	48	1774	1772	77	158	1497	58	157	1219	174
Grp Volume(v), veh/h	53	0	810	42	0	769	327	0	0	285	0	0
Grp Sat Flow(s),veh/h/ln	1774	0	1854	1774	0	1849	1712	0	0	1551	0	0
Q Serve(g_s), s	1.6	0.0	0.0	1.3	0.0	0.0	6.3	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.6	0.0	0.0	1.3	0.0	0.0	23.4	0.0	0.0	17.1	0.0	0.0
Prop In Lane	1.00		0.03	1.00		0.04	0.13		0.03	0.15		0.11
Lane Grp Cap(c), veh/h	509	0	1102	490	0	1095	514	0	0	463	0	0
V/C Ratio(X)	0.10	0.00	0.74	0.09	0.00	0.70	0.64	0.00	0.00	0.62	0.00	0.00
Avail Cap(c_a), veh/h	529	0	1102	513	0	1095	514	0	0	463	0	0
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	0.72	0.00	0.72	0.16	0.00	0.16	1.00	0.00	0.00	0.54	0.00	0.00
Uniform Delay (d), s/veh	10.1	0.0	0.0	10.2	0.0	0.0	43.7	0.0	0.0	24.8	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	3.2	0.0	0.0	0.6	5.9	0.0	0.0	3.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.7	0.0	1.0	0.5	0.0	0.2	11.2	0.0	0.0	5.7	0.0	0.0
Lane Grp Delay (d), s/veh	10.1	0.0	3.2	10.3	0.0	0.6	49.6	0.0	0.0	28.0	0.0	0.0
Lane Grp LOS	B		A	B		A	D			C		
Approach Vol, veh/h		863			811			327			285	
Approach Delay, s/veh		3.6			1.1			49.6			28.0	
Approach LOS		A			A			D			C	

Timer												
Assigned Phs	1	6		5	2			4			8	
Phs Duration (G+Y+Rc), s	6.5	87.3		6.2	87.0			45.0			45.0	
Change Period (Y+Rc), s	3.0	5.0		3.0	5.0			5.8			5.8	
Max Green Setting (Gmax), s	5.0	82.0		5.0	82.0			39.2			39.2	
Max Q Clear Time (g_c+I1), s	3.6	2.0		3.3	2.0			25.4			19.1	
Green Ext Time (p_c), s	0.0	10.9		0.0	10.9			1.7			1.9	

Intersection Summary	
HCM 2010 Ctrl Delay	12.4
HCM 2010 LOS	B

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	50	740	0	0	830	30	40	600	40	0	0	0
Number	1	6	16	5	2	12	7	4	14			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow veh/h/ln	186.3	186.3	190.0	0.0	186.3	190.0	190.0	186.3	190.0			
Lanes	1	1	0	0	1	0	0	1	0			
Cap, veh/h	411	1056	0	0	933	34	40	606	40			
Arrive On Green	0.02	0.57	0.00	0.00	1.00	1.00	0.37	0.37	0.37			
Sat Flow, veh/h	1774	1863	0	0	1786	65	108	1623	108			
Grp Volume(v), veh/h	53	779	0	0	0	906	716	0	0			
Grp Sat Flow(s),veh/h/ln	1774	1863	0	0	0	1851	1838	0	0			
Q Serve(g_s), s	2.0	46.7	0.0	0.0	0.0	0.0	56.0	0.0	0.0			
Cycle Q Clear(g_c), s	2.0	46.7	0.0	0.0	0.0	0.0	56.0	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		0.04	0.06		0.06			
Lane Grp Cap(c), veh/h	411	1056	0	0	0	968	686	0	0			
V/C Ratio(X)	0.13	0.74	0.00	0.00	0.00	0.94	1.04	0.00	0.00			
Avail Cap(c_a), veh/h	428	1056	0	0	0	968	686	0	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00			
Upstream Filter(I)	0.53	0.53	0.00	0.00	0.00	0.70	1.00	0.00	0.00			
Uniform Delay (d), s/veh	15.0	24.2	0.0	0.0	0.0	0.0	47.0	0.0	0.0			
Incr Delay (d2), s/veh	0.1	2.5	0.0	0.0	0.0	13.1	46.1	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile Back of Q (50%), veh/ln	0.9	22.2	0.0	0.0	0.0	3.5	35.1	0.0	0.0			
Lane Grp Delay (d), s/veh	15.1	26.7	0.0	0.0	0.0	13.1	93.1	0.0	0.0			
Lane Grp LOS	B	C				B	F					
Approach Vol, veh/h		832			906			716				
Approach Delay, s/veh		26.0			13.1			93.1				
Approach LOS		C			B			F				
Timer												
Assigned Phs	1	6			2			4				
Phs Duration (G+Y+Rc), s	6.6	90.0			83.4			60.0				
Change Period (Y+Rc), s	3.0	5.0			5.0			4.0				
Max Green Setting (Gmax), s	5.0	85.0			77.0			56.0				
Max Q Clear Time (g_c+I1), s	4.0	48.7			2.0			58.0				
Green Ext Time (p_c), s	0.0	18.2			23.4			0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			40.8									
HCM 2010 LOS			D									
Notes												

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	770	70	580	690	0	0	0	0	580	510	260
Number	1	6	16	5	2	12				3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow veh/h/ln	0.0	167.6	167.6	167.6	167.6	0.0				167.6	167.6	171.0
Lanes	0	1	1	1	1	0				2	2	0
Cap, veh/h	0	922	783	249	1090	0				855	579	294
Arrive On Green	0.00	0.55	0.55	0.16	1.00	0.00				0.09	0.09	0.09
Sat Flow, veh/h	0	1676	1425	1597	1676	0				3097	2097	1067
Grp Volume(v), veh/h	0	811	74	611	726	0				611	429	382
Grp Sat Flow(s),veh/h/ln	0	1676	1425	1597	1676	0				1549	1676	1488
Q Serve(g_s), s	0.0	62.9	3.7	12.0	0.0	0.0				28.6	37.9	38.0
Cycle Q Clear(g_c), s	0.0	62.9	3.7	12.0	0.0	0.0				28.6	37.9	38.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		0.72
Lane Grp Cap(c), veh/h	0	922	783	249	1090	0				855	462	411
V/C Ratio(X)	0.00	0.88	0.09	2.46	0.67	0.00				0.72	0.93	0.93
Avail Cap(c_a), veh/h	0	922	783	249	1090	0				872	472	419
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	1.00				0.33	0.33	0.33
Upstream Filter(I)	0.00	0.56	0.56	1.00	1.00	0.00				0.09	0.09	0.09
Uniform Delay (d), s/veh	0.0	29.3	15.9	31.2	0.0	0.0				62.1	66.3	66.4
Incr Delay (d2), s/veh	0.0	7.1	0.1	667.5	3.2	0.0				0.2	3.4	3.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.0	28.4	1.3	51.0	1.0	0.0				12.1	17.8	15.9
Lane Grp Delay (d), s/veh	0.0	36.4	16.1	698.7	3.2	0.0				62.3	69.7	70.3
Lane Grp LOS		D	B	F	A					E	E	E
Approach Vol, veh/h		885			1337						1422	
Approach Delay, s/veh		34.7			321.0						66.7	
Approach LOS		C			F						E	

Timer												
Assigned Phs		6		5	2						8	
Phs Duration (G+Y+Rc), s		87.0		15.0	102.0						47.1	
Change Period (Y+Rc), s		5.0		3.0	5.0						6.0	
Max Green Setting (Gmax), s		82.0		12.0	97.0						42.0	
Max Q Clear Time (g_c+I1), s		64.9		14.0	2.0						40.0	
Green Ext Time (p_c), s		10.5		0.0	19.9						1.1	

Intersection Summary			
HCM 2010 Ctrl Delay		152.2	
HCM 2010 LOS		F	

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	100	1330	0	0	1590	170	60	450	60	180	0	420
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	167.6	167.6	0.0	0.0	167.6	171.0	167.6	167.6	171.0	171.0	167.6	171.0
Lanes	1	1	0	0	1	0	1	1	0	0	1	0
Cap, veh/h	101	838	0	0	665	71	48	631	84	86	2	134
Arrive On Green	0.04	0.67	0.00	0.00	0.45	0.45	0.44	0.44	0.44	0.44	0.00	0.44
Sat Flow, veh/h	1597	1676	0	0	1489	159	849	1450	193	126	5	308
Grp Volume(v), veh/h	105	1400	0	0	0	1853	63	0	537	631	0	0
Grp Sat Flow(s),veh/h/ln	1597	1676	0	0	0	1648	849	0	1642	440	0	0
Q Serve(g_s), s	5.0	75.0	0.0	0.0	0.0	67.0	0.0	0.0	41.1	24.2	0.0	0.0
Cycle Q Clear(g_c), s	5.0	75.0	0.0	0.0	0.0	67.0	65.3	0.0	41.1	65.3	0.0	0.0
Prop In Lane	1.00		0.00	0.00		0.10	1.00		0.12	0.30		0.70
Lane Grp Cap(c), veh/h	101	838	0	0	0	736	48	0	715	223	0	0
V/C Ratio(X)	1.04	1.67	0.00	0.00	0.00	2.52	1.31	0.00	0.75	2.83	0.00	0.00
Avail Cap(c_a), veh/h	101	838	0	0	0	736	48	0	715	223	0	0
HCM Platoon Ratio	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	0.00	0.09	1.00	0.00	1.00	0.09	0.00	0.00
Uniform Delay (d), s/veh	37.4	25.1	0.0	0.0	0.0	41.5	75.0	0.0	35.5	62.7	0.0	0.0
Incr Delay (d2), s/veh	99.9	306.8	0.0	0.0	0.0	682.9	234.9	0.0	7.1	825.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	4.8	99.9	0.0	0.0	0.0	167.7	5.0	0.0	18.6	59.9	0.0	0.0
Lane Grp Delay (d), s/veh	137.3	332.0	0.0	0.0	0.0	724.4	309.9	0.0	42.7	888.0	0.0	0.0
Lane Grp LOS	F	F				F	F		D	F		
Approach Vol, veh/h		1505			1853			600			631	
Approach Delay, s/veh		318.4			724.4			70.7			888.0	
Approach LOS		F			F			E			F	

Timer					
Assigned Phs	1	6	2	4	8
Phs Duration (G+Y+Rc), s	8.0	80.0	72.0	70.0	70.0
Change Period (Y+Rc), s	3.0	5.0	5.0	4.7	4.7
Max Green Setting (Gmax), s	5.0	75.0	67.0	65.3	65.3
Max Q Clear Time (g_c+I1), s	7.0	77.0	69.0	67.3	67.3
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	528.3
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	140	1200	150	60	1360	60	130	890	30	60	480	110
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	166.0	166.0	171.0	166.0	166.0	171.0	166.0	166.0	171.0	166.0	166.0	171.0
Lanes	1	1	0	1	1	0	1	2	0	1	1	0
Cap, veh/h	101	828	104	97	894	39	110	802	27	108	328	75
Arrive On Green	0.03	0.57	0.57	0.03	0.57	0.57	0.03	0.25	0.25	0.07	0.50	0.50
Sat Flow, veh/h	1581	1447	181	1581	1578	69	1581	3192	109	1581	1307	300
Grp Volume(v), veh/h	147	0	1421	63	0	1495	137	487	482	63	0	621
Grp Sat Flow(s),veh/h/ln	1581	0	1628	1581	0	1648	1581	1660	1641	1581	0	1607
Q Serve(g_s), s	5.0	0.0	85.8	2.5	0.0	85.0	5.0	37.7	37.7	4.5	0.0	37.7
Cycle Q Clear(g_c), s	5.0	0.0	85.8	2.5	0.0	85.0	5.0	37.7	37.7	4.5	0.0	37.7
Prop In Lane	1.00		0.11	1.00		0.04	1.00		0.07	1.00		0.19
Lane Grp Cap(c), veh/h	101	0	931	97	0	934	110	417	412	108	0	404
V/C Ratio(X)	1.46	0.00	1.53	0.65	0.00	1.60	1.24	1.17	1.17	0.59	0.00	1.54
Avail Cap(c_a), veh/h	101	0	931	105	0	934	110	417	412	108	0	404
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	0.09	0.00	0.09	0.09	0.00	0.09	1.00	1.00	1.00	0.76	0.00	0.76
Uniform Delay (d), s/veh	43.1	0.0	32.1	36.8	0.0	32.5	55.7	56.2	56.2	43.1	0.0	37.3
Incr Delay (d2), s/veh	211.9	0.0	237.1	1.2	0.0	270.9	164.8	98.6	98.8	6.1	0.0	251.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	9.9	0.0	96.3	1.4	0.0	104.8	5.0	27.8	27.5	2.6	0.0	41.8
Lane Grp Delay (d), s/veh	255.0	0.0	269.2	38.0	0.0	303.4	220.5	154.7	154.9	49.1	0.0	288.4
Lane Grp LOS	F		F	D		F	F	F	F	D		F
Approach Vol, veh/h		1568			1558			1106			684	
Approach Delay, s/veh		267.8			292.6			163.0			266.3	
Approach LOS		F			F			F			F	

Timer												
Assigned Phs	1	6		5	2		7	4		3	8	
Phs Duration (G+Y+Rc), s	8.0	90.8		7.2	90.0		8.0	44.0		8.0	44.0	
Change Period (Y+Rc), s	3.0	5.0		3.0	5.0		3.0	6.3		3.0	6.3	
Max Green Setting (Gmax), s	5.0	85.0		5.0	85.0		5.0	37.7		5.0	37.7	
Max Q Clear Time (g_c+I1), s	7.0	87.8		4.5	87.0		7.0	39.7		6.5	39.7	
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	

Intersection Summary	
HCM 2010 Ctrl Delay	251.9
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	1150	150	200	1310	0	0	0	0	140	1260	160
Number	1	6	16	5	2	12				3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow veh/h/ln	0.0	166.0	171.0	166.0	166.0	0.0				171.0	166.0	171.0
Lanes	0	1	0	1	1	0				0	2	0
Cap, veh/h	0	748	98	153	1007	0				92	863	114
Arrive On Green	0.00	0.69	0.69	0.09	0.81	0.00				0.11	0.11	0.11
Sat Flow, veh/h	0	1439	188	1581	1660	0				280	2619	346
Grp Volume(v), veh/h	0	0	1369	211	1379	0				866	0	775
Grp Sat Flow(s),veh/h/ln	0	0	1627	1581	1660	0				1646	0	1599
Q Serve(g_s), s	0.0	0.0	78.0	10.0	91.0	0.0				49.4	0.0	49.4
Cycle Q Clear(g_c), s	0.0	0.0	78.0	10.0	91.0	0.0				49.4	0.0	49.4
Prop In Lane	0.00		0.12	1.00		0.00				0.17		0.22
Lane Grp Cap(c), veh/h	0	0	846	153	1007	0				542	0	527
V/C Ratio(X)	0.00	0.00	1.62	1.38	1.37	0.00				1.60	0.00	1.47
Avail Cap(c_a), veh/h	0	0	846	153	1007	0				542	0	527
HCM Platoon Ratio	1.00	1.33	1.33	1.33	1.33	1.00				0.33	0.33	0.33
Upstream Filter(I)	0.00	0.00	0.09	0.09	0.09	0.00				0.09	0.00	0.09
Uniform Delay (d), s/veh	0.0	0.0	23.1	48.0	14.5	0.0				66.8	0.0	66.8
Incr Delay (d2), s/veh	0.0	0.0	278.6	172.7	166.7	0.0				269.2	0.0	213.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.0	0.0	93.5	10.4	74.8	0.0				62.8	0.0	52.9
Lane Grp Delay (d), s/veh	0.0	0.0	301.8	220.7	181.2	0.0				336.0	0.0	280.5
Lane Grp LOS			F	F	F					F		F
Approach Vol, veh/h		1369			1590						1641	
Approach Delay, s/veh		301.8			186.4						309.8	
Approach LOS		F			F						F	

Timer												
Assigned Phs		6		5	2						8	
Phs Duration (G+Y+Rc), s		83.0		13.0	96.0						54.0	
Change Period (Y+Rc), s		5.0		3.0	5.0						4.6	
Max Green Setting (Gmax), s		78.0		10.0	91.0						49.4	
Max Q Clear Time (g_c+I1), s		80.0		12.0	93.0						51.4	
Green Ext Time (p_c), s		0.0		0.0	0.0						0.0	

Intersection Summary												
HCM 2010 Ctrl Delay			264.8									
HCM 2010 LOS			F									

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	320	980	0	0	1200	210	310	1320	30	0	0	0
Number	1	6	16	5	2	12	7	4	14			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow veh/h/ln	166.0	166.0	171.0	0.0	166.0	171.0	166.0	166.0	171.0			
Lanes	1	1	0	0	2	0	1	2	0			
Cap, veh/h	269	952	0	0	1140	198	573	1172	27			
Arrive On Green	0.28	1.00	0.00	0.00	0.41	0.41	0.36	0.36	0.36			
Sat Flow, veh/h	1581	1660	0	0	2758	478	1581	3233	74			
Grp Volume(v), veh/h	337	1032	0	0	756	728	326	713	708			
Grp Sat Flow(s),veh/h/ln	1581	1660	0	0	1660	1576	1581	1660	1647			
Q Serve(g_s), s	21.0	0.0	0.0	0.0	62.0	62.0	24.8	54.4	54.4			
Cycle Q Clear(g_c), s	21.0	0.0	0.0	0.0	62.0	62.0	24.8	54.4	54.4			
Prop In Lane	1.00		0.00	0.00		0.30	1.00		0.05			
Lane Grp Cap(c), veh/h	269	952	0	0	686	651	573	602	597			
V/C Ratio(X)	1.25	1.08	0.00	0.00	1.10	1.12	0.57	1.18	1.19			
Avail Cap(c_a), veh/h	269	952	0	0	686	651	573	602	597			
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.09	0.09	0.00	0.00	0.09	0.09	1.00	1.00	1.00			
Uniform Delay (d), s/veh	40.5	0.0	0.0	0.0	44.0	44.0	38.4	47.8	47.8			
Incr Delay (d2), s/veh	115.9	40.0	0.0	0.0	48.3	55.2	1.3	98.8	99.7			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile Back of Q (50%), veh/ln	13.1	10.6	0.0	0.0	35.5	34.9	10.4	39.8	39.6			
Lane Grp Delay (d), s/veh	156.5	40.0	0.0	0.0	92.3	99.2	39.7	146.6	147.5			
Lane Grp LOS	F	F			F	F	D	F	F			
Approach Vol, veh/h		1369			1484			1747				
Approach Delay, s/veh		68.6			95.7			127.0				
Approach LOS		E			F			F				
Timer												
Assigned Phs	1	6			2			4				
Phs Duration (G+Y+Rc), s	24.0	91.0			67.0			59.0				
Change Period (Y+Rc), s	3.0	5.0			5.0			4.6				
Max Green Setting (Gmax), s	21.0	86.0			62.0			54.4				
Max Q Clear Time (g_c+I1), s	23.0	2.0			64.0			56.4				
Green Ext Time (p_c), s	0.0	49.0			0.0			0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			99.5									
HCM 2010 LOS			F									
Notes												

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	90	910	90	460	660	280	500	1710	280	490	1700	160
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	166.0	166.0	171.0	166.0	166.0	166.0	166.0	166.0	166.0	166.0	166.0	166.0
Lanes	2	1	0	1	1	1	1	2	1	2	2	1
Cap, veh/h	86	438	43	199	652	554	211	1182	502	236	996	423
Arrive On Green	0.03	0.29	0.29	0.13	0.39	0.39	0.13	0.36	0.36	0.10	0.40	0.40
Sat Flow, veh/h	3067	1487	147	1581	1660	1411	1581	3320	1411	3067	3320	1411
Grp Volume(v), veh/h	95	0	1053	484	695	295	526	1800	295	516	1789	168
Grp Sat Flow(s),veh/h/ln	1534	0	1634	1581	1660	1411	1581	1660	1411	1534	1660	1411
Q Serve(g_s), s	4.0	0.0	42.0	18.0	56.0	22.9	19.0	50.8	24.3	11.0	42.8	12.1
Cycle Q Clear(g_c), s	4.0	0.0	42.0	18.0	56.0	22.9	19.0	50.8	24.3	11.0	42.8	12.1
Prop In Lane	1.00		0.09	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	86	0	481	199	652	554	211	1182	502	236	996	423
V/C Ratio(X)	1.10	0.00	2.19	2.43	1.07	0.53	2.50	1.52	0.59	2.18	1.80	0.40
Avail Cap(c_a), veh/h	86	0	481	199	652	554	211	1182	502	236	996	423
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33
Upstream Filter(I)	0.09	0.00	0.09	1.00	1.00	1.00	1.00	1.00	1.00	0.09	0.09	0.09
Uniform Delay (d), s/veh	69.3	0.0	50.4	62.3	43.3	33.3	61.8	45.9	37.4	64.0	42.9	33.7
Incr Delay (d2), s/veh	62.2	0.0	535.8	657.0	54.4	1.0	688.3	239.6	5.0	533.3	358.7	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	2.3	0.0	89.4	43.8	33.6	8.4	48.1	60.8	9.5	21.8	67.2	4.2
Lane Grp Delay (d), s/veh	131.6	0.0	586.2	719.4	97.8	34.3	750.2	285.6	42.4	597.3	401.6	33.9
Lane Grp LOS	F		F	F	F	C	F	F	D	F	F	C
Approach Vol, veh/h		1148			1474			2621			2473	
Approach Delay, s/veh		548.5			289.2			351.4			417.5	
Approach LOS		F			F			F			F	

Timer												
Assigned Phs	3	8		7	4		1	6		5	2	
Phs Duration (G+Y+Rc), s	8.0	48.7		22.0	62.7		23.0	57.0		15.0	49.0	
Change Period (Y+Rc), s	4.0	6.7		4.0	6.7		4.0	6.2		4.0	6.2	
Max Green Setting (Gmax), s	4.0	42.0		18.0	53.3		19.0	50.8		11.0	42.8	
Max Q Clear Time (g_c+I1), s	6.0	44.0		20.0	58.0		21.0	52.8		13.0	44.8	
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	

Intersection Summary	
HCM 2010 Ctrl Delay	390.0
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	430	560	250	50	0	50	0	950	270	220	1510	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	6.7		6.7		6.2		3.0	6.2	
Lane Util. Factor	0.95	0.95	1.00	1.00		1.00		0.91		1.00	0.95	
Frt	1.00	1.00	0.85	1.00		0.85		0.97		1.00	1.00	
Flt Protected	0.95	1.00	1.00	0.95		1.00		1.00		0.95	1.00	
Satd. Flow (prot)	1498	1572	1411	1577		1411		4382		1577	3154	
Flt Permitted	0.95	1.00	1.00	0.41		1.00		1.00		0.12	1.00	
Satd. Flow (perm)	1498	1572	1411	683		1411		4382		203	3154	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	453	589	263	53	0	53	0	1000	284	232	1589	0
RTOR Reduction (vph)	0	0	100	0	0	48	0	34	0	0	0	0
Lane Group Flow (vph)	408	634	163	53	0	5	0	1250	0	232	1589	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Split	NA	Perm	custom		custom		NA		pm+pt	NA	
Protected Phases	3	3						6		5	2	
Permitted Phases			3	4		4				2		
Actuated Green, G (s)	31.0	31.0	31.0	12.5		12.5		59.9		78.6	78.6	
Effective Green, g (s)	31.0	31.0	31.0	12.5		12.5		59.9		78.6	78.6	
Actuated g/C Ratio	0.22	0.22	0.22	0.09		0.09		0.43		0.56	0.56	
Clearance Time (s)	5.0	5.0	5.0	6.7		6.7		6.2		3.0	6.2	
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0		3.0		3.0	3.0	
Lane Grp Cap (vph)	331	348	312	60		125		1874		268	1770	
v/s Ratio Prot	0.27	c0.40						0.29		0.10	c0.50	
v/s Ratio Perm			0.12	c0.08		0.00				0.39		
v/c Ratio	1.23	1.82	0.52	0.88		0.04		0.67		0.87	0.90	
Uniform Delay, d1	54.5	54.5	48.0	63.0		58.3		32.1		26.5	27.1	
Progression Factor	1.00	1.00	1.00	1.00		1.00		0.37		1.00	1.00	
Incremental Delay, d2	128.2	381.0	1.6	75.4		0.1		1.3		24.0	7.7	
Delay (s)	182.7	435.5	49.6	138.4		58.4		13.1		50.6	34.8	
Level of Service	F	F	D	F		E		B		D	C	
Approach Delay (s)		278.7			98.4			13.1			36.8	
Approach LOS		F			F			B			D	

Intersection Summary			
HCM 2000 Control Delay	101.4	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.16		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	20.9
Intersection Capacity Utilization	95.1%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	270	1190	0	0	0	0	0	720	80	0	0	0
Number	1	6	16				7	4	14			
Initial Q (Qb), veh	0	0	0				0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00			
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00			
Adj Sat Flow veh/h/ln	171.0	166.0	0.0				0.0	166.0	166.0			
Lanes	0	2	0				0	2	1			
Cap, veh/h	62	998	0				0	864	367			
Arrive On Green	0.22	0.22	0.00				0.00	0.26	0.26			
Sat Flow, veh/h	0	1511	0				0	3320	1411			
Grp Volume(v), veh/h	284	1253	0				0	758	84			
Grp Sat Flow(s),veh/h/ln	0	1511	0				0	1660	1411			
Q Serve(g_s), s	0.0	77.0	0.0				0.0	25.5	5.5			
Cycle Q Clear(g_c), s	77.0	77.0	0.0				0.0	25.5	5.5			
Prop In Lane	1.00		0.00				0.00		1.00			
Lane Grp Cap(c), veh/h	62	998	0				0	864	367			
V/C Ratio(X)	4.60	1.26	0.00				0.00	0.88	0.23			
Avail Cap(c_a), veh/h	62	998	0				0	963	409			
HCM Platoon Ratio	0.33	0.33	1.00				1.00	1.00	1.00			
Upstream Filter(I)	0.10	0.10	0.00				0.00	0.43	0.43			
Uniform Delay (d), s/veh	84.1	45.6	0.0				0.0	41.3	33.9			
Incr Delay (d2), s/veh	1622.1	115.7	0.0				0.0	3.9	0.1			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0			
%ile Back of Q (50%), veh/ln	29.8	63.9	0.0				0.0	11.3	2.0			
Lane Grp Delay (d), s/veh	1706.2	161.3	0.0				0.0	45.2	34.0			
Lane Grp LOS	F	F						D	C			
Approach Vol, veh/h		1537						842				
Approach Delay, s/veh		446.7						44.1				
Approach LOS		F						D				

Timer	
Assigned Phs	6
Phs Duration (G+Y+Rc), s	82.0
Change Period (Y+Rc), s	5.0
Max Green Setting (Gmax), s	77.0
Max Q Clear Time (g_c+I1), s	79.0
Green Ext Time (p_c), s	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	304.2
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1160	440	0	0	0	0	0	0	370	600	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0								4.6	4.6	
Lane Util. Factor		0.95								0.95	0.95	
Frt		0.96								1.00	1.00	
Flt Protected		1.00								0.95	1.00	
Satd. Flow (prot)		3024								1498	1573	
Flt Permitted		1.00								0.95	1.00	
Satd. Flow (perm)		3024								1498	1573	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	1221	463	0	0	0	0	0	0	389	632	0
RTOR Reduction (vph)	0	33	0	0	0	0	0	0	0	24	10	0
Lane Group Flow (vph)	0	1651	0	0	0	0	0	0	0	326	661	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type		NA								Perm	NA	
Protected Phases		6									8	
Permitted Phases										8		
Actuated Green, G (s)		60.0								50.4	50.4	
Effective Green, g (s)		60.0								50.4	50.4	
Actuated g/C Ratio		0.50								0.42	0.42	
Clearance Time (s)		5.0								4.6	4.6	
Vehicle Extension (s)		3.0								3.0	3.0	
Lane Grp Cap (vph)		1512								629	660	
v/s Ratio Prot		c0.55										
v/s Ratio Perm										0.22	0.42	
v/c Ratio		1.09								0.52	1.00	
Uniform Delay, d1		30.0								25.8	34.8	
Progression Factor		0.66								1.00	1.00	
Incremental Delay, d2		42.6								0.7	35.2	
Delay (s)		62.3								26.5	70.0	
Level of Service		E								C	E	
Approach Delay (s)		62.3			0.0			0.0			55.1	
Approach LOS		E			A			A			E	

Intersection Summary			
HCM 2000 Control Delay	59.6	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.05		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	9.6
Intersection Capacity Utilization	94.3%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	460	1290	210	0	0	0	0	670	60	100	230	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	171.0	166.0	171.0				0.0	166.0	171.0	166.0	166.0	0.0
Lanes	0	2	0				0	2	0	1	2	0
Cap, veh/h	412	1209	203				0	802	72	183	1173	0
Arrive On Green	0.19	0.19	0.19				0.00	0.27	0.27	0.06	0.35	0.00
Sat Flow, veh/h	728	2134	359				0	3005	268	1581	3320	0
Grp Volume(v), veh/h	1080	0	983				0	389	379	105	242	0
Grp Sat Flow(s),veh/h/ln	1624	0	1597				0	1660	1613	1581	1660	0
Q Serve(g_s), s	68.0	0.0	68.0				0.0	27.0	27.0	5.6	6.1	0.0
Cycle Q Clear(g_c), s	68.0	0.0	68.0				0.0	27.0	27.0	5.6	6.1	0.0
Prop In Lane	0.45		0.22				0.00		0.17	1.00		0.00
Lane Grp Cap(c), veh/h	920	0	905				0	443	430	183	1173	0
V/C Ratio(X)	1.17	0.00	1.09				0.00	0.88	0.88	0.57	0.21	0.00
Avail Cap(c_a), veh/h	920	0	905				0	443	430	205	1173	0
HCM Platoon Ratio	0.33	0.33	0.33				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.00	0.09				0.00	0.40	0.40	1.00	1.00	0.00
Uniform Delay (d), s/veh	48.8	0.0	48.8				0.0	42.1	42.2	31.8	27.1	0.0
Incr Delay (d2), s/veh	79.4	0.0	40.9				0.0	10.0	10.3	3.1	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	50.2	0.0	39.7				0.0	12.6	12.3	2.4	2.6	0.0
Lane Grp Delay (d), s/veh	128.2	0.0	89.7				0.0	52.1	52.5	34.8	27.5	0.0
Lane Grp LOS	F		F					D	D	C	C	
Approach Vol, veh/h		2063						768			347	
Approach Delay, s/veh		109.9						52.3			29.7	
Approach LOS		F						D			C	
Timer												
Assigned Phs		6						4		3	8	
Phs Duration (G+Y+Rc), s		73.0						36.6		10.4	47.0	
Change Period (Y+Rc), s		5.0						4.6		3.0	4.6	
Max Green Setting (Gmax), s		68.0						30.4		9.0	42.4	
Max Q Clear Time (g_c+I1), s		70.0						29.0		7.6	8.1	
Green Ext Time (p_c), s		0.0						0.9		0.0	7.7	
Intersection Summary												
HCM 2010 Ctrl Delay			87.2									
HCM 2010 LOS			F									
Notes												

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	110	1550	120	0	0	0	0	260	290	0	0	0
Number	1	6	16				7	4	14			
Initial Q (Qb), veh	0	0	0				0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00			
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00			
Adj Sat Flow veh/h/ln	171.0	166.0	171.0				0.0	166.0	171.0			
Lanes	0	2	0				0	1	0			
Cap, veh/h	60	808	62				0	244	271			
Arrive On Green	0.19	0.19	0.19				0.00	0.11	0.11			
Sat Flow, veh/h	0	1385	107				0	719	800			
Grp Volume(v), veh/h	116	0	1758				0	0	579			
Grp Sat Flow(s),veh/h/ln	0	0	1492				0	0	1519			
Q Serve(g_s), s	0.0	0.0	70.0				0.0	0.0	40.7			
Cycle Q Clear(g_c), s	70.0	0.0	70.0				0.0	0.0	40.7			
Prop In Lane	1.00		0.07				0.00		0.53			
Lane Grp Cap(c), veh/h	60	0	870				0	0	515			
V/C Ratio(X)	1.93	0.00	2.02				0.00	0.00	1.12			
Avail Cap(c_a), veh/h	60	0	870				0	0	515			
HCM Platoon Ratio	0.33	0.33	0.33				1.00	0.33	0.33			
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.00	0.69			
Uniform Delay (d), s/veh	83.5	0.0	48.5				0.0	0.0	53.3			
Incr Delay (d2), s/veh	475.0	0.0	463.1				0.0	0.0	72.5			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0			
%ile Back of Q (50%), veh/ln	9.9	0.0	140.2				0.0	0.0	27.3			
Lane Grp Delay (d), s/veh	558.4	0.0	511.5				0.0	0.0	125.8			
Lane Grp LOS	F		F						F			
Approach Vol, veh/h		1874						579				
Approach Delay, s/veh		514.4						125.8				
Approach LOS		F						F				

Timer	
Assigned Phs	6
Phs Duration (G+Y+Rc), s	75.0
Change Period (Y+Rc), s	5.0
Max Green Setting (Gmax), s	70.0
Max Q Clear Time (g_c+I1), s	72.0
Green Ext Time (p_c), s	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	422.7
HCM 2010 LOS	F

Notes

Movement	EBT	EBR	SBL	SBT	SWL2	SWL
Lane Configurations						
Volume (vph)	1600	190	210	220	840	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0			7.0	7.0	
Lane Util. Factor	0.95			0.95	0.97	
Frt	0.98			1.00	1.00	
Flt Protected	1.00			0.98	0.95	
Satd. Flow (prot)	3135			3109	3090	
Flt Permitted	1.00			0.98	0.95	
Satd. Flow (perm)	3135			3109	3090	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	1684	200	221	232	884	0
RTOR Reduction (vph)	7	0	0	0	111	0
Lane Group Flow (vph)	1877	0	0	453	773	0
Turn Type	NA		Perm	NA	Perm	
Protected Phases	6			9		8
Permitted Phases			9		8	
Actuated Green, G (s)	45.5			21.0	34.5	
Effective Green, g (s)	45.5			21.0	34.5	
Actuated g/C Ratio	0.38			0.18	0.29	
Clearance Time (s)	5.0			7.0	7.0	
Vehicle Extension (s)	3.0			3.0	3.0	
Lane Grp Cap (vph)	1188			544	888	
v/s Ratio Prot	c0.60					
v/s Ratio Perm				0.15	c0.25	
v/c Ratio	1.58			0.83	0.87	
Uniform Delay, d1	37.2			47.8	40.6	
Progression Factor	1.00			1.00	1.00	
Incremental Delay, d2	265.1			10.5	9.3	
Delay (s)	302.4			58.3	49.9	
Level of Service	F			E	D	
Approach Delay (s)	302.4			58.3		49.9
Approach LOS	F			E		D

Intersection Summary			
HCM 2000 Control Delay	198.8	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.18		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	19.0
Intersection Capacity Utilization	111.9%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	140	1500	40	0	0	0	0	300	50	140	270	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	186.3	190.0	190.0	193.7	0.0
Lanes	0	2	0				0	1	0	0	1	0
Cap, veh/h	138	1557	43				0	650	109	188	333	0
Arrive On Green	0.16	0.16	0.16				0.00	0.42	0.42	0.42	0.42	0.00
Sat Flow, veh/h	293	3309	92				0	1556	261	330	797	0
Grp Volume(v), veh/h	926	0	842				0	0	369	431	0	0
Grp Sat Flow(s),veh/h/ln	1848	0	1846				0	0	1817	1127	0	0
Q Serve(g_s), s	45.0	0.0	43.4				0.0	0.0	14.2	22.2	0.0	0.0
Cycle Q Clear(g_c), s	45.0	0.0	43.4				0.0	0.0	14.2	36.4	0.0	0.0
Prop In Lane	0.16		0.05				0.00		0.14	0.34		0.00
Lane Grp Cap(c), veh/h	870	0	869				0	0	759	521	0	0
V/C Ratio(X)	1.06	0.00	0.97				0.00	0.00	0.49	0.83	0.00	0.00
Avail Cap(c_a), veh/h	870	0	869				0	0	842	590	0	0
HCM Platoon Ratio	0.33	0.33	0.33				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.00	0.78	1.00	0.00	0.00
Uniform Delay (d), s/veh	40.4	0.0	39.7				0.0	0.0	20.4	30.0	0.0	0.0
Incr Delay (d2), s/veh	49.2	0.0	23.9				0.0	0.0	0.3	8.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	34.4	0.0	27.5				0.0	0.0	6.3	11.0	0.0	0.0
Lane Grp Delay (d), s/veh	89.6	0.0	63.6				0.0	0.0	20.6	38.2	0.0	0.0
Lane Grp LOS	F		E						C	D		
Approach Vol, veh/h		1768						369			431	
Approach Delay, s/veh		77.2						20.6			38.2	
Approach LOS		E						C			D	

Timer					
Assigned Phs		6		4		8
Phs Duration (G+Y+Rc), s		50.0		45.6		45.6
Change Period (Y+Rc), s		5.0		5.7		5.7
Max Green Setting (Gmax), s		45.0		44.3		44.3
Max Q Clear Time (g_c+I1), s		47.0		16.2		38.4
Green Ext Time (p_c), s		0.0		2.7		1.5

Intersection Summary	
HCM 2010 Ctrl Delay	62.5
HCM 2010 LOS	E

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	150	1500	140	0	0	0	0	490	110	100	360	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	184.5	190.0				0.0	184.5	190.0	190.0	177.1	0.0
Lanes	0	2	0				0	2	0	0	2	0
Cap, veh/h	158	1639	159				0	1051	235	192	672	0
Arrive On Green	0.18	0.18	0.18				0.00	0.36	0.35	0.35	0.36	0.00
Sat Flow, veh/h	293	3036	294				0	2921	653	369	1867	0
Grp Volume(v), veh/h	988	0	896				0	325	307	162	322	0
Grp Sat Flow(s),veh/h/ln	1830	0	1793				0	1845	1729	625	1611	0
Q Serve(g_s), s	54.0	0.0	49.2				0.0	13.7	13.9	13.9	16.0	0.0
Cycle Q Clear(g_c), s	54.0	0.0	49.2				0.0	13.7	13.9	27.7	16.0	0.0
Prop In Lane	0.16		0.16				0.00		0.38	0.65		0.00
Lane Grp Cap(c), veh/h	988	0	968				0	664	623	278	580	0
V/C Ratio(X)	1.00	0.00	0.93				0.00	0.49	0.49	0.58	0.56	0.00
Avail Cap(c_a), veh/h	988	0	968				0	664	623	278	580	0
HCM Platoon Ratio	0.33	0.33	0.33				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.65	0.00	0.65				0.00	0.12	0.12	1.00	1.00	0.00
Uniform Delay (d), s/veh	41.1	0.0	39.1				0.0	24.9	25.1	33.7	25.6	0.0
Incr Delay (d2), s/veh	23.0	0.0	11.3				0.0	0.3	0.3	8.6	3.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	32.9	0.0	26.8				0.0	6.3	6.0	4.4	7.0	0.0
Lane Grp Delay (d), s/veh	64.1	0.0	50.5				0.0	25.2	25.4	42.3	29.4	0.0
Lane Grp LOS	E		D					C	C	D	C	
Approach Vol, veh/h		1884						632			484	
Approach Delay, s/veh		57.6						25.3			33.7	
Approach LOS		E						C			C	

Timer					
Assigned Phs		6		4		8
Phs Duration (G+Y+Rc), s		59.0		41.0		41.0
Change Period (Y+Rc), s		5.0		6.0		6.0
Max Green Setting (Gmax), s		54.0		35.0		35.0
Max Q Clear Time (g_c+I1), s		56.0		15.9		29.7
Green Ext Time (p_c), s		0.0		4.7		2.3

Intersection Summary	
HCM 2010 Ctrl Delay	46.9
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	1680	60	0	0	0	0	0	0	20	50	0
Number	1	6	16							3	8	18
Initial Q (Qb), veh	0	0	0							0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00							1.00		1.00
Parking Bus Adj	1.00	1.00	1.00							1.00	1.00	1.00
Adj Sat Flow veh/h/ln	0.0	182.7	190.0							190.0	190.0	0.0
Lanes	0	2	0							0	1	0
Cap, veh/h	0	2666	95							46	88	0
Arrive On Green	0.00	0.25	0.25							0.15	0.15	0.00
Sat Flow, veh/h	0	3508	124							0	587	0
Grp Volume(v), veh/h	0	917	914							74	0	0
Grp Sat Flow(s),veh/h/ln	0	1827	1805							587	0	0
Q Serve(g_s), s	0.0	45.1	45.6							0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	45.1	45.6							15.0	0.0	0.0
Prop In Lane	0.00		0.07							0.28		0.00
Lane Grp Cap(c), veh/h	0	1388	1372							134	0	0
V/C Ratio(X)	0.00	0.66	0.67							0.55	0.00	0.00
Avail Cap(c_a), veh/h	0	1388	1372							134	0	0
HCM Platoon Ratio	1.00	0.33	0.33							1.00	1.00	1.00
Upstream Filter(I)	0.00	0.09	0.09							1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	25.9	26.1							38.1	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.2	0.2							15.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0							0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.0	22.2	22.2							2.2	0.0	0.0
Lane Grp Delay (d), s/veh	0.0	26.1	26.3							53.4	0.0	0.0
Lane Grp LOS		C	C							D		
Approach Vol, veh/h		1831									74	
Approach Delay, s/veh		26.2									53.4	
Approach LOS		C									D	

Timer	
Assigned Phs	6
Phs Duration (G+Y+Rc), s	81.0
Change Period (Y+Rc), s	5.0
Max Green Setting (Gmax), s	76.0
Max Q Clear Time (g_c+I1), s	47.6
Green Ext Time (p_c), s	12.4

Intersection Summary	
HCM 2010 Ctrl Delay	27.3
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	100	1400	120	0	0	0	0	740	160	180	1050	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	184.5	190.0				0.0	184.5	190.0	184.5	184.5	0.0
Lanes	0	2	0				0	2	0	1	2	0
Cap, veh/h	101	1473	132				0	944	204	271	1594	0
Arrive On Green	0.16	0.16	0.16				0.00	0.32	0.31	0.09	0.43	0.00
Sat Flow, veh/h	215	3135	280				0	2943	635	1757	3689	0
Grp Volume(v), veh/h	897	0	808				0	488	459	189	1105	0
Grp Sat Flow(s),veh/h/ln	1834	0	1795				0	1845	1733	1757	1845	0
Q Serve(g_s), s	47.0	0.0	44.7				0.0	24.4	24.5	7.0	24.3	0.0
Cycle Q Clear(g_c), s	47.0	0.0	44.7				0.0	24.4	24.5	7.0	24.3	0.0
Prop In Lane	0.12		0.16				0.00		0.37	1.00		0.00
Lane Grp Cap(c), veh/h	862	0	844				0	592	556	271	1594	0
V/C Ratio(X)	1.04	0.00	0.96				0.00	0.82	0.82	0.70	0.69	0.00
Avail Cap(c_a), veh/h	862	0	844				0	592	556	321	1594	0
HCM Platoon Ratio	0.33	0.33	0.33				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.71	0.00	0.71				0.00	0.87	0.87	1.00	1.00	0.00
Uniform Delay (d), s/veh	42.2	0.0	41.3				0.0	31.4	31.5	23.5	23.0	0.0
Incr Delay (d2), s/veh	36.9	0.0	17.8				0.0	10.9	11.6	5.2	2.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	32.1	0.0	25.8				0.0	12.9	12.4	5.2	11.5	0.0
Lane Grp Delay (d), s/veh	79.2	0.0	59.1				0.0	42.3	43.1	28.8	25.5	0.0
Lane Grp LOS	F		E					D	D	C	C	
Approach Vol, veh/h		1705						947			1294	
Approach Delay, s/veh		69.6						42.7			26.0	
Approach LOS		E						D			C	

Timer				
Assigned Phs	6	4	3	8
Phs Duration (G+Y+Rc), s	52.0	35.9	12.1	48.0
Change Period (Y+Rc), s	5.0	4.8	3.0	4.8
Max Green Setting (Gmax), s	47.0	28.2	12.0	43.2
Max Q Clear Time (g_c+I1), s	49.0	26.5	9.0	26.3
Green Ext Time (p_c), s	0.0	0.8	0.2	2.6

Intersection Summary	
HCM 2010 Ctrl Delay	48.9
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	30	1520	70	0	0	0	0	70	60	40	110	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	186.3	190.0	190.0	186.3	0.0
Lanes	0	2	0				0	1	0	0	1	0
Cap, veh/h	47	2468	119				0	153	130	94	188	0
Arrive On Green	0.24	0.24	0.24				0.00	0.16	0.15	0.15	0.16	0.00
Sat Flow, veh/h	66	3459	167				0	931	792	229	1144	0
Grp Volume(v), veh/h	896	0	810				0	0	137	158	0	0
Grp Sat Flow(s),veh/h/ln	1859	0	1833				0	0	1723	1373	0	0
Q Serve(g_s), s	35.6	0.0	32.2				0.0	0.0	5.9	3.7	0.0	0.0
Cycle Q Clear(g_c), s	35.6	0.0	32.2				0.0	0.0	5.9	9.6	0.0	0.0
Prop In Lane	0.04		0.09				0.00		0.46	0.27		0.00
Lane Grp Cap(c), veh/h	1327	0	1308				0	0	284	265	0	0
V/C Ratio(X)	0.68	0.00	0.62				0.00	0.00	0.48	0.60	0.00	0.00
Avail Cap(c_a), veh/h	1327	0	1308				0	0	680	644	0	0
HCM Platoon Ratio	0.33	0.33	0.33				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.00	0.92	1.00	0.00	0.00
Uniform Delay (d), s/veh	22.5	0.0	21.2				0.0	0.0	31.0	32.4	0.0	0.0
Incr Delay (d2), s/veh	2.8	0.0	2.2				0.0	0.0	0.9	1.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	19.3	0.0	17.0				0.0	0.0	2.6	3.2	0.0	0.0
Lane Grp Delay (d), s/veh	25.3	0.0	23.4				0.0	0.0	31.9	33.9	0.0	0.0
Lane Grp LOS	C		C						C	C		
Approach Vol, veh/h		1706						137			158	
Approach Delay, s/veh		24.4						31.9			33.9	
Approach LOS		C						C			C	

Timer			
Assigned Phs	6	4	8
Phs Duration (G+Y+Rc), s	63.0	18.3	18.3
Change Period (Y+Rc), s	5.0	5.9	5.9
Max Green Setting (Gmax), s	58.0	31.1	31.1
Max Q Clear Time (g_c+I1), s	37.6	7.9	11.6
Green Ext Time (p_c), s	9.5	0.9	0.8

Intersection Summary	
HCM 2010 Ctrl Delay	25.7
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	70	1400	60	0	0	0	0	880	130	130	1010	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	186.3	190.0	186.3	186.3	0.0
Lanes	0	2	0				0	2	0	1	2	0
Cap, veh/h	70	1452	65				0	1170	173	241	1732	0
Arrive On Green	0.14	0.14	0.14				0.00	0.37	0.36	0.07	0.47	0.00
Sat Flow, veh/h	162	3377	151				0	3173	469	1774	3725	0
Grp Volume(v), veh/h	846	0	765				0	543	520	137	1063	0
Grp Sat Flow(s),veh/h/ln	1855	0	1836				0	1863	1780	1774	1863	0
Q Serve(g_s), s	43.0	0.0	41.5				0.0	26.0	26.0	4.6	21.4	0.0
Cycle Q Clear(g_c), s	43.0	0.0	41.5				0.0	26.0	26.0	4.6	21.4	0.0
Prop In Lane	0.09		0.08				0.00		0.26	1.00		0.00
Lane Grp Cap(c), veh/h	797	0	790				0	687	656	241	1732	0
V/C Ratio(X)	1.06	0.00	0.97				0.00	0.79	0.79	0.57	0.61	0.00
Avail Cap(c_a), veh/h	797	0	790				0	687	656	301	1732	0
HCM Platoon Ratio	0.33	0.33	0.33				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.46	0.00	0.46				0.00	0.79	0.79	1.00	1.00	0.00
Uniform Delay (d), s/veh	42.9	0.0	42.2				0.0	28.1	28.3	22.0	20.0	0.0
Incr Delay (d2), s/veh	39.7	0.0	15.6				0.0	5.0	5.3	2.1	1.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	30.3	0.0	24.0				0.0	13.0	12.5	2.3	10.0	0.0
Lane Grp Delay (d), s/veh	82.6	0.0	57.8				0.0	33.1	33.5	24.1	21.7	0.0
Lane Grp LOS	F		E					C	C	C	C	
Approach Vol, veh/h		1611						1063			1200	
Approach Delay, s/veh		70.9						33.3			21.9	
Approach LOS		E						C			C	

Timer				
Assigned Phs	6	4	3	8
Phs Duration (G+Y+Rc), s	48.0	42.4	9.6	52.0
Change Period (Y+Rc), s	5.0	6.5	3.0	6.5
Max Green Setting (Gmax), s	43.0	32.5	10.0	45.5
Max Q Clear Time (g_c+I1), s	45.0	28.0	6.6	23.4
Green Ext Time (p_c), s	0.0	3.5	0.1	11.7

Intersection Summary	
HCM 2010 Ctrl Delay	45.4
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Volume (veh/h)	40	1200	40	0	0	0	0	100	70	380	50	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	186.3	190.0	186.3	193.7	0.0
Lanes	0	2	0				0	2	0	1	1	0
Cap, veh/h	47	1466	51				0	496	323	643	884	0
Arrive On Green	0.42	0.42	0.42				0.00	0.23	0.23	0.19	0.46	0.00
Sat Flow, veh/h	110	3467	121				0	2110	1373	1774	1937	0
Grp Volume(v), veh/h	708	0	639				0	92	87	400	53	0
Grp Sat Flow(s),veh/h/ln	1857	0	1841				0	1863	1620	1774	1937	0
Q Serve(g_s), s	33.9	0.0	29.3				0.0	3.8	4.2	15.4	1.5	0.0
Cycle Q Clear(g_c), s	33.9	0.0	29.3				0.0	3.8	4.2	15.4	1.5	0.0
Prop In Lane	0.06		0.07				0.00		0.85	1.00		0.00
Lane Grp Cap(c), veh/h	785	0	778				0	438	381	643	884	0
V/C Ratio(X)	0.90	0.00	0.82				0.00	0.21	0.23	0.62	0.06	0.00
Avail Cap(c_a), veh/h	877	0	870				0	438	381	715	884	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.50	0.00	0.50				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	25.6	0.0	24.3				0.0	29.3	29.5	19.2	14.5	0.0
Incr Delay (d2), s/veh	6.4	0.0	3.0				0.0	1.1	1.4	1.4	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	16.5	0.0	13.6				0.0	1.9	1.8	6.8	0.7	0.0
Lane Grp Delay (d), s/veh	32.1	0.0	27.3				0.0	30.4	30.9	20.6	14.6	0.0
Lane Grp LOS	C		C					C	C	C	B	
Approach Vol, veh/h		1347						179			453	
Approach Delay, s/veh		29.8						30.6			19.9	
Approach LOS		C						C			B	

Timer					
Assigned Phs		6		4	3	8
Phs Duration (G+Y+Rc), s		45.3		28.9	21.1	50.0
Change Period (Y+Rc), s		5.0		6.5	3.0	6.5
Max Green Setting (Gmax), s		45.0		18.5	22.0	43.5
Max Q Clear Time (g_c+I1), s		35.9		6.2	17.4	3.5
Green Ext Time (p_c), s		4.4		0.4	0.7	0.6

Intersection Summary	
HCM 2010 Ctrl Delay	27.6
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	150	0	40	0	0	0	0	1680	1140	220	2120	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	9	12	9	11	11	11	12	10	12	12	10	12
Total Lost time (s)	3.9		3.9					3.6	4.6	4.6	3.6	
Lane Util. Factor	1.00		1.00					0.91	0.91	0.97	0.95	
Frt	1.00		0.85					0.98	0.85	1.00	1.00	
Flt Protected	0.95		1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1593		1425					3095	1441	3433	3303	
Flt Permitted	0.95		1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1593		1425					3095	1441	3433	3303	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	158	0	42	0	0	0	0	1768	1200	232	2232	0
RTOR Reduction (vph)	0	0	30	0	0	0	0	11	353	0	0	0
Lane Group Flow (vph)	158	0	12	0	0	0	0	2057	547	232	2232	0
Turn Type	custom		custom					NA	Perm	Prot	NA	
Protected Phases			8					6		5	2	
Permitted Phases	8								6			
Actuated Green, G (s)	32.1		32.1					62.7	62.7	11.1	78.4	
Effective Green, g (s)	33.1		33.1					63.7	62.7	11.1	79.4	
Actuated g/C Ratio	0.28		0.28					0.53	0.52	0.09	0.66	
Clearance Time (s)	4.9		4.9					4.6	4.6	4.6	4.6	
Vehicle Extension (s)	2.5		2.5					2.5	2.5	3.0	2.5	
Lane Grp Cap (vph)	439		393					1642	752	317	2185	
v/s Ratio Prot			0.01					c0.66		0.07	c0.68	
v/s Ratio Perm	c0.10								0.38			
v/c Ratio	0.36		0.03					1.25	0.73	0.73	1.02	
Uniform Delay, d1	34.9		31.7					28.1	22.1	53.0	20.3	
Progression Factor	1.00		1.00					0.68	1.35	1.00	1.00	
Incremental Delay, d2	2.3		0.1					114.3	0.6	8.4	24.9	
Delay (s)	37.2		31.9					133.5	30.3	61.4	45.2	
Level of Service	D		C					F	C	E	D	
Approach Delay (s)		36.1			0.0			102.2			46.7	
Approach LOS		D			A			F			D	

Intersection Summary			
HCM 2000 Control Delay	75.6	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.1
Intersection Capacity Utilization	83.7%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	890	0	60	150	430	180	200	1490	0	0	2000	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	11	12	12	11	12	11	10	12	10	10	12
Total Lost time (s)	6.7		6.7	6.7	5.7		3.5	5.0			5.0	5.0
Lane Util. Factor	0.97		1.00	0.97	1.00		1.00	0.91			0.95	1.00
Frt	1.00		0.85	1.00	0.96		1.00	1.00			1.00	0.85
Flt Protected	0.95		1.00	0.95	1.00		0.95	1.00			1.00	1.00
Satd. Flow (prot)	3433		1583	3433	1721		1711	4746			3303	1583
Flt Permitted	0.10		1.00	0.95	1.00		0.12	1.00			1.00	1.00
Satd. Flow (perm)	359		1583	3433	1721		212	4746			3303	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	937	0	63	158	453	189	211	1568	0	0	2105	105
RTOR Reduction (vph)	0	0	42	0	11	0	0	0	0	0	0	77
Lane Group Flow (vph)	937	0	21	158	631	0	211	1568	0	0	2105	28
Turn Type	custom		custom	Split	NA		pm+pt	NA			NA	Perm
Protected Phases				2	2		7	4			8	
Permitted Phases	1		1				4					8
Actuated Green, G (s)	40.3		40.3	21.3	21.3		39.0	39.0			31.0	31.0
Effective Green, g (s)	40.3		40.3	21.3	22.3		38.5	40.0			32.0	32.0
Actuated g/C Ratio	0.34		0.34	0.18	0.19		0.32	0.33			0.27	0.27
Clearance Time (s)	6.7		6.7	6.7	6.7		3.0	6.0			6.0	6.0
Vehicle Extension (s)	2.5		2.5	2.5	2.5		2.0	2.5			2.5	2.5
Lane Grp Cap (vph)	120		531	609	319		124	1582			880	422
v/s Ratio Prot				0.05	c0.37		c0.06	0.33			c0.64	
v/s Ratio Perm	c2.61		0.01				0.48					0.02
v/c Ratio	7.81		0.04	0.26	1.98		1.70	0.99			2.39	0.07
Uniform Delay, d1	39.9		26.8	42.5	48.9		40.3	39.8			44.0	32.8
Progression Factor	1.00		1.00	1.00	1.00		1.00	1.00			0.69	0.76
Incremental Delay, d2	3080.9		0.1	1.0	450.7		347.7	20.6			626.7	0.0
Delay (s)	3120.7		27.0	43.6	499.6		388.0	60.4			657.2	24.9
Level of Service	F		C	D	F		F	E			F	C
Approach Delay (s)		2925.8			409.5			99.3			627.2	
Approach LOS		F			F			F			F	

Intersection Summary			
HCM 2000 Control Delay	831.9	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	4.50		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	21.9
Intersection Capacity Utilization	140.9%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	30	630	30	40	40	0	0	50	30
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	186.3	190.0	190.0	186.3	0.0	0.0	186.3	190.0
Lanes				0	2	0	0	1	0	0	1	0
Cap, veh/h				120	2600	132	104	79	0	0	111	67
Arrive On Green				0.26	0.26	0.26	0.10	0.10	0.00	0.00	0.10	0.10
Sat Flow, veh/h				155	3362	170	421	781	0	0	1089	658
Grp Volume(v), veh/h				383	0	344	84	0	0	0	0	85
Grp Sat Flow(s),veh/h/ln				1855	0	1833	1201	0	0	0	0	1747
Q Serve(g_s), s				14.5	0.0	13.1	2.6	0.0	0.0	0.0	0.0	4.0
Cycle Q Clear(g_c), s				14.5	0.0	13.1	6.6	0.0	0.0	0.0	0.0	4.0
Prop In Lane				0.08		0.09	0.50		0.00	0.00		0.38
Lane Grp Cap(c), veh/h				1435	0	1417	183	0	0	0	0	177
V/C Ratio(X)				0.27	0.00	0.24	0.46	0.00	0.00	0.00	0.00	0.48
Avail Cap(c_a), veh/h				1435	0	1417	394	0	0	0	0	417
HCM Platoon Ratio				0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.83	0.00	0.83	1.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				12.8	0.0	12.3	38.5	0.0	0.0	0.0	0.0	37.3
Incr Delay (d2), s/veh				0.4	0.0	0.3	1.8	0.0	0.0	0.0	0.0	2.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				7.4	0.0	6.6	1.9	0.0	0.0	0.0	0.0	1.9
Lane Grp Delay (d), s/veh				13.2	0.0	12.6	40.3	0.0	0.0	0.0	0.0	39.3
Lane Grp LOS				B		B	D					D
Approach Vol, veh/h					727			84			85	
Approach Delay, s/veh					12.9			40.3			39.3	
Approach LOS					B			D			D	

Timer	
Assigned Phs	2 4 8
Phs Duration (G+Y+Rc), s	73.0 14.9 14.9
Change Period (Y+Rc), s	5.0 6.0 6.0
Max Green Setting (Gmax), s	68.0 21.0 21.0
Max Q Clear Time (g_c+I1), s	16.5 8.6 6.0
Green Ext Time (p_c), s	3.3 0.4 0.5

Intersection Summary	
HCM 2010 Ctrl Delay	18.0
HCM 2010 LOS	B

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	100	620	70	60	850	0	0	1060	70
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	186.3	190.0	186.3	186.3	0.0	0.0	186.3	190.0
Lanes				0	2	0	1	2	0	0	2	0
Cap, veh/h				189	1231	146	184	1751	0	0	1405	93
Arrive On Green				0.14	0.14	0.14	0.03	0.47	0.00	0.00	0.41	0.40
Sat Flow, veh/h				439	2864	340	1774	3725	0	0	3456	229
Grp Volume(v), veh/h				440	0	392	63	895	0	0	601	589
Grp Sat Flow(s),veh/h/ln				1841	0	1803	1774	1863	0	0	1863	1822
Q Serve(g_s), s				22.3	0.0	20.1	2.0	16.8	0.0	0.0	28.3	28.3
Cycle Q Clear(g_c), s				22.3	0.0	20.1	2.0	16.8	0.0	0.0	28.3	28.3
Prop In Lane				0.24		0.19	1.00		0.00	0.00		0.13
Lane Grp Cap(c), veh/h				792	0	775	184	1751	0	0	757	741
V/C Ratio(X)				0.56	0.00	0.51	0.34	0.51	0.00	0.00	0.79	0.79
Avail Cap(c_a), veh/h				792	0	775	249	1751	0	0	757	741
HCM Platoon Ratio				0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.98	0.00	0.98	1.00	1.00	0.00	0.00	0.72	0.72
Uniform Delay (d), s/veh				34.0	0.0	33.1	21.0	18.5	0.0	0.0	26.0	26.1
Incr Delay (d2), s/veh				2.8	0.0	2.3	1.1	1.1	0.0	0.0	6.2	6.3
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				11.7	0.0	10.3	0.9	7.7	0.0	0.0	14.3	14.1
Lane Grp Delay (d), s/veh				36.8	0.0	35.4	22.1	19.6	0.0	0.0	32.2	32.4
Lane Grp LOS				D		D	C	B			C	C
Approach Vol, veh/h					832			958			1190	
Approach Delay, s/veh					36.1			19.7			32.3	
Approach LOS					D			B			C	

Timer												
Assigned Phs					2		7	4			8	
Phs Duration (G+Y+Rc), s					48.0		6.4	52.0			45.6	
Change Period (Y+Rc), s					5.0		3.0	6.0			6.0	
Max Green Setting (Gmax), s					43.0		7.0	46.0			36.0	
Max Q Clear Time (g_c+I1), s					24.3		4.0	18.8			30.3	
Green Ext Time (p_c), s					3.5		0.0	9.6			3.8	

Intersection Summary		
HCM 2010 Ctrl Delay		29.3
HCM 2010 LOS		C

Notes

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations			↑↑			↱
Volume (vph)	0	0	740	0	0	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	12	11	12	12	11	12
Total Lost time (s)			5.0			4.3
Lane Util. Factor			0.95			1.00
Frt			1.00			0.86
Flt Protected			1.00			1.00
Satd. Flow (prot)			3610			1644
Flt Permitted			1.00			1.00
Satd. Flow (perm)			3610			1644
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	779	0	0	32
RTOR Reduction (vph)	0	0	0	0	0	31
Lane Group Flow (vph)	0	0	779	0	0	1
Heavy Vehicles (%)	2%	2%	0%	0%	2%	0%
Turn Type			NA			custom
Protected Phases			2			
Permitted Phases						8
Actuated Green, G (s)			87.7			3.0
Effective Green, g (s)			87.7			3.0
Actuated g/C Ratio			0.88			0.03
Clearance Time (s)			5.0			4.3
Vehicle Extension (s)			3.0			2.5
Lane Grp Cap (vph)			3165			49
v/s Ratio Prot			c0.22			
v/s Ratio Perm						c0.00
v/c Ratio			0.25			0.02
Uniform Delay, d1			1.0			47.1
Progression Factor			0.24			1.00
Incremental Delay, d2			0.2			0.1
Delay (s)			0.4			47.2
Level of Service			A			D
Approach Delay (s)		0.0	0.4		47.2	
Approach LOS		A	A		D	

Intersection Summary			
HCM 2000 Control Delay	2.3	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.24		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	9.3
Intersection Capacity Utilization	31.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	20	720	50	70	80	0	0	90	40
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	190.0	190.0	190.0	195.5	0.0	0.0	194.9	190.0
Lanes				0	2	0	0	1	0	0	1	0
Cap, veh/h				62	2319	171	182	192	0	0	304	134
Arrive On Green				0.68	0.68	0.68	0.23	0.24	0.00	0.00	0.24	0.23
Sat Flow, veh/h				90	3410	251	543	812	0	0	1282	567
Grp Volume(v), veh/h				440	0	392	158	0	0	0	0	137
Grp Sat Flow(s),veh/h/ln				1895	0	1856	1355	0	0	0	0	1849
Q Serve(g_s), s				9.7	0.0	8.6	6.1	0.0	0.0	0.0	0.0	6.1
Cycle Q Clear(g_c), s				9.7	0.0	8.6	12.2	0.0	0.0	0.0	0.0	6.1
Prop In Lane				0.05		0.14	0.47		0.00	0.00		0.31
Lane Grp Cap(c), veh/h				1289	0	1262	360	0	0	0	0	438
V/C Ratio(X)				0.34	0.00	0.31	0.44	0.00	0.00	0.00	0.00	0.31
Avail Cap(c_a), veh/h				1289	0	1262	360	0	0	0	0	438
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.66
Uniform Delay (d), s/veh				6.7	0.0	6.5	34.5	0.0	0.0	0.0	0.0	31.6
Incr Delay (d2), s/veh				0.7	0.0	0.6	3.8	0.0	0.0	0.0	0.0	1.2
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				4.2	0.0	3.6	4.0	0.0	0.0	0.0	0.0	3.0
Lane Grp Delay (d), s/veh				7.4	0.0	7.1	38.3	0.0	0.0	0.0	0.0	32.8
Lane Grp LOS				A		A	D					C
Approach Vol, veh/h					832			158			137	
Approach Delay, s/veh					7.3			38.3			32.8	
Approach LOS					A			D			C	

Timer	
Assigned Phs	2 4 8
Phs Duration (G+Y+Rc), s	73.0 27.0 27.0
Change Period (Y+Rc), s	5.0 4.3 4.3
Max Green Setting (Gmax), s	68.0 22.7 22.7
Max Q Clear Time (g_c+I1), s	11.7 14.2 8.1
Green Ext Time (p_c), s	3.9 0.6 0.7

Intersection Summary	
HCM 2010 Ctrl Delay	14.7
HCM 2010 LOS	B

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	120	620	100	90	710	0	0	1050	90
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	190.0	190.0	186.3	186.3	0.0	0.0	186.3	190.0
Lanes				0	2	0	1	2	0	0	2	1
Cap, veh/h				223	1210	204	215	1720	0	0	1416	597
Arrive On Green				0.44	0.44	0.44	0.05	0.46	0.00	0.00	0.38	0.37
Sat Flow, veh/h				503	2730	461	1774	3725	0	0	3725	1615
Grp Volume(v), veh/h				469	0	415	95	747	0	0	1105	95
Grp Sat Flow(s),veh/h/ln				1875	0	1819	1774	1863	0	0	1863	1615
Q Serve(g_s), s				17.2	0.0	15.2	2.9	12.5	0.0	0.0	24.2	3.6
Cycle Q Clear(g_c), s				17.2	0.0	15.2	2.9	12.5	0.0	0.0	24.2	3.6
Prop In Lane				0.27		0.25	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				831	0	806	215	1720	0	0	1416	597
V/C Ratio(X)				0.57	0.00	0.51	0.44	0.43	0.00	0.00	0.78	0.16
Avail Cap(c_a), veh/h				831	0	806	262	2021	0	0	1619	684
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	0.57	0.57
Uniform Delay (d), s/veh				19.1	0.0	18.6	20.0	16.8	0.0	0.0	25.3	19.5
Incr Delay (d2), s/veh				2.8	0.0	2.3	1.4	0.2	0.0	0.0	1.3	0.1
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				8.5	0.0	7.2	1.3	5.5	0.0	0.0	11.3	1.5
Lane Grp Delay (d), s/veh				21.9	0.0	20.9	21.4	16.9	0.0	0.0	26.5	19.6
Lane Grp LOS				C		C	C	B			C	B
Approach Vol, veh/h					884			842			1200	
Approach Delay, s/veh					21.4			17.4			26.0	
Approach LOS					C			B			C	

Timer												
Assigned Phs					2		7	4			8	
Phs Duration (G+Y+Rc), s					46.0		7.5	46.5			39.0	
Change Period (Y+Rc), s					5.0		3.0	4.8			4.8	
Max Green Setting (Gmax), s					41.0		7.0	49.2			39.2	
Max Q Clear Time (g_c+I1), s					19.2		4.9	14.5			26.2	
Green Ext Time (p_c), s					3.9		0.0	13.3			8.0	

Intersection Summary												
HCM 2010 Ctrl Delay			22.2									
HCM 2010 LOS			C									

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	60	630	60	120	560	0	0	410	90
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	190.0	190.0	190.0	186.3	0.0	0.0	186.9	190.0
Lanes				0	2	0	0	2	0	0	2	0
Cap, veh/h				165	1817	181	178	731	0	0	991	216
Arrive On Green				0.19	0.19	0.19	0.32	0.33	0.00	0.00	0.33	0.32
Sat Flow, veh/h				285	3133	313	375	2194	0	0	2975	649
Grp Volume(v), veh/h				417	0	372	261	454	0	0	270	257
Grp Sat Flow(s),veh/h/ln				1886	0	1845	874	1695	0	0	1869	1755
Q Serve(g_s), s				19.3	0.0	17.5	18.5	24.4	0.0	0.0	11.3	11.5
Cycle Q Clear(g_c), s				19.3	0.0	17.5	30.0	24.4	0.0	0.0	11.3	11.5
Prop In Lane				0.15		0.17	0.48		0.00	0.00		0.37
Lane Grp Cap(c), veh/h				1094	0	1070	336	564	0	0	622	584
V/C Ratio(X)				0.38	0.00	0.35	0.78	0.80	0.00	0.00	0.43	0.44
Avail Cap(c_a), veh/h				1094	0	1070	336	564	0	0	622	584
HCM Platoon Ratio				0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.98	0.00	0.98	1.00	1.00	0.00	0.00	0.66	0.66
Uniform Delay (d), s/veh				24.8	0.0	24.0	35.7	30.4	0.0	0.0	26.0	26.2
Incr Delay (d2), s/veh				1.0	0.0	0.9	16.1	11.6	0.0	0.0	0.3	0.3
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				10.1	0.0	8.9	8.0	12.0	0.0	0.0	5.3	5.1
Lane Grp Delay (d), s/veh				25.8	0.0	24.9	51.8	42.0	0.0	0.0	26.3	26.6
Lane Grp LOS				C		C	D	D			C	C
Approach Vol, veh/h					789			715			527	
Approach Delay, s/veh					25.4			45.6			26.4	
Approach LOS					C			D			C	

Timer			
Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	63.0	37.0	37.0
Change Period (Y+Rc), s	5.0	4.7	4.7
Max Green Setting (Gmax), s	58.0	32.3	32.3
Max Q Clear Time (g_c+I1), s	21.3	32.0	13.5
Green Ext Time (p_c), s	3.6	0.2	5.3

Intersection Summary	
HCM 2010 Ctrl Delay	32.8
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	30	570	0	30	0	0	0	70	70
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	10	12	12	12	12	12	11	12	12	11	12
Total Lost time (s)					5.0		4.3				4.3	4.3
Lane Util. Factor					0.95		1.00				1.00	1.00
Frt					1.00		1.00				1.00	0.85
Flt Protected					1.00		0.95				1.00	1.00
Satd. Flow (prot)					3530		1805				1801	1615
Flt Permitted					1.00		0.71				1.00	1.00
Satd. Flow (perm)					3530		1347				1801	1615
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	32	600	0	32	0	0	0	74	74
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	57
Lane Group Flow (vph)	0	0	0	0	632	0	32	0	0	0	74	17
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	0%	2%	2%	2%	2%	0%
Turn Type				Perm	NA		custom				NA	Perm
Protected Phases					2						8	
Permitted Phases				2			4					8
Actuated Green, G (s)					68.0		22.7				22.7	22.7
Effective Green, g (s)					68.0		22.7				22.7	22.7
Actuated g/C Ratio					0.68		0.23				0.23	0.23
Clearance Time (s)					5.0		4.3				4.3	4.3
Vehicle Extension (s)					3.0		3.0				3.0	3.0
Lane Grp Cap (vph)					2400		305				408	366
v/s Ratio Prot											c0.04	
v/s Ratio Perm					0.18		0.02					0.01
v/c Ratio					0.26		0.10				0.18	0.05
Uniform Delay, d1					6.2		30.6				31.2	30.2
Progression Factor					0.26		1.00				1.00	1.00
Incremental Delay, d2					0.2		0.7				0.2	0.1
Delay (s)					1.9		31.3				31.4	30.2
Level of Service					A		C				C	C
Approach Delay (s)		0.0			1.9			31.3			30.8	
Approach LOS		A			A			C			C	

Intersection Summary			
HCM 2000 Control Delay	8.3	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.24		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	9.3
Intersection Capacity Utilization	35.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	40	650	60	50	310	0	0	280	70
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	186.3	190.0	190.0	186.3	0.0	0.0	186.3	190.0
Lanes				0	2	0	0	1	0	0	1	0
Cap, veh/h				89	1521	147	102	592	0	0	593	149
Arrive On Green				0.16	0.16	0.16	0.41	0.41	0.00	0.00	0.41	0.41
Sat Flow, veh/h				186	3169	307	147	1436	0	0	1438	361
Grp Volume(v), veh/h				418	0	371	379	0	0	0	0	369
Grp Sat Flow(s),veh/h/ln				1853	0	1809	1583	0	0	0	0	1799
Q Serve(g_s), s				20.5	0.0	18.5	4.8	0.0	0.0	0.0	0.0	15.2
Cycle Q Clear(g_c), s				20.5	0.0	18.5	20.0	0.0	0.0	0.0	0.0	15.2
Prop In Lane				0.10		0.17	0.14		0.00	0.00		0.20
Lane Grp Cap(c), veh/h				890	0	868	693	0	0	0	0	741
V/C Ratio(X)				0.47	0.00	0.43	0.55	0.00	0.00	0.00	0.00	0.50
Avail Cap(c_a), veh/h				890	0	868	693	0	0	0	0	741
HCM Platoon Ratio				0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.95	0.00	0.95	1.00	0.00	0.00	0.00	0.00	0.15
Uniform Delay (d), s/veh				30.5	0.0	29.7	22.4	0.0	0.0	0.0	0.0	21.7
Incr Delay (d2), s/veh				1.7	0.0	1.5	3.1	0.0	0.0	0.0	0.0	0.4
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				10.6	0.0	9.4	7.9	0.0	0.0	0.0	0.0	6.7
Lane Grp Delay (d), s/veh				32.2	0.0	31.1	25.5	0.0	0.0	0.0	0.0	22.1
Lane Grp LOS				C		C	C					C
Approach Vol, veh/h					789			379			369	
Approach Delay, s/veh					31.7			25.5			22.1	
Approach LOS					C			C			C	

Timer			
Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	53.0	47.0	47.0
Change Period (Y+Rc), s	5.0	5.8	5.8
Max Green Setting (Gmax), s	48.0	41.2	41.2
Max Q Clear Time (g_c+I1), s	22.5	22.0	17.2
Green Ext Time (p_c), s	3.5	2.4	2.4

Intersection Summary	
HCM 2010 Ctrl Delay	27.9
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	0	720	80	100	250	0	0	0	0
Number				5	2	12	7	4	14			
Initial Q (Qb), veh				0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00			
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow veh/h/ln				0.0	186.3	190.0	190.0	186.3	0.0			
Lanes				0	2	0	0	1	0			
Cap, veh/h				0	2335	259	39	28	0			
Arrive On Green				0.00	0.23	0.23	0.21	0.21	0.00			
Sat Flow, veh/h				0	3296	365	0	132	0			
Grp Volume(v), veh/h				0	428	414	368	0	0			
Grp Sat Flow(s),veh/h/ln				0	1863	1798	132	0	0			
Q Serve(g_s), s				0.0	22.9	22.9	0.0	0.0	0.0			
Cycle Q Clear(g_c), s				0.0	22.9	22.9	25.0	0.0	0.0			
Prop In Lane				0.00		0.20	0.29		0.00			
Lane Grp Cap(c), veh/h				0	1319	1274	66	0	0			
V/C Ratio(X)				0.00	0.32	0.32	5.57	0.00	0.00			
Avail Cap(c_a), veh/h				0	1319	1274	66	0	0			
HCM Platoon Ratio				1.00	0.33	0.33	1.00	1.00	1.00			
Upstream Filter(I)				0.00	0.87	0.87	1.00	0.00	0.00			
Uniform Delay (d), s/veh				0.0	22.2	22.2	50.0	0.0	0.0			
Incr Delay (d2), s/veh				0.0	0.6	0.6	2088.9	0.0	0.0			
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0			
%ile Back of Q (50%), veh/ln				0.0	11.7	11.3	40.4	0.0	0.0			
Lane Grp Delay (d), s/veh				0.0	22.7	22.8	2138.9	0.0	0.0			
Lane Grp LOS					C	C	F					
Approach Vol, veh/h					842			368				
Approach Delay, s/veh					22.8			2138.9				
Approach LOS					C			F				

Timer	
Assigned Phs	2 4
Phs Duration (G+Y+Rc), s	90.0 30.0
Change Period (Y+Rc), s	5.0 5.0
Max Green Setting (Gmax), s	85.0 25.0
Max Q Clear Time (g_c+I1), s	24.9 27.0
Green Ext Time (p_c), s	6.6 0.0

Intersection Summary	
HCM 2010 Ctrl Delay	666.3
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↑↑						↑↑	↱
Volume (veh/h)	0	0	0	0	500	0	0	0	0	0	70	390
Number				5	2	12				3	8	18
Initial Q (Qb), veh				0	0	0				0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00				1.00		1.00
Parking Bus Adj				1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow veh/h/ln				0.0	167.6	0.0				0.0	167.6	167.6
Lanes				0	2	0				0	2	1
Cap, veh/h				0	2096	0				0	950	404
Arrive On Green				0.00	0.21	0.00				0.00	0.28	0.28
Sat Flow, veh/h				0	3353	0				0	3353	1425
Grp Volume(v), veh/h				0	526	0				0	74	411
Grp Sat Flow(s),veh/h/ln				0	1676	0				0	1676	1425
Q Serve(g_s), s				0.0	15.8	0.0				0.0	1.9	34.0
Cycle Q Clear(g_c), s				0.0	15.8	0.0				0.0	1.9	34.0
Prop In Lane				0.00		0.00				0.00		1.00
Lane Grp Cap(c), veh/h				0	2096	0				0	950	404
V/C Ratio(X)				0.00	0.25	0.00				0.00	0.08	1.02
Avail Cap(c_a), veh/h				0	2096	0				0	950	404
HCM Platoon Ratio				1.00	0.33	1.00				1.00	1.00	1.00
Upstream Filter(I)				0.00	1.00	0.00				0.00	0.44	0.44
Uniform Delay (d), s/veh				0.0	24.1	0.0				0.0	31.5	43.0
Incr Delay (d2), s/veh				0.0	0.3	0.0				0.0	0.0	34.4
Initial Q Delay(d3),s/veh				0.0	0.0	0.0				0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				0.0	7.2	0.0				0.0	0.8	16.2
Lane Grp Delay (d), s/veh				0.0	24.4	0.0				0.0	31.5	77.4
Lane Grp LOS					C						C	F
Approach Vol, veh/h					526						485	
Approach Delay, s/veh					24.4						70.4	
Approach LOS					C						E	

Timer	
Assigned Phs	2	8
Phs Duration (G+Y+Rc), s	80.0	40.0
Change Period (Y+Rc), s	5.0	6.0
Max Green Setting (Gmax), s	75.0	34.0
Max Q Clear Time (g_c+I1), s	17.8	36.0
Green Ext Time (p_c), s	4.1	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	46.5
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	250	1700	230	70	270	0	0	0	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					5.0		4.7	4.7				4.7
Lane Util. Factor					0.95		1.00	1.00				1.00
Frt					0.98		1.00	1.00				0.86
Flt Protected					0.99		0.95	1.00				1.00
Satd. Flow (prot)					3117		1593	1676				1450
Flt Permitted					0.99		0.95	1.00				1.00
Satd. Flow (perm)					3117		1593	1676				1450
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	263	1789	242	74	284	0	0	0	126
RTOR Reduction (vph)	0	0	0	0	8	0	0	0	0	0	0	22
Lane Group Flow (vph)	0	0	0	0	2286	0	74	284	0	0	0	104
Turn Type				Perm	NA		Perm	NA				custom
Protected Phases					2			4				
Permitted Phases				2			4					8
Actuated Green, G (s)					80.0		30.3	30.3				30.3
Effective Green, g (s)					80.0		30.3	30.3				30.3
Actuated g/C Ratio					0.67		0.25	0.25				0.25
Clearance Time (s)					5.0		4.7	4.7				4.7
Vehicle Extension (s)					3.0		3.0	3.0				2.5
Lane Grp Cap (vph)					2078		402	423				366
v/s Ratio Prot								c0.17				
v/s Ratio Perm					0.73		0.05					0.07
v/c Ratio					1.10		0.18	0.67				0.29
Uniform Delay, d1					20.0		35.2	40.4				36.1
Progression Factor					0.42		1.00	1.00				1.35
Incremental Delay, d2					48.6		1.0	8.2				0.0
Delay (s)					57.0		36.2	48.6				49.0
Level of Service					E		D	D				D
Approach Delay (s)		0.0			57.0			46.0			49.0	
Approach LOS		A			E			D			D	

Intersection Summary			
HCM 2000 Control Delay	55.2	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.98		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	9.7
Intersection Capacity Utilization	93.0%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	100	1700	90	200	720	0	0	330	90
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				171.0	166.0	171.0	166.0	166.0	0.0	0.0	166.0	171.0
Lanes				0	2	0	1	2	0	0	2	0
Cap, veh/h				104	1846	102	239	932	0	0	372	100
Arrive On Green				0.21	0.21	0.21	0.11	0.28	0.00	0.00	0.15	0.15
Sat Flow, veh/h				167	2953	164	1581	3320	0	0	2520	680
Grp Volume(v), veh/h				1041	0	948	211	758	0	0	227	215
Grp Sat Flow(s),veh/h/ln				1652	0	1631	1581	1660	0	0	1660	1540
Q Serve(g_s), s				75.0	0.0	68.5	13.0	25.5	0.0	0.0	16.2	16.6
Cycle Q Clear(g_c), s				75.0	0.0	68.5	13.0	25.5	0.0	0.0	16.2	16.6
Prop In Lane				0.10		0.10	1.00		0.00	0.00		0.44
Lane Grp Cap(c), veh/h				1032	0	1020	239	932	0	0	245	227
V/C Ratio(X)				1.01	0.00	0.93	0.88	0.81	0.00	0.00	0.93	0.95
Avail Cap(c_a), veh/h				1032	0	1020	239	932	0	0	245	227
HCM Platoon Ratio				0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.09	0.00	0.09	1.00	1.00	0.00	0.00	0.98	0.98
Uniform Delay (d), s/veh				47.6	0.0	45.0	38.7	40.2	0.0	0.0	50.5	50.7
Incr Delay (d2), s/veh				10.6	0.0	2.0	29.7	7.7	0.0	0.0	40.8	46.9
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				36.6	0.0	30.8	8.7	11.8	0.0	0.0	9.8	9.6
Lane Grp Delay (d), s/veh				58.2	0.0	47.0	68.4	47.9	0.0	0.0	91.3	97.6
Lane Grp LOS				F		D	E	D			F	F
Approach Vol, veh/h					1989			969			442	
Approach Delay, s/veh					52.9			52.4			94.4	
Approach LOS					D			D			F	

Timer				
Assigned Phs	2	7	4	8
Phs Duration (G+Y+Rc), s	80.0	16.0	40.0	24.0
Change Period (Y+Rc), s	5.0	3.0	6.3	6.3
Max Green Setting (Gmax), s	75.0	13.0	33.7	17.7
Max Q Clear Time (g_c+I1), s	77.0	15.0	27.5	18.6
Green Ext Time (p_c), s	0.0	0.0	2.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	58.1
HCM 2010 LOS	E

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	180	1500	0	0	0	0	0	800	280
Number				5	2	12				3	8	18
Initial Q (Qb), veh				0	0	0				0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00				1.00		1.00
Parking Bus Adj				1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow veh/h/ln				171.0	166.0	0.0				0.0	166.0	171.0
Lanes				0	2	0				0	2	0
Cap, veh/h				60	831	0				0	870	304
Arrive On Green				0.18	0.18	0.00				0.00	0.37	0.37
Sat Flow, veh/h				0	1511	0				0	2352	823
Grp Volume(v), veh/h				189	1579	0				0	594	543
Grp Sat Flow(s),veh/h/ln				0	1511	0				0	1660	1515
Q Serve(g_s), s				0.0	66.0	0.0				0.0	42.1	42.3
Cycle Q Clear(g_c), s				66.0	66.0	0.0				0.0	42.1	42.3
Prop In Lane				1.00		0.00				0.00		0.54
Lane Grp Cap(c), veh/h				60	831	0				0	614	560
V/C Ratio(X)				3.15	1.90	0.00				0.00	0.97	0.97
Avail Cap(c_a), veh/h				60	831	0				0	614	561
HCM Platoon Ratio				0.33	0.33	1.00				1.00	1.00	1.00
Upstream Filter(I)				0.42	0.42	0.00				0.00	0.09	0.09
Uniform Delay (d), s/veh				82.1	49.1	0.0				0.0	37.1	37.1
Incr Delay (d2), s/veh				985.1	406.8	0.0				0.0	5.4	6.1
Initial Q Delay(d3),s/veh				0.0	0.0	0.0				0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				18.4	120.9	0.0				0.0	18.6	17.1
Lane Grp Delay (d), s/veh				1067.2	455.8	0.0				0.0	42.5	43.2
Lane Grp LOS				F	F						D	D
Approach Vol, veh/h					1768						1137	
Approach Delay, s/veh					521.2						42.8	
Approach LOS					F						D	

Timer	
Assigned Phs	2
Phs Duration (G+Y+Rc), s	71.0
Change Period (Y+Rc), s	5.0
Max Green Setting (Gmax), s	66.0
Max Q Clear Time (g_c+I1), s	68.0
Green Ext Time (p_c), s	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	334.0
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	0	1500	150	260	700	0	0	0	0
Number				5	2	12	7	4	14			
Initial Q (Qb), veh				0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00			
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow veh/h/ln				0.0	166.0	171.0	171.0	166.0	0.0			
Lanes				0	2	0	0	3	0			
Cap, veh/h				0	1933	191	60	816	0			
Arrive On Green				0.00	0.65	0.65	0.27	0.27	0.00			
Sat Flow, veh/h				0	2974	294	0	3022	0			
Grp Volume(v), veh/h				0	874	863	274	737	0			
Grp Sat Flow(s),veh/h/ln				0	1660	1608	0	1511	0			
Q Serve(g_s), s				0.0	46.7	48.7	0.0	28.3	0.0			
Cycle Q Clear(g_c), s				0.0	46.7	48.7	32.4	28.3	0.0			
Prop In Lane				0.00		0.18	1.00		0.00			
Lane Grp Cap(c), veh/h				0	1079	1045	60	816	0			
V/C Ratio(X)				0.00	0.81	0.83	4.57	0.90	0.00			
Avail Cap(c_a), veh/h				0	1079	1045	60	816	0			
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)				0.00	0.09	0.09	1.00	1.00	0.00			
Uniform Delay (d), s/veh				0.0	15.5	15.9	60.0	42.3	0.0			
Incr Delay (d2), s/veh				0.0	0.6	0.7	1642.5	13.4	0.0			
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0			
%ile Back of Q (50%), veh/ln				0.0	17.9	18.2	29.2	12.5	0.0			
Lane Grp Delay (d), s/veh				0.0	16.2	16.6	1702.5	55.7	0.0			
Lane Grp LOS					B	B	F	E				
Approach Vol, veh/h					1737			1011				
Approach Delay, s/veh					16.4			502.0				
Approach LOS					B			F				

Timer	
Assigned Phs	2	4
Phs Duration (G+Y+Rc), s	83.0	37.0
Change Period (Y+Rc), s	5.0	4.6
Max Green Setting (Gmax), s	78.0	32.4
Max Q Clear Time (g_c+I1), s	50.7	34.4
Green Ext Time (p_c), s	16.4	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	195.0
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	310	710	180	550	930	250	380	1200	410
Number				7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				166.0	166.0	166.0	166.0	166.0	166.0	166.0	166.0	166.0
Lanes				1	1	1	1	2	1	2	2	1
Cap, veh/h				579	608	517	237	1200	510	443	1181	502
Arrive On Green				0.37	0.37	0.37	0.15	0.36	0.36	0.29	0.71	0.71
Sat Flow, veh/h				1581	1660	1411	1581	3320	1411	3067	3320	1411
Grp Volume(v), veh/h				326	747	189	579	979	263	400	1263	432
Grp Sat Flow(s),veh/h/ln				1581	1660	1411	1581	1660	1411	1534	1660	1411
Q Serve(g_s), s				23.0	51.3	13.7	21.0	37.4	20.5	17.6	49.8	31.9
Cycle Q Clear(g_c), s				23.0	51.3	13.7	21.0	37.4	20.5	17.6	49.8	31.9
Prop In Lane				1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h				579	608	517	237	1200	510	443	1181	502
V/C Ratio(X)				0.56	1.23	0.37	2.44	0.82	0.52	0.90	1.07	0.86
Avail Cap(c_a), veh/h				579	608	517	237	1200	510	526	1181	502
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	1.00	0.42	0.42	0.42
Uniform Delay (d), s/veh				35.4	44.3	32.4	59.5	40.5	35.1	48.9	20.2	17.6
Incr Delay (d2), s/veh				1.2	116.6	0.4	661.2	6.2	3.7	8.4	39.1	8.2
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				9.5	41.5	12.0	52.2	16.9	8.0	6.9	21.3	9.4
Lane Grp Delay (d), s/veh				36.6	160.9	32.9	720.7	46.7	38.8	57.3	59.3	25.8
Lane Grp LOS				D	F	C	F	D	D	E	F	C
Approach Vol, veh/h					1262			1821			2095	
Approach Delay, s/veh					109.7			259.8			52.0	
Approach LOS					F			F			D	

Timer												
Assigned Phs					4		1	6		5	2	
Phs Duration (G+Y+Rc), s					58.0		26.0	56.8		25.2	56.0	
Change Period (Y+Rc), s					6.7		5.0	6.2		5.0	6.2	
Max Green Setting (Gmax), s					51.3		21.0	46.8		24.0	49.8	
Max Q Clear Time (g_c+I1), s					53.3		23.0	39.4		19.6	51.8	
Green Ext Time (p_c), s					0.0		0.0	6.9		0.6	0.0	

Intersection Summary	
HCM 2010 Ctrl Delay	139.1
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	310	30	760	80	0	110	0	1500	10	30	1810	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	6.7		6.7		6.2		3.0	6.2	
Lane Util. Factor	0.95	0.95	1.00	1.00		1.00		0.91		1.00	0.95	
Frt	1.00	1.00	0.85	1.00		0.85		1.00		1.00	1.00	
Flt Protected	0.95	0.96	1.00	0.95		1.00		1.00		0.95	1.00	
Satd. Flow (prot)	1498	1515	1411	1577		1411		4528		1577	3154	
Flt Permitted	0.95	0.96	1.00	0.64		1.00		1.00		0.09	1.00	
Satd. Flow (perm)	1498	1515	1411	1061		1411		4528		157	3154	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	326	32	800	84	0	116	0	1579	11	32	1905	0
RTOR Reduction (vph)	0	0	75	0	0	88	0	0	0	0	0	0
Lane Group Flow (vph)	179	179	725	84	0	28	0	1590	0	32	1905	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Split	NA	Perm	custom		custom		NA		pm+pt	NA	
Protected Phases	3	3						6		5	2	
Permitted Phases			3	4		4				2		
Actuated Green, G (s)	31.0	31.0	31.0	14.6		14.6		80.5		86.5	86.5	
Effective Green, g (s)	31.0	31.0	31.0	14.6		14.6		80.5		86.5	86.5	
Actuated g/C Ratio	0.21	0.21	0.21	0.10		0.10		0.54		0.58	0.58	
Clearance Time (s)	5.0	5.0	5.0	6.7		6.7		6.2		3.0	6.2	
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0		3.0		3.0	3.0	
Lane Grp Cap (vph)	309	313	291	103		137		2430		118	1818	
v/s Ratio Prot	0.12	0.12						0.35		0.01	c0.60	
v/s Ratio Perm			c0.51	c0.08		0.02				0.15		
v/c Ratio	0.58	0.57	2.49	0.82		0.21		0.65		0.27	1.05	
Uniform Delay, d1	53.6	53.5	59.5	66.4		62.4		24.8		17.2	31.8	
Progression Factor	1.00	1.00	1.00	1.00		1.00		0.15		1.00	1.00	
Incremental Delay, d2	2.6	2.5	682.0	37.1		0.8		0.1		1.2	34.9	
Delay (s)	56.2	56.0	741.5	103.5		63.1		4.0		18.4	66.7	
Level of Service	E	E	F	F		E		A		B	E	
Approach Delay (s)		529.6			80.1			4.0			65.9	
Approach LOS		F			F			A			E	

Intersection Summary			
HCM 2000 Control Delay	156.2	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.39		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	20.9
Intersection Capacity Utilization	125.5%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	700	1060	0	0	0	0	0	1050	140	0	0	0
Number	1	6	16				7	4	14			
Initial Q (Qb), veh	0	0	0				0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00			
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00			
Adj Sat Flow veh/h/ln	171.0	166.0	0.0				0.0	166.0	166.0			
Lanes	0	2	0				0	2	1			
Cap, veh/h	57	845	0				0	1222	520			
Arrive On Green	0.18	0.18	0.00				0.00	0.37	0.37			
Sat Flow, veh/h	0	1511	0				0	3320	1411			
Grp Volume(v), veh/h	737	1116	0				0	1105	147			
Grp Sat Flow(s),veh/h/ln	0	1511	0				0	1660	1411			
Q Serve(g_s), s	0.0	71.0	0.0				0.0	40.0	9.3			
Cycle Q Clear(g_c), s	71.0	71.0	0.0				0.0	40.0	9.3			
Prop In Lane	1.00		0.00				0.00		1.00			
Lane Grp Cap(c), veh/h	57	845	0				0	1222	520			
V/C Ratio(X)	12.99	1.32	0.00				0.00	0.90	0.28			
Avail Cap(c_a), veh/h	57	845	0				0	1303	554			
HCM Platoon Ratio	0.33	0.33	1.00				1.00	1.00	1.00			
Upstream Filter(I)	0.09	0.09	0.00				0.00	0.09	0.09			
Uniform Delay (d), s/veh	87.3	51.8	0.0				0.0	38.0	28.3			
Incr Delay (d2), s/veh	5399.9	145.1	0.0				0.0	0.9	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0			
%ile Back of Q (50%), veh/ln	87.0	63.2	0.0				0.0	17.0	3.4			
Lane Grp Delay (d), s/veh	5487.1	196.8	0.0				0.0	38.9	28.3			
Lane Grp LOS	F	F						D	C			
Approach Vol, veh/h		1853						1252				
Approach Delay, s/veh		2300.9						37.7				
Approach LOS		F						D				

Timer	
Assigned Phs	6
Phs Duration (G+Y+Rc), s	76.0
Change Period (Y+Rc), s	5.0
Max Green Setting (Gmax), s	71.0
Max Q Clear Time (g_c+I1), s	73.0
Green Ext Time (p_c), s	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	1388.3
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1250	310	0	0	0	0	0	0	340	990	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0								4.6	4.6	
Lane Util. Factor		0.95								0.95	0.95	
Frt		0.97								1.00	1.00	
Flt Protected		1.00								0.95	1.00	
Satd. Flow (prot)		3060								1498	1575	
Flt Permitted		1.00								0.95	1.00	
Satd. Flow (perm)		3060								1498	1575	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	1316	326	0	0	0	0	0	0	358	1042	0
RTOR Reduction (vph)	0	17	0	0	0	0	0	0	0	8	8	0
Lane Group Flow (vph)	0	1625	0	0	0	0	0	0	0	314	1070	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type		NA								Perm	NA	
Protected Phases		6									8	
Permitted Phases										8		
Actuated Green, G (s)		53.0								67.4	67.4	
Effective Green, g (s)		53.0								67.4	67.4	
Actuated g/C Ratio		0.41								0.52	0.52	
Clearance Time (s)		5.0								4.6	4.6	
Vehicle Extension (s)		3.0								3.0	3.0	
Lane Grp Cap (vph)		1247								776	816	
v/s Ratio Prot		c0.53										
v/s Ratio Perm										0.21	0.68	
v/c Ratio		1.30								0.40	1.31	
Uniform Delay, d1		38.5								19.1	31.3	
Progression Factor		1.06								1.00	1.00	
Incremental Delay, d2		137.1								0.3	148.7	
Delay (s)		178.0								19.4	180.0	
Level of Service		F								B	F	
Approach Delay (s)		178.0			0.0			0.0			143.1	
Approach LOS		F			A			A			F	

Intersection Summary			
HCM 2000 Control Delay	162.0	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.31		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	9.6
Intersection Capacity Utilization	103.4%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	450	1220	320	0	0	0	0	640	80	130	400	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	171.0	166.0	171.0				0.0	166.0	171.0	166.0	166.0	0.0
Lanes	0	2	0				0	2	0	1	2	0
Cap, veh/h	427	1191	321				0	655	82	165	1057	0
Arrive On Green	0.20	0.20	0.20				0.00	0.23	0.23	0.07	0.32	0.00
Sat Flow, veh/h	702	1961	529				0	2896	361	1581	3320	0
Grp Volume(v), veh/h	1097	0	998				0	386	372	137	421	0
Grp Sat Flow(s),veh/h/ln	1625	0	1567				0	1660	1597	1581	1660	0
Q Serve(g_s), s	79.0	0.0	79.0				0.0	29.4	29.4	8.5	12.9	0.0
Cycle Q Clear(g_c), s	79.0	0.0	79.0				0.0	29.4	29.4	8.5	12.9	0.0
Prop In Lane	0.43		0.34				0.00		0.23	1.00		0.00
Lane Grp Cap(c), veh/h	988	0	952				0	375	361	165	1057	0
V/C Ratio(X)	1.11	0.00	1.05				0.00	1.03	1.03	0.83	0.40	0.00
Avail Cap(c_a), veh/h	988	0	952				0	375	361	165	1057	0
HCM Platoon Ratio	0.33	0.33	0.33				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.00	0.09				0.00	0.84	0.84	1.00	1.00	0.00
Uniform Delay (d), s/veh	52.0	0.0	52.0				0.0	50.3	50.3	37.6	34.6	0.0
Incr Delay (d2), s/veh	51.4	0.0	24.9				0.0	50.1	51.4	28.7	1.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	48.9	0.0	40.2				0.0	17.8	17.3	6.0	5.6	0.0
Lane Grp Delay (d), s/veh	103.4	0.0	76.9				0.0	100.4	101.7	66.3	35.7	0.0
Lane Grp LOS	F		F					F	F	E	D	
Approach Vol, veh/h		2095						758			558	
Approach Delay, s/veh		90.8						101.0			43.2	
Approach LOS		F						F			D	

Timer					
Assigned Phs		6		4	3	8
Phs Duration (G+Y+Rc), s		84.0		34.0	12.0	46.0
Change Period (Y+Rc), s		5.0		4.6	3.0	4.6
Max Green Setting (Gmax), s		79.0		29.4	9.0	41.4
Max Q Clear Time (g_c+I1), s		81.0		31.4	10.5	14.9
Green Ext Time (p_c), s		0.0		0.0	0.0	8.8

Intersection Summary	
HCM 2010 Ctrl Delay	85.3
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	210	1500	200	0	0	0	0	300	330	0	0	0
Number	1	6	16				7	4	14			
Initial Q (Qb), veh	0	0	0				0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00			
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00			
Adj Sat Flow veh/h/ln	171.0	166.0	171.0				0.0	166.0	171.0			
Lanes	0	2	0				0	1	0			
Cap, veh/h	55	733	98				0	266	292			
Arrive On Green	0.19	0.19	0.19				0.00	0.12	0.12			
Sat Flow, veh/h	0	1306	174				0	724	795			
Grp Volume(v), veh/h	221	0	1790				0	0	663			
Grp Sat Flow(s),veh/h/ln	0	0	1480				0	0	1520			
Q Serve(g_s), s	0.0	0.0	73.0				0.0	0.0	47.7			
Cycle Q Clear(g_c), s	73.0	0.0	73.0				0.0	0.0	47.7			
Prop In Lane	1.00		0.12				0.00		0.52			
Lane Grp Cap(c), veh/h	55	0	831				0	0	558			
V/C Ratio(X)	3.99	0.00	2.15				0.00	0.00	1.19			
Avail Cap(c_a), veh/h	55	0	831				0	0	558			
HCM Platoon Ratio	0.33	0.33	0.33				1.00	0.33	0.33			
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.00	0.40			
Uniform Delay (d), s/veh	89.5	0.0	53.0				0.0	0.0	57.1			
Incr Delay (d2), s/veh	1387.7	0.0	523.2				0.0	0.0	92.5			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0			
%ile Back of Q (50%), veh/ln	23.3	0.0	150.1				0.0	0.0	34.2			
Lane Grp Delay (d), s/veh	1477.1	0.0	576.2				0.0	0.0	149.7			
Lane Grp LOS	F		F						F			
Approach Vol, veh/h		2011						663				
Approach Delay, s/veh		675.2						149.7				
Approach LOS		F						F				

Timer	
Assigned Phs	6
Phs Duration (G+Y+Rc), s	78.0
Change Period (Y+Rc), s	5.0
Max Green Setting (Gmax), s	73.0
Max Q Clear Time (g_c+I1), s	75.0
Green Ext Time (p_c), s	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	544.9
HCM 2010 LOS	F

Notes

Movement	EBT	EBR	SBT	SWL2	SWL
Lane Configurations					
Volume (vph)	1880	150	580	590	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900
Total Lost time (s)	5.0		7.0	7.0	
Lane Util. Factor	0.95		0.95	0.97	
Frt	0.99		1.00	1.00	
Flt Protected	1.00		1.00	0.95	
Satd. Flow (prot)	3150		3185	3090	
Flt Permitted	1.00		1.00	0.95	
Satd. Flow (perm)	3150		3185	3090	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	1979	158	611	621	0
RTOR Reduction (vph)	4	0	0	583	0
Lane Group Flow (vph)	2133	0	611	38	0
Turn Type	NA		NA	Perm	
Protected Phases	6		9		8
Permitted Phases				8	
Actuated Green, G (s)	71.3		31.8	7.9	
Effective Green, g (s)	71.3		31.8	7.9	
Actuated g/C Ratio	0.55		0.24	0.06	
Clearance Time (s)	5.0		7.0	7.0	
Vehicle Extension (s)	3.0		3.0	3.0	
Lane Grp Cap (vph)	1727		779	187	
v/s Ratio Prot	c0.68		c0.19		
v/s Ratio Perm				c0.01	
v/c Ratio	1.24		0.78	0.20	
Uniform Delay, d1	29.4		45.9	58.1	
Progression Factor	1.00		1.00	1.00	
Incremental Delay, d2	111.1		5.2	0.5	
Delay (s)	140.5		51.1	58.6	
Level of Service	F		D	E	
Approach Delay (s)	140.5		51.1		58.6
Approach LOS	F		D		E

Intersection Summary			
HCM 2000 Control Delay	109.2	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.03		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	19.0
Intersection Capacity Utilization	115.4%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	160	1700	40	0	0	0	0	210	40	100	160	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	186.3	190.0	190.0	193.7	0.0
Lanes	0	2	0				0	1	0	0	1	0
Cap, veh/h	185	2072	51				0	432	82	139	206	0
Arrive On Green	0.21	0.21	0.21				0.00	0.28	0.28	0.28	0.28	0.00
Sat Flow, veh/h	297	3318	82				0	1522	289	338	726	0
Grp Volume(v), veh/h	1047	0	952				0	0	263	273	0	0
Grp Sat Flow(s),veh/h/ln	1848	0	1848				0	0	1812	1064	0	0
Q Serve(g_s), s	64.6	0.0	57.6				0.0	0.0	14.2	16.3	0.0	0.0
Cycle Q Clear(g_c), s	64.6	0.0	57.6				0.0	0.0	14.2	30.5	0.0	0.0
Prop In Lane	0.16		0.04				0.00		0.16	0.38		0.00
Lane Grp Cap(c), veh/h	1154	0	1154				0	0	515	345	0	0
V/C Ratio(X)	0.91	0.00	0.83				0.00	0.00	0.51	0.79	0.00	0.00
Avail Cap(c_a), veh/h	1154	0	1154				0	0	563	386	0	0
HCM Platoon Ratio	0.33	0.33	0.33				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.00	0.74	1.00	0.00	0.00
Uniform Delay (d), s/veh	43.1	0.0	40.3				0.0	0.0	35.1	43.8	0.0	0.0
Incr Delay (d2), s/veh	11.9	0.0	6.8				0.0	0.0	0.4	9.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	36.2	0.0	31.1				0.0	0.0	6.6	8.9	0.0	0.0
Lane Grp Delay (d), s/veh	54.9	0.0	47.1				0.0	0.0	35.5	53.0	0.0	0.0
Lane Grp LOS	D		D						D	D		
Approach Vol, veh/h		1999						263			273	
Approach Delay, s/veh		51.2						35.5			53.0	
Approach LOS		D						D			D	

Timer												
Assigned Phs		6						4			8	
Phs Duration (G+Y+Rc), s		78.0						38.9			38.9	
Change Period (Y+Rc), s		5.0						5.7			5.7	
Max Green Setting (Gmax), s		73.0						36.3			36.3	
Max Q Clear Time (g_c+I1), s		66.6						16.2			32.5	
Green Ext Time (p_c), s		4.9						1.6			0.7	

Intersection Summary												
HCM 2010 Ctrl Delay			49.8									
HCM 2010 LOS			D									

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	140	1700	70	0	0	0	0	510	120	140	570	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	184.5	190.0				0.0	184.5	190.0	190.0	177.1	0.0
Lanes	0	2	0				0	2	0	0	2	0
Cap, veh/h	136	1736	75				0	1109	259	191	709	0
Arrive On Green	0.18	0.18	0.18				0.00	0.38	0.38	0.38	0.38	0.00
Sat Flow, veh/h	256	3255	141				0	2894	676	370	1850	0
Grp Volume(v), veh/h	1052	0	958				0	341	322	228	519	0
Grp Sat Flow(s),veh/h/ln	1832	0	1820				0	1845	1725	609	1611	0
Q Serve(g_s), s	64.0	0.0	63.0				0.0	16.8	17.0	28.0	35.1	0.0
Cycle Q Clear(g_c), s	64.0	0.0	63.0				0.0	16.8	17.0	45.0	35.1	0.0
Prop In Lane	0.14		0.08				0.00		0.39	0.64		0.00
Lane Grp Cap(c), veh/h	977	0	971				0	707	661	278	618	0
V/C Ratio(X)	1.08	0.00	0.99				0.00	0.48	0.49	0.82	0.84	0.00
Avail Cap(c_a), veh/h	977	0	971				0	707	661	278	618	0
HCM Platoon Ratio	0.33	0.33	0.33				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.44	0.00	0.44				0.00	0.34	0.34	1.00	1.00	0.00
Uniform Delay (d), s/veh	49.4	0.0	49.0				0.0	28.0	28.2	43.8	33.7	0.0
Incr Delay (d2), s/veh	43.7	0.0	16.2				0.0	0.8	0.9	23.2	13.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	43.6	0.0	35.4				0.0	7.9	7.5	8.9	16.3	0.0
Lane Grp Delay (d), s/veh	93.1	0.0	65.2				0.0	28.8	29.1	67.0	46.6	0.0
Lane Grp LOS	F		E					C	C	E	D	
Approach Vol, veh/h		2010						663			747	
Approach Delay, s/veh		79.8						28.9			52.8	
Approach LOS		E						C			D	

Timer												
Assigned Phs		6						4			8	
Phs Duration (G+Y+Rc), s		69.0						51.0			51.0	
Change Period (Y+Rc), s		5.0						6.0			6.0	
Max Green Setting (Gmax), s		64.0						45.0			45.0	
Max Q Clear Time (g_c+I1), s		66.0						19.0			47.0	
Green Ext Time (p_c), s		0.0						6.8			0.0	

Intersection Summary												
HCM 2010 Ctrl Delay			64.1									
HCM 2010 LOS			E									

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	1930	80	0	0	0	0	0	0	30	50	0
Number	1	6	16							3	8	18
Initial Q (Qb), veh	0	0	0							0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00							1.00		1.00
Parking Bus Adj	1.00	1.00	1.00							1.00	1.00	1.00
Adj Sat Flow veh/h/ln	0.0	182.7	190.0							190.0	190.0	0.0
Lanes	0	2	0							0	1	0
Cap, veh/h	0	2556	105							41	52	0
Arrive On Green	0.00	0.24	0.24							0.18	0.18	0.00
Sat Flow, veh/h	0	3486	143							0	284	0
Grp Volume(v), veh/h	0	1058	1058							85	0	0
Grp Sat Flow(s),veh/h/ln	0	1827	1802							284	0	0
Q Serve(g_s), s	0.0	65.1	66.3							0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	65.1	66.3							22.0	0.0	0.0
Prop In Lane	0.00		0.08							0.38		0.00
Lane Grp Cap(c), veh/h	0	1340	1321							93	0	0
V/C Ratio(X)	0.00	0.79	0.80							0.91	0.00	0.00
Avail Cap(c_a), veh/h	0	1340	1321							93	0	0
HCM Platoon Ratio	1.00	0.33	0.33							1.00	1.00	1.00
Upstream Filter(I)	0.00	0.09	0.09							1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	36.8	37.2							47.5	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.5	0.5							70.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0							0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.0	32.3	32.4							4.5	0.0	0.0
Lane Grp Delay (d), s/veh	0.0	37.3	37.7							118.3	0.0	0.0
Lane Grp LOS		D	D							F		
Approach Vol, veh/h		2116									85	
Approach Delay, s/veh		37.5									118.3	
Approach LOS		D									F	

Timer	
Assigned Phs	6
Phs Duration (G+Y+Rc), s	93.0
Change Period (Y+Rc), s	5.0
Max Green Setting (Gmax), s	88.0
Max Q Clear Time (g_c+I1), s	68.3
Green Ext Time (p_c), s	12.7

Intersection Summary	
HCM 2010 Ctrl Delay	40.6
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	100	1700	80	0	0	0	0	650	140	170	900	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	184.5	190.0				0.0	184.5	190.0	184.5	184.5	0.0
Lanes	0	2	0				0	2	0	1	2	0
Cap, veh/h	101	1789	88				0	800	172	243	1390	0
Arrive On Green	0.18	0.18	0.18				0.00	0.27	0.26	0.09	0.38	0.00
Sat Flow, veh/h	186	3303	162				0	2945	632	1757	3689	0
Grp Volume(v), veh/h	1036	0	942				0	428	403	179	947	0
Grp Sat Flow(s),veh/h/ln	1835	0	1816				0	1845	1733	1757	1845	0
Q Serve(g_s), s	65.0	0.0	61.7				0.0	26.4	26.5	8.6	25.8	0.0
Cycle Q Clear(g_c), s	65.0	0.0	61.7				0.0	26.4	26.5	8.6	25.8	0.0
Prop In Lane	0.10		0.09				0.00		0.36	1.00		0.00
Lane Grp Cap(c), veh/h	994	0	984				0	501	471	243	1390	0
V/C Ratio(X)	1.04	0.00	0.96				0.00	0.85	0.86	0.74	0.68	0.00
Avail Cap(c_a), veh/h	994	0	984				0	501	471	249	1390	0
HCM Platoon Ratio	0.33	0.33	0.33				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.86	0.86	1.00	1.00	0.00
Uniform Delay (d), s/veh	49.3	0.0	47.9				0.0	41.4	41.6	31.0	31.4	0.0
Incr Delay (d2), s/veh	40.0	0.0	20.2				0.0	14.8	15.7	10.7	2.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	43.4	0.0	35.9				0.0	14.5	13.8	6.3	12.5	0.0
Lane Grp Delay (d), s/veh	89.3	0.0	68.1				0.0	56.2	57.3	41.6	34.1	0.0
Lane Grp LOS	F		E					E	E	D	C	
Approach Vol, veh/h		1978						831			1126	
Approach Delay, s/veh		79.2						56.8			35.3	
Approach LOS		E						E			D	

Timer				
Assigned Phs	6	4	3	8
Phs Duration (G+Y+Rc), s	70.0	36.4	13.6	50.0
Change Period (Y+Rc), s	5.0	4.8	3.0	4.8
Max Green Setting (Gmax), s	65.0	31.2	11.0	45.2
Max Q Clear Time (g_c+I1), s	67.0	28.5	10.6	27.8
Green Ext Time (p_c), s	0.0	1.0	0.0	2.1

Intersection Summary	
HCM 2010 Ctrl Delay	61.9
HCM 2010 LOS	E

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	80	0	20	0	0	0	0	80	60	100	90	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	186.3	190.0	190.0	186.3	0.0
Lanes	0	2	0				0	1	0	0	1	0
Cap, veh/h	1221	0	1090				0	218	164	165	135	0
Arrive On Green	0.69	0.00	0.69				0.00	0.22	0.21	0.21	0.22	0.00
Sat Flow, veh/h	1774	0	1583				0	990	742	507	613	0
Grp Volume(v), veh/h	84	0	21				0	0	147	200	0	0
Grp Sat Flow(s),veh/h/ln	1774	0	1583				0	0	1732	1120	0	0
Q Serve(g_s), s	1.6	0.0	0.4				0.0	0.0	7.5	11.3	0.0	0.0
Cycle Q Clear(g_c), s	1.6	0.0	0.4				0.0	0.0	7.5	18.8	0.0	0.0
Prop In Lane	1.00		1.00				0.00		0.43	0.52		0.00
Lane Grp Cap(c), veh/h	1221	0	1090				0	0	382	290	0	0
V/C Ratio(X)	0.07	0.00	0.02				0.00	0.00	0.38	0.69	0.00	0.00
Avail Cap(c_a), veh/h	1221	0	1090				0	0	662	527	0	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.00	0.95	1.00	0.00	0.00
Uniform Delay (d), s/veh	5.3	0.0	5.1				0.0	0.0	34.5	40.6	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.0				0.0	0.0	0.4	2.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.7	0.0	0.2				0.0	0.0	3.3	5.3	0.0	0.0
Lane Grp Delay (d), s/veh	5.4	0.0	5.1				0.0	0.0	34.9	42.8	0.0	0.0
Lane Grp LOS	A		A						C	D		
Approach Vol, veh/h		105						147			200	
Approach Delay, s/veh		5.3						34.9			42.8	
Approach LOS		A						C			D	

Timer			
Assigned Phs	6	4	8
Phs Duration (G+Y+Rc), s	75.6	27.7	27.7
Change Period (Y+Rc), s	4.5	5.9	5.9
Max Green Setting (Gmax), s	71.1	38.5	38.5
Max Q Clear Time (g_c+I1), s	3.6	9.5	20.8
Green Ext Time (p_c), s	0.4	1.1	1.0

Intersection Summary	
HCM 2010 Ctrl Delay	31.5
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	100	1620	50	0	0	0	0	750	110	50	1200	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	186.3	190.0	186.3	186.3	0.0
Lanes	0	2	0				0	2	0	1	2	0
Cap, veh/h	93	1580	51				0	1246	183	223	1661	0
Arrive On Green	0.15	0.15	0.15				0.00	0.39	0.38	0.03	0.45	0.00
Sat Flow, veh/h	199	3387	110				0	3176	467	1774	3725	0
Grp Volume(v), veh/h	976	0	887				0	463	442	53	1263	0
Grp Sat Flow(s),veh/h/ln	1853	0	1843				0	1863	1780	1774	1863	0
Q Serve(g_s), s	56.0	0.0	56.0				0.0	24.1	24.2	2.1	34.1	0.0
Cycle Q Clear(g_c), s	56.0	0.0	56.0				0.0	24.1	24.2	2.1	34.1	0.0
Prop In Lane	0.11		0.06				0.00		0.26	1.00		0.00
Lane Grp Cap(c), veh/h	865	0	860				0	731	698	223	1661	0
V/C Ratio(X)	1.13	0.00	1.03				0.00	0.63	0.63	0.24	0.76	0.00
Avail Cap(c_a), veh/h	865	0	860				0	731	698	290	1661	0
HCM Platoon Ratio	0.33	0.33	0.33				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.39	0.00	0.39				0.00	0.89	0.89	1.00	1.00	0.00
Uniform Delay (d), s/veh	50.8	0.0	50.8				0.0	29.5	29.6	23.3	27.9	0.0
Incr Delay (d2), s/veh	64.2	0.0	27.7				0.0	1.6	1.7	0.5	3.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	43.5	0.0	34.6				0.0	11.5	11.0	0.9	16.6	0.0
Lane Grp Delay (d), s/veh	115.0	0.0	78.5				0.0	31.1	31.3	23.8	31.2	0.0
Lane Grp LOS	F		F					C	C	C	C	
Approach Vol, veh/h		1863						905			1316	
Approach Delay, s/veh		97.6						31.2			30.9	
Approach LOS		F						C			C	

Timer					
Assigned Phs		6		4		3	8	
Phs Duration (G+Y+Rc), s		61.0		52.6		6.4	59.0	
Change Period (Y+Rc), s		5.0		6.5		3.0	6.5	
Max Green Setting (Gmax), s		56.0		41.5		8.0	52.5	
Max Q Clear Time (g_c+I1), s		58.0		26.2		4.1	36.1	
Green Ext Time (p_c), s		0.0		9.6		0.0	10.1	

Intersection Summary	
HCM 2010 Ctrl Delay	61.4
HCM 2010 LOS	E

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Volume (veh/h)	120	1500	50	0	0	0	0	240	100	230	350	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	186.3	190.0	186.3	193.7	0.0
Lanes	0	2	0				0	2	0	1	1	0
Cap, veh/h	137	1803	63				0	522	211	400	690	0
Arrive On Green	0.54	0.54	0.54				0.00	0.21	0.21	0.12	0.36	0.00
Sat Flow, veh/h	253	3323	117				0	2527	1019	1774	1937	0
Grp Volume(v), veh/h	921	0	837				0	185	173	242	368	0
Grp Sat Flow(s),veh/h/ln	1850	0	1842				0	1863	1683	1774	1937	0
Q Serve(g_s), s	51.6	0.0	43.3				0.0	9.9	10.4	11.7	17.2	0.0
Cycle Q Clear(g_c), s	51.6	0.0	43.3				0.0	9.9	10.4	11.7	17.2	0.0
Prop In Lane	0.14		0.06				0.00		0.61	1.00		0.00
Lane Grp Cap(c), veh/h	1004	0	999				0	385	348	400	690	0
V/C Ratio(X)	0.92	0.00	0.84				0.00	0.48	0.50	0.61	0.53	0.00
Avail Cap(c_a), veh/h	1107	0	1102				0	385	348	447	690	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.55	0.00	0.55				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	23.7	0.0	21.8				0.0	39.7	39.9	28.9	29.1	0.0
Incr Delay (d2), s/veh	6.8	0.0	3.0				0.0	4.2	5.0	1.9	2.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	24.7	0.0	19.9				0.0	5.2	5.0	5.4	8.9	0.0
Lane Grp Delay (d), s/veh	30.5	0.0	24.8				0.0	43.9	44.9	30.8	32.0	0.0
Lane Grp LOS	C		C					D	D	C	C	
Approach Vol, veh/h		1758						358			610	
Approach Delay, s/veh		27.8						44.4			31.5	
Approach LOS		C						D			C	

Timer					
Assigned Phs		6		4	3	8
Phs Duration (G+Y+Rc), s		66.7		30.0	17.0	47.0
Change Period (Y+Rc), s		5.0		6.5	3.0	6.5
Max Green Setting (Gmax), s		68.0		20.5	17.0	40.5
Max Q Clear Time (g_c+I1), s		53.6		12.4	13.7	19.2
Green Ext Time (p_c), s		8.1		1.4	0.3	1.9

Intersection Summary	
HCM 2010 Ctrl Delay	30.8
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	120	0	20	0	0	0	0	1340	1300	320	1430	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	9	12	9	11	11	11	12	10	12	12	10	12
Total Lost time (s)	3.9		3.9					3.6	4.6	4.6	3.6	
Lane Util. Factor	1.00		1.00					0.91	0.91	0.97	0.95	
Frt	1.00		0.85					0.96	0.85	1.00	1.00	
Flt Protected	0.95		1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1593		1425					3039	1441	3433	3303	
Flt Permitted	0.95		1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1593		1425					3039	1441	3433	3303	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	126	0	21	0	0	0	0	1411	1368	337	1505	0
RTOR Reduction (vph)	0	0	19	0	0	0	0	25	162	0	0	0
Lane Group Flow (vph)	126	0	2	0	0	0	0	1892	700	337	1505	0
Turn Type	custom		custom					NA	Perm	Prot	NA	
Protected Phases			8					6		5	2	
Permitted Phases	8								6			
Actuated Green, G (s)	13.1		13.1					86.0	86.0	16.8	107.4	
Effective Green, g (s)	14.1		14.1					87.0	86.0	16.8	108.4	
Actuated g/C Ratio	0.11		0.11					0.67	0.66	0.13	0.83	
Clearance Time (s)	4.9		4.9					4.6	4.6	4.6	4.6	
Vehicle Extension (s)	2.5		2.5					2.5	2.5	3.0	2.5	
Lane Grp Cap (vph)	172		154					2033	953	443	2754	
v/s Ratio Prot			0.00					c0.62		c0.10	0.46	
v/s Ratio Perm	c0.08								0.49			
v/c Ratio	0.73		0.01					0.93	0.73	0.76	0.55	
Uniform Delay, d1	56.1		51.7					18.9	14.5	54.7	3.3	
Progression Factor	1.00		1.00					0.71	0.69	1.00	1.00	
Incremental Delay, d2	23.9		0.2					1.0	0.5	7.5	0.8	
Delay (s)	80.0		51.9					14.4	10.4	62.2	4.1	
Level of Service	F		D					B	B	E	A	
Approach Delay (s)		76.0			0.0			13.1			14.7	
Approach LOS		E			A			B			B	

Intersection Summary			
HCM 2000 Control Delay	15.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	12.1
Intersection Capacity Utilization	77.2%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1060	0	50	180	1080	260	190	1340	0	0	1430	150
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	11	12	12	11	12	11	10	12	10	10	12
Total Lost time (s)	6.7		6.7	6.7	5.7		3.5	5.0			5.0	5.0
Lane Util. Factor	0.97		1.00	0.97	1.00		1.00	0.91			0.95	1.00
Frt	1.00		0.85	1.00	0.97		1.00	1.00			1.00	0.85
Flt Protected	0.95		1.00	0.95	1.00		0.95	1.00			1.00	1.00
Satd. Flow (prot)	3433		1583	3433	1748		1711	4746			3303	1583
Flt Permitted	0.09		1.00	0.95	1.00		0.12	1.00			1.00	1.00
Satd. Flow (perm)	334		1583	3433	1748		218	4746			3303	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	1116	0	53	189	1137	274	200	1411	0	0	1505	158
RTOR Reduction (vph)	0	0	35	0	5	0	0	0	0	0	0	85
Lane Group Flow (vph)	1116	0	18	189	1406	0	200	1411	0	0	1505	73
Turn Type	custom		custom	Split	NA		pm+pt	NA			NA	Perm
Protected Phases				2	2		7	4			8	
Permitted Phases	1		1				4					8
Actuated Green, G (s)	43.3		43.3	27.3	27.3		40.0	40.0			30.0	30.0
Effective Green, g (s)	43.3		43.3	27.3	28.3		39.5	41.0			31.0	31.0
Actuated g/C Ratio	0.33		0.33	0.21	0.22		0.30	0.32			0.24	0.24
Clearance Time (s)	6.7		6.7	6.7	6.7		3.0	6.0			6.0	6.0
Vehicle Extension (s)	2.5		2.5	2.5	2.5		2.0	2.5			2.5	2.5
Lane Grp Cap (vph)	111		527	720	380		140	1496			787	377
v/s Ratio Prot				0.06	c0.80		c0.07	0.30			c0.46	
v/s Ratio Perm	c3.34		0.01				0.36					0.05
v/c Ratio	10.05		0.03	0.26	3.70		1.43	0.94			1.91	0.19
Uniform Delay, d1	43.4		29.2	42.9	50.9		42.1	43.4			49.5	39.5
Progression Factor	1.00		1.00	1.00	1.00		1.00	1.00			0.94	0.87
Incremental Delay, d2	4092.3		0.1	0.9	1220.9		229.0	13.2			414.7	1.0
Delay (s)	4135.6		29.4	43.8	1271.7		271.0	56.5			461.2	35.5
Level of Service	F		C	D	F		F	E			F	D
Approach Delay (s)		3949.4			1126.7			83.2			420.8	
Approach LOS		F			F			F			F	

Intersection Summary			
HCM 2000 Control Delay	1200.3	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	5.62		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	21.9
Intersection Capacity Utilization	168.5%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	30	1300	40	40	50	0	0	100	50
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	186.3	190.0	190.0	186.3	0.0	0.0	186.3	190.0
Lanes				0	2	0	0	1	0	0	1	0
Cap, veh/h				59	2653	85	87	92	0	0	167	84
Arrive On Green				0.25	0.25	0.25	0.14	0.14	0.00	0.00	0.14	0.14
Sat Flow, veh/h				79	3510	113	272	644	0	0	1169	590
Grp Volume(v), veh/h				757	0	685	95	0	0	0	0	158
Grp Sat Flow(s),veh/h/ln				1859	0	1843	916	0	0	0	0	1759
Q Serve(g_s), s				38.3	0.0	34.5	3.6	0.0	0.0	0.0	0.0	9.2
Cycle Q Clear(g_c), s				38.3	0.0	34.5	12.7	0.0	0.0	0.0	0.0	9.2
Prop In Lane				0.04		0.06	0.44		0.00	0.00		0.34
Lane Grp Cap(c), veh/h				1405	0	1393	179	0	0	0	0	251
V/C Ratio(X)				0.54	0.00	0.49	0.53	0.00	0.00	0.00	0.00	0.63
Avail Cap(c_a), veh/h				1405	0	1393	339	0	0	0	0	438
HCM Platoon Ratio				0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.09	0.00	0.09	1.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				24.3	0.0	22.9	45.4	0.0	0.0	0.0	0.0	43.8
Incr Delay (d2), s/veh				0.1	0.0	0.1	2.4	0.0	0.0	0.0	0.0	2.6
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				19.5	0.0	17.5	2.7	0.0	0.0	0.0	0.0	4.3
Lane Grp Delay (d), s/veh				24.5	0.0	23.0	47.9	0.0	0.0	0.0	0.0	46.4
Lane Grp LOS				C		C	D					D
Approach Vol, veh/h					1442			95			158	
Approach Delay, s/veh					23.8			47.9			46.4	
Approach LOS					C			D			D	
Timer												
Assigned Phs					2			4			8	
Phs Duration (G+Y+Rc), s					87.0			21.5			21.5	
Change Period (Y+Rc), s					5.0			6.0			6.0	
Max Green Setting (Gmax), s					82.0			27.0			27.0	
Max Q Clear Time (g_c+I1), s					40.3			14.7			11.2	
Green Ext Time (p_c), s					8.8			0.7			0.8	
Intersection Summary												
HCM 2010 Ctrl Delay			27.2									
HCM 2010 LOS			C									
Notes												

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	190	1200	140	70	700	0	0	1170	70
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	186.3	190.0	186.3	186.3	0.0	0.0	186.3	190.0
Lanes				0	2	0	1	2	0	0	2	0
Cap, veh/h				185	1216	148	170	1832	0	0	1497	90
Arrive On Green				0.14	0.14	0.14	0.04	0.49	0.00	0.00	0.43	0.42
Sat Flow, veh/h				434	2861	348	1774	3725	0	0	3480	209
Grp Volume(v), veh/h				848	0	762	74	737	0	0	659	647
Grp Sat Flow(s),veh/h/ln				1841	0	1801	1774	1863	0	0	1863	1826
Q Serve(g_s), s				51.0	0.0	50.7	2.7	15.0	0.0	0.0	37.4	37.6
Cycle Q Clear(g_c), s				51.0	0.0	50.7	2.7	15.0	0.0	0.0	37.4	37.6
Prop In Lane				0.24		0.19	1.00		0.00	0.00		0.11
Lane Grp Cap(c), veh/h				782	0	766	170	1832	0	0	801	785
V/C Ratio(X)				1.08	0.00	1.00	0.43	0.40	0.00	0.00	0.82	0.82
Avail Cap(c_a), veh/h				782	0	766	224	1832	0	0	801	785
HCM Platoon Ratio				0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.86	0.00	0.86	1.00	1.00	0.00	0.00	0.50	0.50
Uniform Delay (d), s/veh				51.6	0.0	51.5	25.2	19.3	0.0	0.0	30.1	30.2
Incr Delay (d2), s/veh				55.2	0.0	29.1	1.7	0.7	0.0	0.0	4.9	5.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				37.4	0.0	31.0	1.3	7.0	0.0	0.0	18.5	18.4
Lane Grp Delay (d), s/veh				106.8	0.0	80.5	26.9	20.0	0.0	0.0	35.0	35.3
Lane Grp LOS				F		F	C	B			D	D
Approach Vol, veh/h					1610			811			1306	
Approach Delay, s/veh					94.3			20.6			35.1	
Approach LOS					F			C			D	

Timer					
Assigned Phs		2	7	4	8
Phs Duration (G+Y+Rc), s		56.0	7.4	64.0	56.6
Change Period (Y+Rc), s		5.0	3.0	6.0	6.0
Max Green Setting (Gmax), s		51.0	8.0	58.0	47.3
Max Q Clear Time (g_c+I1), s		53.0	4.7	17.0	39.6
Green Ext Time (p_c), s		0.0	0.0	10.1	4.8

Intersection Summary	
HCM 2010 Ctrl Delay	57.6
HCM 2010 LOS	E

Notes

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations			↑↑			↱
Volume (vph)	0	0	1530	0	0	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	12	11	12	12	11	12
Total Lost time (s)			5.0			4.3
Lane Util. Factor			0.95			1.00
Frt			1.00			0.86
Flt Protected			1.00			1.00
Satd. Flow (prot)			3610			1644
Flt Permitted			1.00			1.00
Satd. Flow (perm)			3610			1644
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	1611	0	0	63
RTOR Reduction (vph)	0	0	0	0	0	55
Lane Group Flow (vph)	0	0	1611	0	0	8
Heavy Vehicles (%)	2%	2%	0%	0%	2%	0%
Turn Type			NA			custom
Protected Phases			2			
Permitted Phases						8
Actuated Green, G (s)			105.3			5.4
Effective Green, g (s)			105.3			5.4
Actuated g/C Ratio			0.88			0.05
Clearance Time (s)			5.0			4.3
Vehicle Extension (s)			3.0			2.5
Lane Grp Cap (vph)			3167			73
v/s Ratio Prot			c0.45			
v/s Ratio Perm						c0.00
v/c Ratio			0.51			0.10
Uniform Delay, d1			1.6			55.0
Progression Factor			0.20			1.00
Incremental Delay, d2			0.5			0.5
Delay (s)			0.8			55.4
Level of Service			A			E
Approach Delay (s)		0.0	0.8		55.4	
Approach LOS		A	A		E	

Intersection Summary			
HCM 2000 Control Delay	2.9	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	9.3
Intersection Capacity Utilization	53.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	20	1300	80	60	80	0	0	90	100
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	190.0	190.0	190.0	195.4	0.0	0.0	195.7	190.0
Lanes				0	2	0	0	1	0	0	1	0
Cap, veh/h				33	2263	146	168	212	0	0	239	264
Arrive On Green				0.65	0.65	0.65	0.27	0.28	0.00	0.00	0.28	0.27
Sat Flow, veh/h				51	3482	224	447	755	0	0	851	941
Grp Volume(v), veh/h				777	0	696	147	0	0	0	0	200
Grp Sat Flow(s),veh/h/ln				1897	0	1860	1202	0	0	0	0	1791
Q Serve(g_s), s				29.1	0.0	25.1	6.5	0.0	0.0	0.0	0.0	10.9
Cycle Q Clear(g_c), s				29.1	0.0	25.1	17.4	0.0	0.0	0.0	0.0	10.9
Prop In Lane				0.03		0.12	0.43		0.00	0.00		0.52
Lane Grp Cap(c), veh/h				1233	0	1209	370	0	0	0	0	503
V/C Ratio(X)				0.63	0.00	0.58	0.40	0.00	0.00	0.00	0.00	0.40
Avail Cap(c_a), veh/h				1233	0	1209	370	0	0	0	0	503
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.39
Uniform Delay (d), s/veh				12.4	0.0	11.7	38.4	0.0	0.0	0.0	0.0	35.2
Incr Delay (d2), s/veh				2.4	0.0	2.0	3.2	0.0	0.0	0.0	0.0	0.9
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				13.6	0.0	11.3	4.4	0.0	0.0	0.0	0.0	5.2
Lane Grp Delay (d), s/veh				14.9	0.0	13.7	41.6	0.0	0.0	0.0	0.0	36.1
Lane Grp LOS				B		B	D					D
Approach Vol, veh/h					1473			147			200	
Approach Delay, s/veh					14.3			41.6			36.1	
Approach LOS					B			D			D	

Timer			
Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	83.0	37.0	37.0
Change Period (Y+Rc), s	5.0	4.3	4.3
Max Green Setting (Gmax), s	78.0	32.7	32.7
Max Q Clear Time (g_c+I1), s	31.1	19.4	12.9
Green Ext Time (p_c), s	9.3	0.9	1.0

Intersection Summary	
HCM 2010 Ctrl Delay	18.9
HCM 2010 LOS	B

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	150	1200	90	80	640	0	0	940	120
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	190.0	190.0	186.3	186.3	0.0	0.0	186.3	190.0
Lanes				0	2	0	1	2	0	0	2	1
Cap, veh/h				193	1616	127	185	1502	0	0	1234	521
Arrive On Green				0.52	0.52	0.52	0.05	0.40	0.00	0.00	0.33	0.32
Sat Flow, veh/h				373	3120	245	1774	3725	0	0	3725	1615
Grp Volume(v), veh/h				797	0	719	84	674	0	0	989	126
Grp Sat Flow(s),veh/h/ln				1881	0	1857	1774	1863	0	0	1863	1615
Q Serve(g_s), s				39.7	0.0	34.1	3.4	14.8	0.0	0.0	27.1	6.4
Cycle Q Clear(g_c), s				39.7	0.0	34.1	3.4	14.8	0.0	0.0	27.1	6.4
Prop In Lane				0.20		0.13	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				975	0	962	185	1502	0	0	1234	521
V/C Ratio(X)				0.82	0.00	0.75	0.45	0.45	0.00	0.00	0.80	0.24
Avail Cap(c_a), veh/h				975	0	962	232	1770	0	0	1404	594
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	0.59	0.59
Uniform Delay (d), s/veh				22.6	0.0	21.2	26.7	24.3	0.0	0.0	34.1	27.9
Incr Delay (d2), s/veh				7.6	0.0	5.3	1.7	0.2	0.0	0.0	1.8	0.1
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				20.0	0.0	16.6	1.6	6.9	0.0	0.0	13.0	2.6
Lane Grp Delay (d), s/veh				30.1	0.0	26.5	28.5	24.5	0.0	0.0	35.9	28.0
Lane Grp LOS				C		C	C	C			D	C
Approach Vol, veh/h					1516			758			1115	
Approach Delay, s/veh					28.4			25.0			35.0	
Approach LOS					C			C			D	
Timer												
Assigned Phs					2		7	4			8	
Phs Duration (G+Y+Rc), s					63.0		8.1	48.9			40.9	
Change Period (Y+Rc), s					5.0		3.0	4.8			4.8	
Max Green Setting (Gmax), s					58.0		8.0	52.2			41.2	
Max Q Clear Time (g_c+I1), s					41.7		5.4	16.8			29.1	
Green Ext Time (p_c), s					7.2		0.0	11.7			7.0	
Intersection Summary												
HCM 2010 Ctrl Delay			29.8									
HCM 2010 LOS			C									
Notes												

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	150	1100	90	140	540	0	0	570	90
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	190.0	190.0	190.0	186.3	0.0	0.0	186.8	190.0
Lanes				0	2	0	0	2	0	0	2	0
Cap, veh/h				207	1586	136	217	795	0	0	1294	204
Arrive On Green				0.17	0.17	0.17	0.40	0.41	0.00	0.00	0.41	0.40
Sat Flow, veh/h				400	3070	263	407	1935	0	0	3150	498
Grp Volume(v), veh/h				743	0	668	220	495	0	0	355	340
Grp Sat Flow(s),veh/h/ln				1880	0	1854	647	1695	0	0	1868	1780
Q Serve(g_s), s				45.2	0.0	40.7	24.7	29.2	0.0	0.0	16.6	16.7
Cycle Q Clear(g_c), s				45.2	0.0	40.7	41.4	29.2	0.0	0.0	16.6	16.7
Prop In Lane				0.21		0.14	0.67		0.00	0.00		0.28
Lane Grp Cap(c), veh/h				971	0	958	311	696	0	0	767	731
V/C Ratio(X)				0.76	0.00	0.70	0.71	0.71	0.00	0.00	0.46	0.46
Avail Cap(c_a), veh/h				971	0	958	311	696	0	0	767	731
HCM Platoon Ratio				0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.84	0.00	0.84	1.00	1.00	0.00	0.00	0.09	0.09
Uniform Delay (d), s/veh				42.8	0.0	41.0	39.2	29.4	0.0	0.0	25.7	25.9
Incr Delay (d2), s/veh				4.9	0.0	3.6	12.8	6.1	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				24.4	0.0	21.4	7.5	13.6	0.0	0.0	7.8	7.5
Lane Grp Delay (d), s/veh				47.7	0.0	44.5	52.0	35.5	0.0	0.0	25.8	25.9
Lane Grp LOS				D		D	D	D			C	C
Approach Vol, veh/h					1411			715			695	
Approach Delay, s/veh					46.2			40.6			25.8	
Approach LOS					D			D			C	
Timer												
Assigned Phs					2			4			8	
Phs Duration (G+Y+Rc), s					67.0			53.0			53.0	
Change Period (Y+Rc), s					5.0			4.7			4.7	
Max Green Setting (Gmax), s					62.0			48.3			48.3	
Max Q Clear Time (g_c+I1), s					47.2			43.4			18.7	
Green Ext Time (p_c), s					6.2			2.7			7.0	
Intersection Summary												
HCM 2010 Ctrl Delay			39.7									
HCM 2010 LOS			D									
Notes												

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	50	1290	0	40	0	0	0	70	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	10	12	12	12	12	12	11	12	12	11	12
Total Lost time (s)					5.0		4.3				4.3	4.3
Lane Util. Factor					0.95		1.00				1.00	1.00
Frt					1.00		1.00				1.00	0.85
Flt Protected					1.00		0.95				1.00	1.00
Satd. Flow (prot)					3533		1805				1801	1615
Flt Permitted					1.00		0.71				1.00	1.00
Satd. Flow (perm)					3533		1347				1801	1615
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	53	1358	0	42	0	0	0	74	63
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	51
Lane Group Flow (vph)	0	0	0	0	1411	0	42	0	0	0	74	12
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	0%	2%	2%	2%	2%	0%
Turn Type				Perm	NA		custom				NA	Perm
Protected Phases					2						8	
Permitted Phases				2			4					8
Actuated Green, G (s)					88.0		22.7				22.7	22.7
Effective Green, g (s)					88.0		22.7				22.7	22.7
Actuated g/C Ratio					0.73		0.19				0.19	0.19
Clearance Time (s)					5.0		4.3				4.3	4.3
Vehicle Extension (s)					3.0		3.0				3.0	3.0
Lane Grp Cap (vph)					2590		254				340	305
v/s Ratio Prot											c0.04	
v/s Ratio Perm					0.40		0.03					0.01
v/c Ratio					0.54		0.17				0.22	0.04
Uniform Delay, d1					7.1		40.7				41.1	39.7
Progression Factor					0.23		1.00				1.00	1.00
Incremental Delay, d2					0.7		1.4				0.3	0.1
Delay (s)					2.3		42.1				41.5	39.8
Level of Service					A		D				D	D
Approach Delay (s)		0.0			2.3			42.1			40.7	
Approach LOS		A			A			D			D	

Intersection Summary			
HCM 2000 Control Delay	6.7	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	9.3
Intersection Capacity Utilization	55.2%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	90	1100	60	70	210	0	0	160	50
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	186.3	190.0	190.0	186.3	0.0	0.0	186.3	190.0
Lanes				0	2	0	0	1	0	0	1	0
Cap, veh/h				148	1891	108	131	373	0	0	444	140
Arrive On Green				0.19	0.19	0.19	0.33	0.33	0.00	0.00	0.33	0.33
Sat Flow, veh/h				254	3241	185	287	1141	0	0	1359	429
Grp Volume(v), veh/h				692	0	624	295	0	0	0	0	221
Grp Sat Flow(s),veh/h/ln				1850	0	1830	1428	0	0	0	0	1787
Q Serve(g_s), s				41.4	0.0	37.2	12.2	0.0	0.0	0.0	0.0	11.4
Cycle Q Clear(g_c), s				41.4	0.0	37.2	23.6	0.0	0.0	0.0	0.0	11.4
Prop In Lane				0.14		0.10	0.25		0.00	0.00		0.24
Lane Grp Cap(c), veh/h				1079	0	1068	504	0	0	0	0	584
V/C Ratio(X)				0.64	0.00	0.58	0.59	0.00	0.00	0.00	0.00	0.38
Avail Cap(c_a), veh/h				1079	0	1068	504	0	0	0	0	584
HCM Platoon Ratio				0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.76	0.00	0.76	1.00	0.00	0.00	0.00	0.00	0.15
Uniform Delay (d), s/veh				36.9	0.0	35.2	35.6	0.0	0.0	0.0	0.0	31.0
Incr Delay (d2), s/veh				2.2	0.0	1.8	4.9	0.0	0.0	0.0	0.0	0.3
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				21.4	0.0	19.0	8.6	0.0	0.0	0.0	0.0	5.2
Lane Grp Delay (d), s/veh				39.1	0.0	37.0	40.5	0.0	0.0	0.0	0.0	31.3
Lane Grp LOS				D		D	D					C
Approach Vol, veh/h					1316			295			221	
Approach Delay, s/veh					38.1			40.5			31.3	
Approach LOS					D			D			C	

Timer				
Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	75.0	45.0	45.0
Change Period (Y+Rc), s	5.0	5.8	5.8
Max Green Setting (Gmax), s	70.0	39.2	39.2
Max Q Clear Time (g_c+I1), s	43.4	25.6	13.4
Green Ext Time (p_c), s	7.0	1.4	1.6

Intersection Summary	
HCM 2010 Ctrl Delay	37.7
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	0	1150	120	110	330	0	0	0	0
Number				5	2	12	7	4	14			
Initial Q (Qb), veh				0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00			
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow veh/h/ln				0.0	186.3	190.0	190.0	186.3	0.0			
Lanes				0	2	0	0	1	0			
Cap, veh/h				0	2043	212	35	40	0			
Arrive On Green				0.00	0.20	0.20	0.31	0.31	0.00			
Sat Flow, veh/h				0	3320	345	0	131	0			
Grp Volume(v), veh/h				0	678	659	463	0	0			
Grp Sat Flow(s),veh/h/ln				0	1863	1802	131	0	0			
Q Serve(g_s), s				0.0	42.9	43.1	0.0	0.0	0.0			
Cycle Q Clear(g_c), s				0.0	42.9	43.1	40.0	0.0	0.0			
Prop In Lane				0.00		0.19	0.25		0.00			
Lane Grp Cap(c), veh/h				0	1146	1109	75	0	0			
V/C Ratio(X)				0.00	0.59	0.59	6.18	0.00	0.00			
Avail Cap(c_a), veh/h				0	1146	1109	75	0	0			
HCM Platoon Ratio				1.00	0.33	0.33	1.00	1.00	1.00			
Upstream Filter(I)				0.00	0.74	0.74	1.00	0.00	0.00			
Uniform Delay (d), s/veh				0.0	37.0	37.1	44.2	0.0	0.0			
Incr Delay (d2), s/veh				0.0	1.7	1.7	2358.2	0.0	0.0			
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0			
%ile Back of Q (50%), veh/ln				0.0	22.2	21.6	51.6	0.0	0.0			
Lane Grp Delay (d), s/veh				0.0	38.7	38.8	2402.4	0.0	0.0			
Lane Grp LOS					D	D	F					
Approach Vol, veh/h					1337			463				
Approach Delay, s/veh					38.7			2402.4				
Approach LOS					D			F				

Timer	
Assigned Phs	2	4
Phs Duration (G+Y+Rc), s	85.0	45.0
Change Period (Y+Rc), s	5.0	5.0
Max Green Setting (Gmax), s	80.0	40.0
Max Q Clear Time (g_c+I1), s	45.1	42.0
Green Ext Time (p_c), s	12.3	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	646.7
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↑↑						↑↑	↱
Volume (veh/h)	0	0	0	0	900	0	0	0	0	0	240	430
Number				5	2	12				3	8	18
Initial Q (Qb), veh				0	0	0				0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00				1.00		1.00
Parking Bus Adj				1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow veh/h/ln				0.0	167.6	0.0				0.0	167.6	167.6
Lanes				0	2	0				0	2	1
Cap, veh/h				0	1850	0				0	1152	489
Arrive On Green				0.00	0.18	0.00				0.00	0.34	0.34
Sat Flow, veh/h				0	3353	0				0	3353	1425
Grp Volume(v), veh/h				0	947	0				0	253	453
Grp Sat Flow(s),veh/h/ln				0	1676	0				0	1676	1425
Q Serve(g_s), s				0.0	26.8	0.0				0.0	5.6	32.2
Cycle Q Clear(g_c), s				0.0	26.8	0.0				0.0	5.6	32.2
Prop In Lane				0.00		0.00				0.00		1.00
Lane Grp Cap(c), veh/h				0	1850	0				0	1152	489
V/C Ratio(X)				0.00	0.51	0.00				0.00	0.22	0.93
Avail Cap(c_a), veh/h				0	1850	0				0	1946	827
HCM Platoon Ratio				1.00	0.33	1.00				1.00	1.00	1.00
Upstream Filter(I)				0.00	1.00	0.00				0.00	0.53	0.53
Uniform Delay (d), s/veh				0.0	30.2	0.0				0.0	24.5	33.2
Incr Delay (d2), s/veh				0.0	1.0	0.0				0.0	0.0	3.6
Initial Q Delay(d3),s/veh				0.0	0.0	0.0				0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				0.0	12.6	0.0				0.0	2.4	11.8
Lane Grp Delay (d), s/veh				0.0	31.2	0.0				0.0	24.5	36.8
Lane Grp LOS					C						C	D
Approach Vol, veh/h					947						706	
Approach Delay, s/veh					31.2						32.4	
Approach LOS					C						C	

Timer	
Assigned Phs	2
Phs Duration (G+Y+Rc), s	63.0
Change Period (Y+Rc), s	5.0
Max Green Setting (Gmax), s	58.0
Max Q Clear Time (g_c+I1), s	28.8
Green Ext Time (p_c), s	7.9

Intersection Summary	
HCM 2010 Ctrl Delay	31.7
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	0	1820	260	100	410	0	0	0	200
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					5.0		4.7	4.7				4.7
Lane Util. Factor					0.95		1.00	1.00				1.00
Frt					0.98		1.00	1.00				0.86
Flt Protected					1.00		0.95	1.00				1.00
Satd. Flow (prot)					3126		1593	1676				1450
Flt Permitted					1.00		0.95	1.00				1.00
Satd. Flow (perm)					3126		1593	1676				1450
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	0	1916	274	105	432	0	0	0	211
RTOR Reduction (vph)	0	0	0	0	9	0	12	0	0	0	0	12
Lane Group Flow (vph)	0	0	0	0	2181	0	93	432	0	0	0	199
Turn Type					NA		Perm	NA				custom
Protected Phases					2			4				
Permitted Phases							4					8
Actuated Green, G (s)					81.0		39.3	39.3				39.3
Effective Green, g (s)					81.0		39.3	39.3				39.3
Actuated g/C Ratio					0.62		0.30	0.30				0.30
Clearance Time (s)					5.0		4.7	4.7				4.7
Vehicle Extension (s)					3.0		3.0	3.0				2.5
Lane Grp Cap (vph)					1947		481	506				438
v/s Ratio Prot					c0.70			c0.26				
v/s Ratio Perm							0.06					0.14
v/c Ratio					1.12		0.19	0.85				0.45
Uniform Delay, d1					24.5		33.6	42.6				36.7
Progression Factor					0.27		1.00	1.00				1.51
Incremental Delay, d2					54.9		0.9	16.6				0.0
Delay (s)					61.5		34.5	59.2				55.6
Level of Service					E		C	E				E
Approach Delay (s)		0.0			61.5			54.4			55.6	
Approach LOS		A			E			D			E	

Intersection Summary			
HCM 2000 Control Delay	59.8	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.03		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	9.7
Intersection Capacity Utilization	97.2%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	90	1900	90	210	570	0	0	510	200
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				171.0	166.0	171.0	166.0	166.0	0.0	0.0	166.0	171.0
Lanes				0	2	0	1	2	0	0	2	0
Cap, veh/h				75	1639	81	238	1218	0	0	519	203
Arrive On Green				0.18	0.18	0.18	0.12	0.37	0.00	0.00	0.23	0.23
Sat Flow, veh/h				137	3002	149	1581	3320	0	0	2273	890
Grp Volume(v), veh/h				1147	0	1043	221	600	0	0	392	356
Grp Sat Flow(s),veh/h/ln				1653	0	1634	1581	1660	0	0	1660	1503
Q Serve(g_s), s				71.0	0.0	71.0	13.5	18.2	0.0	0.0	29.7	29.7
Cycle Q Clear(g_c), s				71.0	0.0	71.0	13.5	18.2	0.0	0.0	29.7	29.7
Prop In Lane				0.08		0.09	1.00		0.00	0.00		0.59
Lane Grp Cap(c), veh/h				903	0	892	238	1218	0	0	379	343
V/C Ratio(X)				1.27	0.00	1.17	0.93	0.49	0.00	0.00	1.03	1.04
Avail Cap(c_a), veh/h				903	0	892	238	1218	0	0	379	343
HCM Platoon Ratio				0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.09	0.00	0.09	1.00	1.00	0.00	0.00	0.91	0.91
Uniform Delay (d), s/veh				53.3	0.0	53.3	34.9	31.8	0.0	0.0	50.2	50.2
Incr Delay (d2), s/veh				122.2	0.0	77.4	39.5	1.4	0.0	0.0	52.7	56.5
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				62.5	0.0	50.7	10.1	7.9	0.0	0.0	18.3	16.9
Lane Grp Delay (d), s/veh				175.5	0.0	130.7	74.4	33.2	0.0	0.0	102.9	106.6
Lane Grp LOS				F		F	E	C			F	F
Approach Vol, veh/h					2190			821			748	
Approach Delay, s/veh					154.2			44.3			104.7	
Approach LOS					F			D			F	
Timer												
Assigned Phs					2		7	4			8	
Phs Duration (G+Y+Rc), s					76.0		18.0	54.0			36.0	
Change Period (Y+Rc), s					5.0		3.0	6.3			6.3	
Max Green Setting (Gmax), s					71.0		15.0	47.7			29.7	
Max Q Clear Time (g_c+I1), s					73.0		15.5	20.2			31.7	
Green Ext Time (p_c), s					0.0		0.0	3.6			0.0	
Intersection Summary												
HCM 2010 Ctrl Delay			120.3									
HCM 2010 LOS			F									
Notes												

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	300	1800	0	0	0	0	0	990	270
Number				5	2	12				3	8	18
Initial Q (Qb), veh				0	0	0				0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00				1.00		1.00
Parking Bus Adj				1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow veh/h/ln				171.0	166.0	0.0				0.0	166.0	171.0
Lanes				0	2	0				0	2	0
Cap, veh/h				55	860	0				0	899	243
Arrive On Green				0.19	0.19	0.00				0.00	0.36	0.36
Sat Flow, veh/h				0	1511	0				0	2518	682
Grp Volume(v), veh/h				316	1895	0				0	685	641
Grp Sat Flow(s),veh/h/ln				0	1511	0				0	1660	1540
Q Serve(g_s), s				0.0	74.0	0.0				0.0	46.4	46.4
Cycle Q Clear(g_c), s				74.0	74.0	0.0				0.0	46.4	46.4
Prop In Lane				1.00		0.00				0.00		0.44
Lane Grp Cap(c), veh/h				55	860	0				0	593	550
V/C Ratio(X)				5.71	2.20	0.00				0.00	1.16	1.17
Avail Cap(c_a), veh/h				55	860	0				0	593	550
HCM Platoon Ratio				0.33	0.33	1.00				1.00	1.00	1.00
Upstream Filter(I)				0.09	0.09	0.00				0.00	0.09	0.09
Uniform Delay (d), s/veh				89.8	52.8	0.0				0.0	41.8	41.8
Incr Delay (d2), s/veh				2121.0	541.9	0.0				0.0	72.0	77.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0				0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				34.6	159.8	0.0				0.0	31.4	29.9
Lane Grp Delay (d), s/veh				2210.8	594.7	0.0				0.0	113.8	118.8
Lane Grp LOS				F	F						F	F
Approach Vol, veh/h					2211						1326	
Approach Delay, s/veh					825.7						116.2	
Approach LOS					F						F	

Timer	
Assigned Phs	2	8
Phs Duration (G+Y+Rc), s	79.0	51.0
Change Period (Y+Rc), s	5.0	4.6
Max Green Setting (Gmax), s	74.0	46.4
Max Q Clear Time (g_c+I1), s	76.0	48.4
Green Ext Time (p_c), s	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	559.7
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	0	1450	320	510	1000	0	0	0	0
Number				5	2	12	7	4	14			
Initial Q (Qb), veh				0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00			
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow veh/h/ln				0.0	166.0	171.0	171.0	166.0	0.0			
Lanes				0	2	0	0	3	0			
Cap, veh/h				0	1531	327	55	1055	0			
Arrive On Green				0.00	0.58	0.58	0.35	0.35	0.00			
Sat Flow, veh/h				0	2653	567	0	3022	0			
Grp Volume(v), veh/h				0	936	927	537	1053	0			
Grp Sat Flow(s),veh/h/ln				0	1660	1560	0	1511	0			
Q Serve(g_s), s				0.0	71.1	75.0	0.0	45.3	0.0			
Cycle Q Clear(g_c), s				0.0	71.1	75.0	45.4	45.3	0.0			
Prop In Lane				0.00		0.36	1.00		0.00			
Lane Grp Cap(c), veh/h				0	958	900	55	1055	0			
V/C Ratio(X)				0.00	0.98	1.03	9.70	1.00	0.00			
Avail Cap(c_a), veh/h				0	958	900	55	1055	0			
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)				0.00	0.09	0.09	1.00	1.00	0.00			
Uniform Delay (d), s/veh				0.0	26.7	27.5	65.0	42.3	0.0			
Incr Delay (d2), s/veh				0.0	5.0	17.9	3949.0	27.2	0.0			
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0			
%ile Back of Q (50%), veh/ln				0.0	29.9	32.7	62.6	21.4	0.0			
Lane Grp Delay (d), s/veh				0.0	31.6	45.4	4014.0	69.4	0.0			
Lane Grp LOS					C	F	F	E				
Approach Vol, veh/h					1863			1590				
Approach Delay, s/veh					38.5			1401.7				
Approach LOS					D			F				

Timer	
Assigned Phs	2 4
Phs Duration (G+Y+Rc), s	80.0 50.0
Change Period (Y+Rc), s	5.0 4.6
Max Green Setting (Gmax), s	75.0 45.4
Max Q Clear Time (g_c+I1), s	77.0 47.4
Green Ext Time (p_c), s	0.0 0.0

Intersection Summary	
HCM 2010 Ctrl Delay	666.2
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	480	560	190	610	1380	210	850	1410	570
Number				7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				166.0	166.0	166.0	166.0	166.0	166.0	166.0	166.0	166.0
Lanes				1	1	1	1	2	1	2	2	1
Cap, veh/h				488	512	436	306	1257	534	593	1257	534
Arrive On Green				0.31	0.31	0.31	0.19	0.38	0.38	0.32	0.63	0.63
Sat Flow, veh/h				1581	1660	1411	1581	3320	1411	3067	3320	1411
Grp Volume(v), veh/h				505	589	200	642	1453	221	895	1484	600
Grp Sat Flow(s),veh/h/ln				1581	1660	1411	1581	1660	1411	1534	1660	1411
Q Serve(g_s), s				46.3	46.3	17.1	29.0	56.8	17.3	29.0	56.8	56.8
Cycle Q Clear(g_c), s				46.3	46.3	17.1	29.0	56.8	17.3	29.0	56.8	56.8
Prop In Lane				1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h				488	512	436	306	1257	534	593	1257	534
V/C Ratio(X)				1.03	1.15	0.46	2.10	1.16	0.41	1.51	1.18	1.12
Avail Cap(c_a), veh/h				488	512	436	306	1257	534	593	1257	534
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.67	1.67	1.67
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	1.00	0.09	0.09	0.09
Uniform Delay (d), s/veh				51.8	51.8	41.8	60.5	46.6	34.3	50.8	27.6	27.6
Incr Delay (d2), s/veh				50.0	87.9	0.8	506.1	79.4	2.4	229.9	82.0	57.9
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				25.8	32.4	14.1	54.9	38.3	6.7	29.8	35.1	26.3
Lane Grp Delay (d), s/veh				101.8	139.7	42.5	566.6	126.0	36.7	280.7	109.5	85.5
Lane Grp LOS				F	F	D	F	F	D	F	F	F
Approach Vol, veh/h					1294			2316			2979	
Approach Delay, s/veh					109.9			239.6			156.1	
Approach LOS					F			F			F	
Timer												
Assigned Phs					4		1	6		5	2	
Phs Duration (G+Y+Rc), s					53.0		34.0	63.0		34.0	63.0	
Change Period (Y+Rc), s					6.7		5.0	6.2		5.0	6.2	
Max Green Setting (Gmax), s					46.3		29.0	56.8		29.0	56.8	
Max Q Clear Time (g_c+I1), s					48.3		31.0	58.8		31.0	58.8	
Green Ext Time (p_c), s					0.0		0.0	0.0		0.0	0.0	
Intersection Summary												
HCM 2010 Ctrl Delay			176.4									
HCM 2010 LOS			F									
Notes												

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	620	820	360	70	0	70	0	1130	330	260	1800	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	6.7		6.7		6.2		3.0	6.2	
Lane Util. Factor	0.95	0.95	1.00	1.00		1.00		0.91		1.00	0.95	
Frt	1.00	1.00	0.85	1.00		0.85		0.97		1.00	1.00	
Flt Protected	0.95	1.00	1.00	0.95		1.00		1.00		0.95	1.00	
Satd. Flow (prot)	1498	1572	1411	1577		1411		4379		1577	3154	
Flt Permitted	0.95	1.00	1.00	0.31		1.00		1.00		0.09	1.00	
Satd. Flow (perm)	1498	1572	1411	511		1411		4379		147	3154	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	653	863	379	74	0	74	0	1189	347	274	1895	0
RTOR Reduction (vph)	0	0	79	0	0	65	0	38	0	0	0	0
Lane Group Flow (vph)	588	928	300	74	0	9	0	1498	0	274	1895	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Split	NA	Perm	custom		custom		NA		pm+pt	NA	
Protected Phases	3	3						6		5	2	
Permitted Phases			3	4		4				2		
Actuated Green, G (s)	31.0	31.0	31.0	16.3		16.3		66.8		74.8	74.8	
Effective Green, g (s)	31.0	31.0	31.0	16.3		16.3		66.8		74.8	74.8	
Actuated g/C Ratio	0.22	0.22	0.22	0.12		0.12		0.48		0.53	0.53	
Clearance Time (s)	5.0	5.0	5.0	6.7		6.7		6.2		3.0	6.2	
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0		3.0		3.0	3.0	
Lane Grp Cap (vph)	331	348	312	59		164		2089		129	1685	
v/s Ratio Prot	0.39	c0.59						0.34		c0.08	0.60	
v/s Ratio Perm			0.21	c0.14		0.01				c1.05		
v/c Ratio	1.78	2.67	0.96	1.25		0.05		0.72		2.12	1.12	
Uniform Delay, d1	54.5	54.5	53.9	61.9		55.0		29.1		27.1	32.6	
Progression Factor	1.00	1.00	1.00	1.00		1.00		0.45		1.00	1.00	
Incremental Delay, d2	361.4	758.2	40.7	200.4		0.1		0.8		530.9	64.5	
Delay (s)	415.9	812.7	94.6	262.2		55.1		13.9		558.1	97.1	
Level of Service	F	F	F	F		E		B		F	F	
Approach Delay (s)		546.0			158.7			13.9			155.3	
Approach LOS		F			F			B			F	

Intersection Summary			
HCM 2000 Control Delay	246.4	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	2.18		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	20.9
Intersection Capacity Utilization	120.2%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	390	1730	0	0	0	0	0	860	100	0	0	0
Number	1	6	16				7	4	14			
Initial Q (Qb), veh	0	0	0				0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00			
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00			
Adj Sat Flow veh/h/ln	171.0	166.0	0.0				0.0	166.0	166.0			
Lanes	0	2	0				0	2	1			
Cap, veh/h	48	997	0				0	925	393			
Arrive On Green	0.22	0.22	0.00				0.00	0.28	0.28			
Sat Flow, veh/h	0	1511	0				0	3320	1411			
Grp Volume(v), veh/h	411	1821	0				0	905	105			
Grp Sat Flow(s),veh/h/ln	0	1511	0				0	1660	1411			
Q Serve(g_s), s	0.0	99.0	0.0				0.0	40.5	8.7			
Cycle Q Clear(g_c), s	99.0	99.0	0.0				0.0	40.5	8.7			
Prop In Lane	1.00		0.00				0.00		1.00			
Lane Grp Cap(c), veh/h	48	997	0				0	925	393			
V/C Ratio(X)	8.56	1.83	0.00				0.00	0.98	0.27			
Avail Cap(c_a), veh/h	48	997	0				0	925	393			
HCM Platoon Ratio	0.33	0.33	1.00				1.00	1.00	1.00			
Upstream Filter(I)	0.09	0.09	0.00				0.00	0.09	0.09			
Uniform Delay (d), s/veh	108.2	58.7	0.0				0.0	53.6	42.2			
Incr Delay (d2), s/veh	3406.9	372.2	0.0				0.0	5.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0			
%ile Back of Q (50%), veh/ln	47.4	143.8	0.0				0.0	18.2	3.2			
Lane Grp Delay (d), s/veh	3515.1	430.8	0.0				0.0	58.7	42.2			
Lane Grp LOS	F	F						E	D			
Approach Vol, veh/h		2232						1010				
Approach Delay, s/veh		998.8						56.9				
Approach LOS		F						E				

Timer	
Assigned Phs	6
Phs Duration (G+Y+Rc), s	104.0
Change Period (Y+Rc), s	5.0
Max Green Setting (Gmax), s	99.0
Max Q Clear Time (g_c+I1), s	101.0
Green Ext Time (p_c), s	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	705.4
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1690	630	0	0	0	0	0	0	440	720	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0								4.6	4.6	
Lane Util. Factor		0.95								0.95	0.95	
Frt		0.96								1.00	1.00	
Flt Protected		1.00								0.95	1.00	
Satd. Flow (prot)		3026								1498	1573	
Flt Permitted		1.00								0.95	1.00	
Satd. Flow (perm)		3026								1498	1573	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	1779	663	0	0	0	0	0	0	463	758	0
RTOR Reduction (vph)	0	26	0	0	0	0	0	0	0	9	9	0
Lane Group Flow (vph)	0	2416	0	0	0	0	0	0	0	408	795	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type		NA								Perm	NA	
Protected Phases		6									8	
Permitted Phases										8		
Actuated Green, G (s)		85.0								55.4	55.4	
Effective Green, g (s)		85.0								55.4	55.4	
Actuated g/C Ratio		0.57								0.37	0.37	
Clearance Time (s)		5.0								4.6	4.6	
Vehicle Extension (s)		3.0								3.0	3.0	
Lane Grp Cap (vph)		1714								553	580	
v/s Ratio Prot		c0.80										
v/s Ratio Perm										0.27	0.51	
v/c Ratio		1.41								0.74	1.37	
Uniform Delay, d1		32.5								41.0	47.3	
Progression Factor		0.66								1.00	1.00	
Incremental Delay, d2		184.7								5.1	177.2	
Delay (s)		206.2								46.1	224.5	
Level of Service		F								D	F	
Approach Delay (s)		206.2			0.0			0.0			163.6	
Approach LOS		F			A			A			F	

Intersection Summary			
HCM 2000 Control Delay	192.0	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.39		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	9.6
Intersection Capacity Utilization	123.5%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	670	1870	310	0	0	0	0	810	70	120	280	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	171.0	166.0	171.0				0.0	166.0	171.0	166.0	166.0	0.0
Lanes	0	2	0				0	2	0	1	2	0
Cap, veh/h	467	1361	233				0	651	56	143	983	0
Arrive On Green	0.21	0.21	0.21				0.00	0.22	0.22	0.06	0.30	0.00
Sat Flow, veh/h	729	2126	364				0	3013	261	1581	3320	0
Grp Volume(v), veh/h	1570	0	1429				0	470	457	126	295	0
Grp Sat Flow(s),veh/h/ln	1624	0	1596				0	1660	1614	1581	1660	0
Q Serve(g_s), s	96.0	0.0	96.0				0.0	32.4	32.4	9.0	10.3	0.0
Cycle Q Clear(g_c), s	96.0	0.0	96.0				0.0	32.4	32.4	9.0	10.3	0.0
Prop In Lane	0.45		0.23				0.00		0.16	1.00		0.00
Lane Grp Cap(c), veh/h	1039	0	1021				0	359	349	143	983	0
V/C Ratio(X)	1.51	0.00	1.40				0.00	1.31	1.31	0.88	0.30	0.00
Avail Cap(c_a), veh/h	1039	0	1021				0	359	349	143	983	0
HCM Platoon Ratio	0.33	0.33	0.33				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.00	0.09				0.00	0.09	0.09	1.00	1.00	0.00
Uniform Delay (d), s/veh	59.2	0.0	59.2				0.0	58.8	58.8	45.7	40.8	0.0
Incr Delay (d2), s/veh	230.4	0.0	180.1				0.0	141.7	141.8	42.6	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	108.9	0.0	92.8				0.0	28.2	27.4	6.7	4.5	0.0
Lane Grp Delay (d), s/veh	289.5	0.0	239.2				0.0	200.5	200.6	88.3	41.6	0.0
Lane Grp LOS	F		F					F	F	F	D	
Approach Vol, veh/h		2999						927			421	
Approach Delay, s/veh		265.6						200.5			55.6	
Approach LOS		F						F			E	

Timer					
Assigned Phs		6		4	3	8
Phs Duration (G+Y+Rc), s		101.0		37.0	12.0	49.0
Change Period (Y+Rc), s		5.0		4.6	3.0	4.6
Max Green Setting (Gmax), s		96.0		32.4	9.0	44.4
Max Q Clear Time (g_c+I1), s		98.0		34.4	11.0	12.3
Green Ext Time (p_c), s		0.0		0.0	0.0	9.8

Intersection Summary	
HCM 2010 Ctrl Delay	231.4
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	140	2250	140	0	0	0	0	310	340	0	0	0
Number	1	6	16				7	4	14			
Initial Q (Qb), veh	0	0	0				0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00			
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00			
Adj Sat Flow veh/h/ln	171.0	166.0	171.0				0.0	166.0	171.0			
Lanes	0	2	0				0	1	0			
Cap, veh/h	48	864	54				0	235	258			
Arrive On Green	0.20	0.20	0.20				0.00	0.11	0.11			
Sat Flow, veh/h	0	1408	87				0	724	795			
Grp Volume(v), veh/h	147	0	2515				0	0	684			
Grp Sat Flow(s),veh/h/ln	0	0	1495				0	0	1520			
Q Serve(g_s), s	0.0	0.0	92.0				0.0	0.0	48.7			
Cycle Q Clear(g_c), s	92.0	0.0	92.0				0.0	0.0	48.7			
Prop In Lane	1.00		0.06				0.00		0.52			
Lane Grp Cap(c), veh/h	48	0	917				0	0	493			
V/C Ratio(X)	3.06	0.00	2.74				0.00	0.00	1.39			
Avail Cap(c_a), veh/h	48	0	917				0	0	493			
HCM Platoon Ratio	0.33	0.33	0.33				1.00	0.33	0.33			
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.00	0.10			
Uniform Delay (d), s/veh	105.8	0.0	59.8				0.0	0.0	67.0			
Incr Delay (d2), s/veh	980.8	0.0	787.1				0.0	0.0	175.1			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0			
%ile Back of Q (50%), veh/ln	15.0	0.0	238.0				0.0	0.0	44.3			
Lane Grp Delay (d), s/veh	1086.6	0.0	846.9				0.0	0.0	242.0			
Lane Grp LOS	F		F						F			
Approach Vol, veh/h		2662						684				
Approach Delay, s/veh		860.1						242.0				
Approach LOS		F						F				

Timer	
Assigned Phs	6
Phs Duration (G+Y+Rc), s	97.0
Change Period (Y+Rc), s	5.0
Max Green Setting (Gmax), s	92.0
Max Q Clear Time (g_c+I1), s	94.0
Green Ext Time (p_c), s	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	733.8
HCM 2010 LOS	F

Notes

Movement	EBT	EBR	SBL	SBT	SWL2	SWL
Lane Configurations						
Volume (vph)	2320	270	350	260	1050	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0			7.0	7.0	
Lane Util. Factor	0.95			0.95	0.97	
Frt	0.98			1.00	1.00	
Flt Protected	1.00			0.97	0.95	
Satd. Flow (prot)	3136			3097	3090	
Flt Permitted	1.00			0.97	0.95	
Satd. Flow (perm)	3136			3097	3090	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	2442	284	368	274	1105	0
RTOR Reduction (vph)	6	0	0	0	49	0
Lane Group Flow (vph)	2720	0	0	642	1056	0
Turn Type	NA		Perm	NA	Perm	
Protected Phases	6			9		8
Permitted Phases			9		8	
Actuated Green, G (s)	69.0			24.0	38.0	
Effective Green, g (s)	69.0			24.0	38.0	
Actuated g/C Ratio	0.46			0.16	0.25	
Clearance Time (s)	5.0			7.0	7.0	
Vehicle Extension (s)	3.0			3.0	3.0	
Lane Grp Cap (vph)	1442			495	782	
v/s Ratio Prot	c0.87					
v/s Ratio Perm				0.21	c0.34	
v/c Ratio	1.89			1.45dl	1.35	
Uniform Delay, d1	40.5			63.0	56.0	
Progression Factor	1.00			1.00	1.00	
Incremental Delay, d2	401.5			148.0	166.4	
Delay (s)	442.0			211.0	222.4	
Level of Service	F			F	F	
Approach Delay (s)	442.0			211.0		222.4
Approach LOS	F			F		F

Intersection Summary			
HCM 2000 Control Delay	354.6	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.62		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	19.0
Intersection Capacity Utilization	151.5%	ICU Level of Service	H
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	170	2200	50	0	0	0	0	360	60	170	320	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	186.3	190.0	190.0	193.7	0.0
Lanes	0	2	0				0	1	0	0	1	0
Cap, veh/h	126	1711	41				0	639	106	148	228	0
Arrive On Green	0.17	0.17	0.17				0.00	0.41	0.41	0.41	0.41	0.00
Sat Flow, veh/h	248	3370	81				0	1558	259	270	556	0
Grp Volume(v), veh/h	1334	0	1214				0	0	442	516	0	0
Grp Sat Flow(s),veh/h/ln	1850	0	1849				0	0	1817	825	0	0
Q Serve(g_s), s	66.0	0.0	66.0				0.0	0.0	24.7	28.6	0.0	0.0
Cycle Q Clear(g_c), s	66.0	0.0	66.0				0.0	0.0	24.7	53.3	0.0	0.0
Prop In Lane	0.13		0.04				0.00		0.14	0.35		0.00
Lane Grp Cap(c), veh/h	939	0	938				0	0	745	376	0	0
V/C Ratio(X)	1.42	0.00	1.29				0.00	0.00	0.59	1.37	0.00	0.00
Avail Cap(c_a), veh/h	939	0	938				0	0	745	376	0	0
HCM Platoon Ratio	0.33	0.33	0.33				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.00	0.09	1.00	0.00	0.00
Uniform Delay (d), s/veh	54.1	0.0	54.1				0.0	0.0	29.9	50.1	0.0	0.0
Incr Delay (d2), s/veh	195.3	0.0	140.1				0.0	0.0	0.1	184.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	84.1	0.0	69.6				0.0	0.0	11.3	31.9	0.0	0.0
Lane Grp Delay (d), s/veh	249.4	0.0	194.2				0.0	0.0	30.0	234.2	0.0	0.0
Lane Grp LOS	F		F						C	F		
Approach Vol, veh/h		2548						442			516	
Approach Delay, s/veh		223.1						30.0			234.2	
Approach LOS		F						C			F	

Timer	
Assigned Phs	6 4 8
Phs Duration (G+Y+Rc), s	71.0 59.0 59.0
Change Period (Y+Rc), s	5.0 5.7 5.7
Max Green Setting (Gmax), s	66.0 53.3 53.3
Max Q Clear Time (g_c+I1), s	68.0 26.7 55.3
Green Ext Time (p_c), s	0.0 3.4 0.0

Intersection Summary	
HCM 2010 Ctrl Delay	200.4
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	190	2180	170	0	0	0	0	590	140	120	430	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	184.5	190.0				0.0	184.5	190.0	190.0	177.1	0.0
Lanes	0	2	0				0	2	0	0	2	0
Cap, veh/h	165	1966	160				0	844	199	117	471	0
Arrive On Green	0.21	0.21	0.21				0.00	0.29	0.28	0.28	0.29	0.00
Sat Flow, veh/h	262	3117	253				0	2887	682	209	1611	0
Grp Volume(v), veh/h	1400	0	1274				0	396	372	126	453	0
Grp Sat Flow(s),veh/h/ln	1832	0	1800				0	1845	1724	209	1611	0
Q Serve(g_s), s	82.0	0.0	82.0				0.0	25.2	25.3	11.7	36.0	0.0
Cycle Q Clear(g_c), s	82.0	0.0	82.0				0.0	25.2	25.3	37.0	36.0	0.0
Prop In Lane	0.14		0.14				0.00		0.40	1.00		0.00
Lane Grp Cap(c), veh/h	1155	0	1135				0	539	504	115	471	0
V/C Ratio(X)	1.21	0.00	1.12				0.00	0.74	0.74	1.10	0.96	0.00
Avail Cap(c_a), veh/h	1155	0	1135				0	539	504	115	471	0
HCM Platoon Ratio	0.33	0.33	0.33				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.29	0.00	0.29				0.00	0.09	0.09	1.00	1.00	0.00
Uniform Delay (d), s/veh	51.5	0.0	51.5				0.0	41.5	41.7	61.6	45.3	0.0
Incr Delay (d2), s/veh	97.8	0.0	58.9				0.0	0.8	0.9	111.9	32.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	72.2	0.0	58.6				0.0	12.0	11.3	7.5	19.2	0.0
Lane Grp Delay (d), s/veh	149.3	0.0	110.4				0.0	42.3	42.6	173.6	78.2	0.0
Lane Grp LOS	F		F					D	D	F	E	
Approach Vol, veh/h		2674						768			579	
Approach Delay, s/veh		130.8						42.4			99.0	
Approach LOS		F						D			F	

Timer												
Assigned Phs		6						4			8	
Phs Duration (G+Y+Rc), s		87.0						43.0			43.0	
Change Period (Y+Rc), s		5.0						6.0			6.0	
Max Green Setting (Gmax), s		82.0						37.0			37.0	
Max Q Clear Time (g_c+I1), s		84.0						27.3			39.0	
Green Ext Time (p_c), s		0.0						4.3			0.0	

Intersection Summary												
HCM 2010 Ctrl Delay			109.3									
HCM 2010 LOS			F									

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	2370	70	0	0	0	0	0	0	30	60	0
Number	1	6	16							3	8	18
Initial Q (Qb), veh	0	0	0							0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00							1.00		1.00
Parking Bus Adj	1.00	1.00	1.00							1.00	1.00	1.00
Adj Sat Flow veh/h/ln	0.0	182.7	190.0							190.0	190.0	0.0
Lanes	0	2	0							0	1	0
Cap, veh/h	0	2879	85							37	55	0
Arrive On Green	0.00	0.27	0.27							0.12	0.12	0.00
Sat Flow, veh/h	0	3531	104							0	476	0
Grp Volume(v), veh/h	0	1285	1285							95	0	0
Grp Sat Flow(s),veh/h/ln	0	1827	1809							476	0	0
Q Serve(g_s), s	0.0	87.0	88.1							0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	87.0	88.1							15.0	0.0	0.0
Prop In Lane	0.00		0.06							0.34		0.00
Lane Grp Cap(c), veh/h	0	1490	1475							92	0	0
V/C Ratio(X)	0.00	0.86	0.87							1.03	0.00	0.00
Avail Cap(c_a), veh/h	0	1490	1475							92	0	0
HCM Platoon Ratio	1.00	0.33	0.33							1.00	1.00	1.00
Upstream Filter(I)	0.00	0.09	0.09							1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	40.6	41.0							57.2	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.7	0.7							103.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0							0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.0	43.2	43.5							5.8	0.0	0.0
Lane Grp Delay (d), s/veh	0.0	41.2	41.7							160.4	0.0	0.0
Lane Grp LOS		D	D							F		
Approach Vol, veh/h		2569									95	
Approach Delay, s/veh		41.5									160.4	
Approach LOS		D									F	

Timer												
Assigned Phs		6									8	
Phs Duration (G+Y+Rc), s		111.0									19.0	
Change Period (Y+Rc), s		5.0									4.0	
Max Green Setting (Gmax), s		106.0									15.0	
Max Q Clear Time (g_c+I1), s		90.1									17.0	
Green Ext Time (p_c), s		13.4									0.0	

Intersection Summary												
HCM 2010 Ctrl Delay			45.7									
HCM 2010 LOS			D									

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	120	2040	140	0	0	0	0	880	190	210	1260	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	184.5	190.0				0.0	184.5	190.0	184.5	184.5	0.0
Lanes	0	2	0				0	2	0	1	2	0
Cap, veh/h	97	1713	122				0	819	177	231	1453	0
Arrive On Green	0.18	0.18	0.18				0.00	0.28	0.27	0.10	0.39	0.00
Sat Flow, veh/h	183	3227	230				0	2942	635	1757	3689	0
Grp Volume(v), veh/h	1267	0	1153				0	580	546	221	1326	0
Grp Sat Flow(s),veh/h/ln	1836	0	1804				0	1845	1733	1757	1845	0
Q Serve(g_s), s	69.0	0.0	69.0				0.0	36.2	36.2	12.1	44.2	0.0
Cycle Q Clear(g_c), s	69.0	0.0	69.0				0.0	36.2	36.2	12.1	44.2	0.0
Prop In Lane	0.10		0.13				0.00		0.37	1.00		0.00
Lane Grp Cap(c), veh/h	974	0	958				0	514	482	231	1453	0
V/C Ratio(X)	1.30	0.00	1.20				0.00	1.13	1.13	0.96	0.91	0.00
Avail Cap(c_a), veh/h	974	0	958				0	514	482	231	1453	0
HCM Platoon Ratio	0.33	0.33	0.33				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.29	0.00	0.29				0.00	0.82	0.82	1.00	1.00	0.00
Uniform Delay (d), s/veh	53.6	0.0	53.6				0.0	46.9	47.1	36.6	37.3	0.0
Incr Delay (d2), s/veh	137.5	0.0	94.9				0.0	77.2	78.8	46.9	10.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	71.6	0.0	59.0				0.0	28.1	26.7	10.5	22.7	0.0
Lane Grp Delay (d), s/veh	191.1	0.0	148.6				0.0	124.1	125.9	83.5	47.5	0.0
Lane Grp LOS	F		F					F	F	F	D	
Approach Vol, veh/h		2420						1126			1547	
Approach Delay, s/veh		170.8						124.9			52.7	
Approach LOS		F						F			D	

Timer					
Assigned Phs		6		4		3	8
Phs Duration (G+Y+Rc), s		74.0		40.0		16.0	56.0
Change Period (Y+Rc), s		5.0		4.8		3.0	4.8
Max Green Setting (Gmax), s		69.0		35.2		13.0	51.2
Max Q Clear Time (g_c+I1), s		71.0		38.2		14.1	46.2
Green Ext Time (p_c), s		0.0		0.0		0.0	2.1

Intersection Summary	
HCM 2010 Ctrl Delay	124.8
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	40	2180	80	0	0	0	0	80	70	50	130	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	186.3	190.0	190.0	186.3	0.0
Lanes	0	2	0				0	1	0	0	1	0
Cap, veh/h	45	2559	98				0	171	151	84	188	0
Arrive On Green	0.24	0.24	0.24				0.00	0.19	0.18	0.18	0.19	0.00
Sat Flow, veh/h	62	3503	134				0	915	806	245	1002	0
Grp Volume(v), veh/h	1268	0	1153				0	0	158	190	0	0
Grp Sat Flow(s),veh/h/ln	1860	0	1839				0	0	1721	1247	0	0
Q Serve(g_s), s	80.4	0.0	72.3				0.0	0.0	9.9	8.8	0.0	0.0
Cycle Q Clear(g_c), s	80.4	0.0	72.3				0.0	0.0	9.9	18.8	0.0	0.0
Prop In Lane	0.03		0.07				0.00		0.47	0.28		0.00
Lane Grp Cap(c), veh/h	1359	0	1344				0	0	322	261	0	0
V/C Ratio(X)	0.93	0.00	0.86				0.00	0.00	0.49	0.73	0.00	0.00
Avail Cap(c_a), veh/h	1359	0	1344				0	0	459	390	0	0
HCM Platoon Ratio	0.33	0.33	0.33				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.00	0.93	1.00	0.00	0.00
Uniform Delay (d), s/veh	42.8	0.0	39.7				0.0	0.0	44.0	48.1	0.0	0.0
Incr Delay (d2), s/veh	12.9	0.0	7.3				0.0	0.0	0.8	2.9	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	45.9	0.0	39.2				0.0	0.0	4.5	6.0	0.0	0.0
Lane Grp Delay (d), s/veh	55.7	0.0	47.0				0.0	0.0	44.8	51.0	0.0	0.0
Lane Grp LOS	E		D						D	D		
Approach Vol, veh/h		2421						158			190	
Approach Delay, s/veh		51.6						44.8			51.0	
Approach LOS		D						D			D	

Timer												
Assigned Phs		6						4			8	
Phs Duration (G+Y+Rc), s		93.0						27.5			27.5	
Change Period (Y+Rc), s		5.0						5.9			5.9	
Max Green Setting (Gmax), s		88.0						31.1			31.1	
Max Q Clear Time (g_c+I1), s		82.4						11.9			20.8	
Green Ext Time (p_c), s		5.0						1.0			0.8	

Intersection Summary												
HCM 2010 Ctrl Delay			51.2									
HCM 2010 LOS			D									

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	90	2030	70	0	0	0	0	1050	160	150	1200	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	186.3	190.0	186.3	186.3	0.0
Lanes	0	2	0				0	2	0	1	2	0
Cap, veh/h	74	1740	63				0	993	151	187	1533	0
Arrive On Green	0.17	0.17	0.17				0.00	0.31	0.31	0.07	0.41	0.00
Sat Flow, veh/h	146	3426	124				0	3161	479	1774	3725	0
Grp Volume(v), veh/h	1207	0	1099				0	650	623	158	1263	0
Grp Sat Flow(s),veh/h/ln	1855	0	1841				0	1863	1778	1774	1863	0
Q Serve(g_s), s	66.0	0.0	66.0				0.0	40.8	40.8	7.7	39.2	0.0
Cycle Q Clear(g_c), s	66.0	0.0	66.0				0.0	40.8	40.8	7.7	39.2	0.0
Prop In Lane	0.08		0.07				0.00		0.27	1.00		0.00
Lane Grp Cap(c), veh/h	942	0	935				0	585	559	187	1533	0
V/C Ratio(X)	1.28	0.00	1.18				0.00	1.11	1.12	0.84	0.82	0.00
Avail Cap(c_a), veh/h	942	0	935				0	585	559	192	1533	0
HCM Platoon Ratio	0.33	0.33	0.33				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.33	0.00	0.33				0.00	0.65	0.65	1.00	1.00	0.00
Uniform Delay (d), s/veh	54.1	0.0	54.1				0.0	44.6	44.7	32.8	34.1	0.0
Incr Delay (d2), s/veh	129.5	0.0	83.0				0.0	65.2	67.6	27.1	5.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	67.1	0.0	54.5				0.0	30.3	29.3	6.8	19.5	0.0
Lane Grp Delay (d), s/veh	183.6	0.0	137.1				0.0	109.8	112.3	59.9	39.2	0.0
Lane Grp LOS	F		F					F	F	E	D	
Approach Vol, veh/h		2306						1273			1421	
Approach Delay, s/veh		161.5						111.0			41.5	
Approach LOS		F						F			D	
Timer												
Assigned Phs		6						4		3	8	
Phs Duration (G+Y+Rc), s		71.0						46.3		12.7	59.0	
Change Period (Y+Rc), s		5.0						6.5		3.0	6.5	
Max Green Setting (Gmax), s		66.0						39.5		10.0	52.5	
Max Q Clear Time (g_c+I1), s		68.0						42.8		9.7	41.2	
Green Ext Time (p_c), s		0.0						0.0		0.0	8.7	
Intersection Summary												
HCM 2010 Ctrl Delay			114.5									
HCM 2010 LOS			F									
Notes												

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Volume (veh/h)	40	1480	40	0	0	0	0	120	80	460	60	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	186.3	190.0	186.3	193.7	0.0
Lanes	0	2	0				0	2	0	1	1	0
Cap, veh/h	45	1750	49				0	311	193	588	795	0
Arrive On Green	0.50	0.50	0.50				0.00	0.14	0.14	0.24	0.41	0.00
Sat Flow, veh/h	91	3514	99				0	2152	1338	1774	1937	0
Grp Volume(v), veh/h	861	0	781				0	108	102	484	63	0
Grp Sat Flow(s),veh/h/ln	1858	0	1845				0	1863	1627	1774	1937	0
Q Serve(g_s), s	54.4	0.0	46.2				0.0	6.6	7.2	28.1	2.5	0.0
Cycle Q Clear(g_c), s	54.4	0.0	46.2				0.0	6.6	7.2	28.1	2.5	0.0
Prop In Lane	0.05		0.05				0.00		0.82	1.00		0.00
Lane Grp Cap(c), veh/h	925	0	919				0	269	235	588	795	0
V/C Ratio(X)	0.93	0.00	0.85				0.00	0.40	0.43	0.82	0.08	0.00
Avail Cap(c_a), veh/h	992	0	985				0	269	235	597	795	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.22	0.00	0.22				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	29.5	0.0	27.4				0.0	48.7	49.0	31.4	22.5	0.0
Incr Delay (d2), s/veh	4.0	0.0	1.6				0.0	4.4	5.7	9.0	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	25.9	0.0	21.4				0.0	3.5	3.4	14.0	1.3	0.0
Lane Grp Delay (d), s/veh	33.5	0.0	29.0				0.0	53.1	54.7	40.4	22.7	0.0
Lane Grp LOS	C		C					D	D	D	C	
Approach Vol, veh/h		1642						210			547	
Approach Delay, s/veh		31.3						53.9			38.3	
Approach LOS		C						D			D	
Timer												
Assigned Phs		6						4		3	8	
Phs Duration (G+Y+Rc), s		67.5						24.6		33.4	58.0	
Change Period (Y+Rc), s		5.0						6.5		3.0	6.5	
Max Green Setting (Gmax), s		67.0						17.5		31.0	51.5	
Max Q Clear Time (g_c+I1), s		56.4						9.2		30.1	4.5	
Green Ext Time (p_c), s		6.1						0.4		0.2	0.7	
Intersection Summary												
HCM 2010 Ctrl Delay			34.9									
HCM 2010 LOS			C									
Notes												

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	180	0	50	0	0	0	0	2000	1360	260	2520	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	9	12	9	11	11	11	12	10	12	12	10	12
Total Lost time (s)	3.9		3.9					3.6	4.6	4.6	3.6	
Lane Util. Factor	1.00		1.00					0.91	0.91	0.97	0.95	
Frt	1.00		0.85					0.98	0.85	1.00	1.00	
Flt Protected	0.95		1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1593		1425					3095	1441	3433	3303	
Flt Permitted	0.95		1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1593		1425					3095	1441	3433	3303	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	189	0	53	0	0	0	0	2105	1432	274	2653	0
RTOR Reduction (vph)	0	0	38	0	0	0	0	11	356	0	0	0
Lane Group Flow (vph)	189	0	15	0	0	0	0	2452	718	274	2653	0
Turn Type	custom		custom					NA	Perm	Prot	NA	
Protected Phases			8					6		5	2	
Permitted Phases	8								6			
Actuated Green, G (s)	32.1		32.1					62.4	62.4	11.4	78.4	
Effective Green, g (s)	33.1		33.1					63.4	62.4	11.4	79.4	
Actuated g/C Ratio	0.28		0.28					0.53	0.52	0.10	0.66	
Clearance Time (s)	4.9		4.9					4.6	4.6	4.6	4.6	
Vehicle Extension (s)	2.5		2.5					2.5	2.5	3.0	2.5	
Lane Grp Cap (vph)	439		393					1635	749	326	2185	
v/s Ratio Prot			0.01					c0.79		0.08	c0.80	
v/s Ratio Perm	c0.12								0.50			
v/c Ratio	0.43		0.04					1.50	0.96	0.84	1.21	
Uniform Delay, d1	35.7		31.8					28.3	27.6	53.4	20.3	
Progression Factor	1.00		1.00					0.76	0.77	1.00	1.00	
Incremental Delay, d2	3.1		0.2					225.2	4.1	17.4	100.8	
Delay (s)	38.8		32.0					246.6	25.4	70.8	121.1	
Level of Service	D		C					F	C	E	F	
Approach Delay (s)		37.3			0.0			179.4			116.4	
Approach LOS		D			A			F			F	

Intersection Summary			
HCM 2000 Control Delay	146.8	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.16		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.1
Intersection Capacity Utilization	97.6%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1090	0	80	180	630	230	230	1780	0	0	2380	130
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	11	12	12	11	12	11	10	12	10	10	12
Total Lost time (s)	6.7		6.7	6.7	5.7		3.5	5.0			5.0	5.0
Lane Util. Factor	0.97		1.00	0.97	1.00		1.00	0.91			0.95	1.00
Frt	1.00		0.85	1.00	0.96		1.00	1.00			1.00	0.85
Flt Protected	0.95		1.00	0.95	1.00		0.95	1.00			1.00	1.00
Satd. Flow (prot)	3433		1583	3433	1728		1711	4746			3303	1583
Flt Permitted	0.11		1.00	0.95	1.00		0.11	1.00			1.00	1.00
Satd. Flow (perm)	398		1583	3433	1728		206	4746			3303	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	1147	0	84	189	663	242	242	1874	0	0	2505	137
RTOR Reduction (vph)	0	0	59	0	2	0	0	0	0	0	0	88
Lane Group Flow (vph)	1147	0	25	189	903	0	242	1874	0	0	2505	49
Turn Type	custom		custom	Split	NA		pm+pt	NA			NA	Perm
Protected Phases				2	2		7	4			8	
Permitted Phases	1		1				4					8
Actuated Green, G (s)	36.3		36.3	22.3	22.3		42.0	42.0			32.0	32.0
Effective Green, g (s)	36.3		36.3	22.3	23.3		41.5	43.0			33.0	33.0
Actuated g/C Ratio	0.30		0.30	0.19	0.19		0.35	0.36			0.28	0.28
Clearance Time (s)	6.7		6.7	6.7	6.7		3.0	6.0			6.0	6.0
Vehicle Extension (s)	2.5		2.5	2.5	2.5		2.0	2.5			2.5	2.5
Lane Grp Cap (vph)	120		478	637	335		152	1700			908	435
v/s Ratio Prot				0.06	c0.52		c0.09	0.39			c0.76	
v/s Ratio Perm	c2.88		0.02				0.46					0.03
v/c Ratio	9.56		0.05	0.30	2.69		1.59	1.10			2.76	0.11
Uniform Delay, d1	41.9		29.7	42.1	48.4		35.9	38.5			43.5	32.5
Progression Factor	1.00		1.00	1.00	1.00		1.00	1.00			1.01	1.30
Incremental Delay, d2	3867.9		0.2	1.2	770.9		295.2	55.5			791.7	0.0
Delay (s)	3909.8		29.9	43.3	819.2		331.1	94.0			835.5	42.3
Level of Service	F		C	D	F		F	F			F	D
Approach Delay (s)		3645.0			685.2			121.1			794.4	
Approach LOS		F			F			F			F	

Intersection Summary			
HCM 2000 Control Delay	1071.8	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	5.20		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	21.9
Intersection Capacity Utilization	172.4%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	40	920	40	50	50	0	0	70	40
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	186.3	190.0	190.0	186.3	0.0	0.0	186.3	190.0
Lanes				0	2	0	0	1	0	0	1	0
Cap, veh/h				110	2645	121	96	83	0	0	146	83
Arrive On Green				0.26	0.26	0.26	0.13	0.13	0.00	0.00	0.13	0.13
Sat Flow, veh/h				141	3396	155	399	632	0	0	1117	634
Grp Volume(v), veh/h				554	0	498	106	0	0	0	0	116
Grp Sat Flow(s),veh/h/ln				1856	0	1835	1031	0	0	0	0	1751
Q Serve(g_s), s				30.0	0.0	27.0	5.9	0.0	0.0	0.0	0.0	7.5
Cycle Q Clear(g_c), s				30.0	0.0	27.0	13.4	0.0	0.0	0.0	0.0	7.5
Prop In Lane				0.08		0.08	0.50		0.00	0.00		0.36
Lane Grp Cap(c), veh/h				1446	0	1430	179	0	0	0	0	229
V/C Ratio(X)				0.38	0.00	0.35	0.59	0.00	0.00	0.00	0.00	0.51
Avail Cap(c_a), veh/h				1446	0	1430	279	0	0	0	0	345
HCM Platoon Ratio				0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.62	0.00	0.62	1.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				21.1	0.0	20.0	52.9	0.0	0.0	0.0	0.0	49.3
Incr Delay (d2), s/veh				0.5	0.0	0.4	3.1	0.0	0.0	0.0	0.0	1.7
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				15.3	0.0	13.6	3.5	0.0	0.0	0.0	0.0	3.5
Lane Grp Delay (d), s/veh				21.6	0.0	20.5	56.0	0.0	0.0	0.0	0.0	51.1
Lane Grp LOS				C		C	E					D
Approach Vol, veh/h					1052			106			116	
Approach Delay, s/veh					21.1			56.0			51.1	
Approach LOS					C			E			D	

Timer			
Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	100.0	21.9	21.9
Change Period (Y+Rc), s	5.0	6.0	6.0
Max Green Setting (Gmax), s	95.0	24.0	24.0
Max Q Clear Time (g_c+I1), s	32.0	15.4	9.5
Green Ext Time (p_c), s	5.4	0.5	0.7

Intersection Summary	
HCM 2010 Ctrl Delay	26.7
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	130	900	90	70	1010	0	0	1260	100
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	186.3	190.0	186.3	186.3	0.0	0.0	186.3	190.0
Lanes				0	2	0	1	2	0	0	2	0
Cap, veh/h				187	1355	142	125	1719	0	0	1369	108
Arrive On Green				0.15	0.15	0.15	0.04	0.46	0.00	0.00	0.40	0.39
Sat Flow, veh/h				405	2937	309	1774	3725	0	0	3409	269
Grp Volume(v), veh/h				623	0	556	74	1063	0	0	723	708
Grp Sat Flow(s),veh/h/ln				1842	0	1808	1774	1863	0	0	1863	1815
Q Serve(g_s), s				41.9	0.0	37.7	3.1	27.9	0.0	0.0	49.3	49.8
Cycle Q Clear(g_c), s				41.9	0.0	37.7	3.1	27.9	0.0	0.0	49.3	49.8
Prop In Lane				0.22		0.17	1.00		0.00	0.00		0.15
Lane Grp Cap(c), veh/h				850	0	835	125	1719	0	0	748	729
V/C Ratio(X)				0.73	0.00	0.67	0.59	0.62	0.00	0.00	0.97	0.97
Avail Cap(c_a), veh/h				850	0	835	155	1719	0	0	748	729
HCM Platoon Ratio				0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.95	0.00	0.95	1.00	1.00	0.00	0.00	0.38	0.38
Uniform Delay (d), s/veh				47.4	0.0	45.7	31.7	26.4	0.0	0.0	38.0	38.3
Incr Delay (d2), s/veh				5.2	0.0	4.0	4.4	1.7	0.0	0.0	13.7	14.8
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				22.2	0.0	19.4	2.7	13.4	0.0	0.0	26.1	25.8
Lane Grp Delay (d), s/veh				52.7	0.0	49.6	36.1	28.0	0.0	0.0	51.8	53.1
Lane Grp LOS				D		D	D	C			D	D
Approach Vol, veh/h					1179			1137			1431	
Approach Delay, s/veh					51.2			28.6			52.4	
Approach LOS					D			C			D	
Timer												
Assigned Phs					2		7	4			8	
Phs Duration (G+Y+Rc), s					65.0		7.8	65.0			57.2	
Change Period (Y+Rc), s					5.0		3.0	6.0			6.0	
Max Green Setting (Gmax), s					60.0		7.0	59.0			49.0	
Max Q Clear Time (g_c+I1), s					43.9		5.1	29.9			51.8	
Green Ext Time (p_c), s					5.2		0.0	13.0			0.0	
Intersection Summary												
HCM 2010 Ctrl Delay			44.8									
HCM 2010 LOS			D									
Notes												

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations			↑↑			↱
Volume (vph)	0	0	1100	0	0	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	12	11	12	12	11	12
Total Lost time (s)			5.0			4.3
Lane Util. Factor			0.95			1.00
Frt			1.00			0.86
Flt Protected			1.00			1.00
Satd. Flow (prot)			3610			1644
Flt Permitted			1.00			1.00
Satd. Flow (perm)			3610			1644
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	1158	0	0	42
RTOR Reduction (vph)	0	0	0	0	0	41
Lane Group Flow (vph)	0	0	1158	0	0	1
Heavy Vehicles (%)	2%	2%	0%	0%	2%	0%
Turn Type			NA			custom
Protected Phases			2			
Permitted Phases						8
Actuated Green, G (s)			116.7			4.0
Effective Green, g (s)			116.7			4.0
Actuated g/C Ratio			0.90			0.03
Clearance Time (s)			5.0			4.3
Vehicle Extension (s)			3.0			2.5
Lane Grp Cap (vph)			3240			50
v/s Ratio Prot			c0.32			
v/s Ratio Perm						c0.00
v/c Ratio			0.36			0.03
Uniform Delay, d1			1.0			61.1
Progression Factor			3.54			1.00
Incremental Delay, d2			0.3			0.2
Delay (s)			3.8			61.3
Level of Service			A			E
Approach Delay (s)		0.0	3.8		61.3	
Approach LOS		A	A		E	

Intersection Summary			
HCM 2000 Control Delay	5.8	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	9.3
Intersection Capacity Utilization	41.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	30	1030	60	70	90	0	0	100	50
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	190.0	190.0	190.0	195.4	0.0	0.0	195.0	190.0
Lanes				0	2	0	0	1	0	0	1	0
Cap, veh/h				64	2256	138	188	230	0	0	345	174
Arrive On Green				0.65	0.65	0.65	0.27	0.28	0.00	0.00	0.28	0.27
Sat Flow, veh/h				97	3450	211	525	815	0	0	1224	618
Grp Volume(v), veh/h				622	0	557	169	0	0	0	0	158
Grp Sat Flow(s),veh/h/ln				1895	0	1863	1340	0	0	0	0	1841
Q Serve(g_s), s				22.0	0.0	19.2	8.7	0.0	0.0	0.0	0.0	8.8
Cycle Q Clear(g_c), s				22.0	0.0	19.2	17.5	0.0	0.0	0.0	0.0	8.8
Prop In Lane				0.05		0.11	0.44		0.00	0.00		0.34
Lane Grp Cap(c), veh/h				1239	0	1218	408	0	0	0	0	520
V/C Ratio(X)				0.50	0.00	0.46	0.41	0.00	0.00	0.00	0.00	0.30
Avail Cap(c_a), veh/h				1239	0	1218	408	0	0	0	0	520
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.28
Uniform Delay (d), s/veh				11.6	0.0	11.1	41.0	0.0	0.0	0.0	0.0	36.8
Incr Delay (d2), s/veh				1.5	0.0	1.2	3.1	0.0	0.0	0.0	0.0	0.4
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				10.2	0.0	8.8	5.3	0.0	0.0	0.0	0.0	4.2
Lane Grp Delay (d), s/veh				13.0	0.0	12.3	44.1	0.0	0.0	0.0	0.0	37.2
Lane Grp LOS				B		B	D					D
Approach Vol, veh/h					1179			169			158	
Approach Delay, s/veh					12.7			44.1			37.2	
Approach LOS					B			D			D	

Timer			
Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	90.0	40.0	40.0
Change Period (Y+Rc), s	5.0	4.3	4.3
Max Green Setting (Gmax), s	85.0	35.7	35.7
Max Q Clear Time (g_c+I1), s	24.0	19.5	10.8
Green Ext Time (p_c), s	6.4	0.9	1.0

Intersection Summary	
HCM 2010 Ctrl Delay	18.8
HCM 2010 LOS	B

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	150	900	130	110	850	0	0	1250	110
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	190.0	190.0	186.3	186.3	0.0	0.0	186.3	190.0
Lanes				0	2	0	1	2	0	0	2	1
Cap, veh/h				206	1291	196	174	1759	0	0	1468	623
Arrive On Green				0.46	0.46	0.46	0.05	0.47	0.00	0.00	0.39	0.39
Sat Flow, veh/h				450	2823	428	1774	3725	0	0	3725	1615
Grp Volume(v), veh/h				658	0	584	116	895	0	0	1316	116
Grp Sat Flow(s),veh/h/ln				1877	0	1824	1774	1863	0	0	1863	1615
Q Serve(g_s), s				36.5	0.0	31.8	4.7	20.8	0.0	0.0	41.3	5.9
Cycle Q Clear(g_c), s				36.5	0.0	31.8	4.7	20.8	0.0	0.0	41.3	5.9
Prop In Lane				0.24		0.23	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				859	0	834	174	1759	0	0	1468	623
V/C Ratio(X)				0.77	0.00	0.70	0.67	0.51	0.00	0.00	0.90	0.19
Avail Cap(c_a), veh/h				859	0	834	235	1919	0	0	1500	637
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	0.10	0.10
Uniform Delay (d), s/veh				28.3	0.0	27.0	29.2	22.9	0.0	0.0	35.4	25.3
Incr Delay (d2), s/veh				6.5	0.0	4.8	4.3	0.2	0.0	0.0	0.9	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				18.6	0.0	15.5	3.9	9.6	0.0	0.0	19.6	2.4
Lane Grp Delay (d), s/veh				34.8	0.0	31.8	33.5	23.1	0.0	0.0	36.3	25.3
Lane Grp LOS				C		C	C	C			D	C
Approach Vol, veh/h					1242			1011			1432	
Approach Delay, s/veh					33.4			24.3			35.4	
Approach LOS					C			C			D	
Timer												
Assigned Phs					2		7	4			8	
Phs Duration (G+Y+Rc), s					62.0		9.7	62.6			52.9	
Change Period (Y+Rc), s					5.0		3.0	4.8			4.8	
Max Green Setting (Gmax), s					57.0		11.0	63.2			49.2	
Max Q Clear Time (g_c+I1), s					38.5		6.7	22.8			43.3	
Green Ext Time (p_c), s					5.8		0.1	18.6			4.8	
Intersection Summary												
HCM 2010 Ctrl Delay			31.7									
HCM 2010 LOS			C									
Notes												

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	70	950	80	140	670	0	0	490	110
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	190.0	190.0	190.0	186.3	0.0	0.0	186.9	190.0
Lanes				0	2	0	0	2	0	0	2	0
Cap, veh/h				123	1737	153	194	812	0	0	1168	261
Arrive On Green				0.18	0.18	0.18	0.39	0.39	0.00	0.00	0.39	0.39
Sat Flow, veh/h				228	3225	285	385	2058	0	0	2960	662
Grp Volume(v), veh/h				612	0	546	276	576	0	0	325	307
Grp Sat Flow(s),veh/h/ln				1889	0	1850	748	1695	0	0	1869	1753
Q Serve(g_s), s				38.8	0.0	35.0	31.3	40.5	0.0	0.0	16.6	16.8
Cycle Q Clear(g_c), s				38.8	0.0	35.0	48.1	40.5	0.0	0.0	16.6	16.8
Prop In Lane				0.12		0.15	0.53		0.00	0.00		0.38
Lane Grp Cap(c), veh/h				1017	0	996	332	669	0	0	738	692
V/C Ratio(X)				0.60	0.00	0.55	0.83	0.86	0.00	0.00	0.44	0.44
Avail Cap(c_a), veh/h				1017	0	996	332	669	0	0	738	692
HCM Platoon Ratio				0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.92	0.00	0.92	1.00	1.00	0.00	0.00	0.09	0.09
Uniform Delay (d), s/veh				40.6	0.0	39.0	45.7	36.1	0.0	0.0	28.8	29.0
Incr Delay (d2), s/veh				2.4	0.0	2.0	20.9	13.7	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				20.5	0.0	18.1	11.0	20.0	0.0	0.0	7.9	7.5
Lane Grp Delay (d), s/veh				43.1	0.0	41.0	66.6	49.8	0.0	0.0	28.9	29.1
Lane Grp LOS				D		D	E	D			C	C
Approach Vol, veh/h					1158			852			632	
Approach Delay, s/veh					42.1			55.2			29.0	
Approach LOS					D			E			C	

Timer			
Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	75.0	55.0	55.0
Change Period (Y+Rc), s	5.0	4.7	4.7
Max Green Setting (Gmax), s	70.0	50.3	50.3
Max Q Clear Time (g_c+I1), s	40.8	50.1	18.8
Green Ext Time (p_c), s	5.9	0.1	7.6

Intersection Summary	
HCM 2010 Ctrl Delay	43.2
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	40	980	0	40	0	0	0	80	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	10	12	12	12	12	12	11	12	12	11	12
Total Lost time (s)					5.0		4.3				4.3	4.3
Lane Util. Factor					0.95		1.00				1.00	1.00
Frt					1.00		1.00				1.00	0.85
Flt Protected					1.00		0.95				1.00	1.00
Satd. Flow (prot)					3532		1805				1801	1615
Flt Permitted					1.00		0.68				1.00	1.00
Satd. Flow (perm)					3532		1301				1801	1615
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	42	1032	0	42	0	0	0	84	84
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	66
Lane Group Flow (vph)	0	0	0	0	1074	0	42	0	0	0	84	18
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	0%	2%	2%	2%	2%	0%
Turn Type				Perm	NA		custom				NA	Perm
Protected Phases					2						8	
Permitted Phases				2			4					8
Actuated Green, G (s)					93.0		27.7				27.7	27.7
Effective Green, g (s)					93.0		27.7				27.7	27.7
Actuated g/C Ratio					0.72		0.21				0.21	0.21
Clearance Time (s)					5.0		4.3				4.3	4.3
Vehicle Extension (s)					3.0		3.0				3.0	3.0
Lane Grp Cap (vph)					2526		277				383	344
v/s Ratio Prot											c0.05	
v/s Ratio Perm					0.30		0.03					0.01
v/c Ratio					0.43		0.15				0.22	0.05
Uniform Delay, d1					7.6		41.6				42.2	40.7
Progression Factor					0.23		1.00				1.00	1.00
Incremental Delay, d2					0.4		1.2				0.3	0.1
Delay (s)					2.1		42.8				42.5	40.8
Level of Service					A		D				D	D
Approach Delay (s)		0.0			2.1			42.8			41.6	
Approach LOS		A			A			D			D	

Intersection Summary			
HCM 2000 Control Delay	8.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.38		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	9.3
Intersection Capacity Utilization	47.6%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	50	950	70	60	370	0	0	330	80
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	186.3	190.0	190.0	186.3	0.0	0.0	186.3	190.0
Lanes				0	2	0	0	1	0	0	1	0
Cap, veh/h				88	1727	134	76	414	0	0	560	136
Arrive On Green				0.18	0.18	0.18	0.39	0.39	0.00	0.00	0.39	0.39
Sat Flow, veh/h				165	3254	253	115	1073	0	0	1450	351
Grp Volume(v), veh/h				595	0	532	452	0	0	0	0	431
Grp Sat Flow(s),veh/h/ln				1854	0	1818	1188	0	0	0	0	1801
Q Serve(g_s), s				38.5	0.0	34.7	24.4	0.0	0.0	0.0	0.0	25.1
Cycle Q Clear(g_c), s				38.5	0.0	34.7	49.5	0.0	0.0	0.0	0.0	25.1
Prop In Lane				0.09		0.14	0.14		0.00	0.00		0.19
Lane Grp Cap(c), veh/h				984	0	965	490	0	0	0	0	695
V/C Ratio(X)				0.60	0.00	0.55	0.92	0.00	0.00	0.00	0.00	0.62
Avail Cap(c_a), veh/h				984	0	965	490	0	0	0	0	695
HCM Platoon Ratio				0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.88	0.00	0.88	1.00	0.00	0.00	0.00	0.00	0.09
Uniform Delay (d), s/veh				41.0	0.0	39.5	42.0	0.0	0.0	0.0	0.0	32.2
Incr Delay (d2), s/veh				2.4	0.0	2.0	25.2	0.0	0.0	0.0	0.0	0.4
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				20.0	0.0	17.6	18.4	0.0	0.0	0.0	0.0	11.4
Lane Grp Delay (d), s/veh				43.5	0.0	41.5	67.3	0.0	0.0	0.0	0.0	32.6
Lane Grp LOS				D		D	E					C
Approach Vol, veh/h					1127			452			431	
Approach Delay, s/veh					42.5			67.3			32.6	
Approach LOS					D			E			C	

Timer			
Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	74.0	56.0	56.0
Change Period (Y+Rc), s	5.0	5.8	5.8
Max Green Setting (Gmax), s	69.0	50.2	50.2
Max Q Clear Time (g_c+I1), s	40.5	51.5	27.1
Green Ext Time (p_c), s	5.7	0.0	3.0

Intersection Summary	
HCM 2010 Ctrl Delay	46.0
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	0	1020	110	120	290	0	0	0	0
Number				5	2	12	7	4	14			
Initial Q (Qb), veh				0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00			
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow veh/h/ln				0.0	186.3	190.0	190.0	186.3	0.0			
Lanes				0	2	0	0	1	0			
Cap, veh/h				0	2314	250	31	13	0			
Arrive On Green				0.00	0.23	0.23	0.23	0.23	0.00			
Sat Flow, veh/h				0	3306	357	0	56	0			
Grp Volume(v), veh/h				0	605	585	431	0	0			
Grp Sat Flow(s),veh/h/ln				0	1863	1800	56	0	0			
Q Serve(g_s), s				0.0	41.9	42.0	0.0	0.0	0.0			
Cycle Q Clear(g_c), s				0.0	41.9	42.0	35.0	0.0	0.0			
Prop In Lane				0.00		0.20	0.29		0.00			
Lane Grp Cap(c), veh/h				0	1304	1260	44	0	0			
V/C Ratio(X)				0.00	0.46	0.46	9.79	0.00	0.00			
Avail Cap(c_a), veh/h				0	1304	1260	44	0	0			
HCM Platoon Ratio				1.00	0.33	0.33	1.00	1.00	1.00			
Upstream Filter(I)				0.00	0.78	0.78	1.00	0.00	0.00			
Uniform Delay (d), s/veh				0.0	33.4	33.5	64.8	0.0	0.0			
Incr Delay (d2), s/veh				0.0	0.9	1.0	3998.5	0.0	0.0			
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0			
%ile Back of Q (50%), veh/ln				0.0	21.6	20.9	50.7	0.0	0.0			
Lane Grp Delay (d), s/veh				0.0	34.4	34.4	4063.3	0.0	0.0			
Lane Grp LOS					C	C	F					
Approach Vol, veh/h					1190			431				
Approach Delay, s/veh					34.4			4063.3				
Approach LOS					C			F				

Timer		
Assigned Phs	2	4
Phs Duration (G+Y+Rc), s	110.0	40.0
Change Period (Y+Rc), s	5.0	5.0
Max Green Setting (Gmax), s	105.0	35.0
Max Q Clear Time (g_c+I1), s	44.0	37.0
Green Ext Time (p_c), s	11.3	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	1105.6
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↑↑						↑↑	↱
Volume (veh/h)	0	0	0	0	730	0	0	0	0	0	90	470
Number				5	2	12				3	8	18
Initial Q (Qb), veh				0	0	0				0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00				1.00		1.00
Parking Bus Adj				1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow veh/h/ln				0.0	167.6	0.0				0.0	167.6	167.6
Lanes				0	2	0				0	2	1
Cap, veh/h				0	2235	0				0	872	370
Arrive On Green				0.00	0.22	0.00				0.00	0.26	0.26
Sat Flow, veh/h				0	3353	0				0	3353	1425
Grp Volume(v), veh/h				0	768	0				0	95	495
Grp Sat Flow(s),veh/h/ln				0	1676	0				0	1676	1425
Q Serve(g_s), s				0.0	29.0	0.0				0.0	3.2	39.0
Cycle Q Clear(g_c), s				0.0	29.0	0.0				0.0	3.2	39.0
Prop In Lane				0.00		0.00				0.00		1.00
Lane Grp Cap(c), veh/h				0	2235	0				0	872	370
V/C Ratio(X)				0.00	0.34	0.00				0.00	0.11	1.34
Avail Cap(c_a), veh/h				0	2235	0				0	872	370
HCM Platoon Ratio				1.00	0.33	1.00				1.00	1.00	1.00
Upstream Filter(I)				0.00	1.00	0.00				0.00	0.09	0.09
Uniform Delay (d), s/veh				0.0	30.8	0.0				0.0	42.3	55.5
Incr Delay (d2), s/veh				0.0	0.4	0.0				0.0	0.0	152.9
Initial Q Delay(d3),s/veh				0.0	0.0	0.0				0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				0.0	13.3	0.0				0.0	1.4	30.1
Lane Grp Delay (d), s/veh				0.0	31.2	0.0				0.0	42.3	208.4
Lane Grp LOS					C						D	F
Approach Vol, veh/h					768						590	
Approach Delay, s/veh					31.2						181.7	
Approach LOS					C						F	

Timer	
Assigned Phs	2	8
Phs Duration (G+Y+Rc), s	105.0	45.0
Change Period (Y+Rc), s	5.0	6.0
Max Green Setting (Gmax), s	100.0	39.0
Max Q Clear Time (g_c+I1), s	31.0	41.0
Green Ext Time (p_c), s	6.6	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	96.6
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	0	2470	340	80	320	0	0	0	140
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					5.0		4.7	4.7				4.7
Lane Util. Factor					0.95		1.00	1.00				1.00
Frt					0.98		1.00	1.00				0.86
Flt Protected					1.00		0.95	1.00				1.00
Satd. Flow (prot)					3127		1593	1676				1450
Flt Permitted					1.00		0.95	1.00				1.00
Satd. Flow (perm)					3127		1593	1676				1450
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	0	2600	358	84	337	0	0	0	147
RTOR Reduction (vph)	0	0	0	0	7	0	12	0	0	0	0	12
Lane Group Flow (vph)	0	0	0	0	2951	0	72	337	0	0	0	135
Turn Type					NA		Perm	NA				custom
Protected Phases					2			4				
Permitted Phases							4					8
Actuated Green, G (s)					110.0		30.3	30.3				30.3
Effective Green, g (s)					110.0		30.3	30.3				30.3
Actuated g/C Ratio					0.73		0.20	0.20				0.20
Clearance Time (s)					5.0		4.7	4.7				4.7
Vehicle Extension (s)					3.0		3.0	3.0				2.5
Lane Grp Cap (vph)					2293		321	338				292
v/s Ratio Prot					c0.94			c0.20				
v/s Ratio Perm							0.05					0.09
v/c Ratio					1.29		0.22	1.00				0.46
Uniform Delay, d1					20.0		50.0	59.8				52.7
Progression Factor					0.28		1.00	1.00				0.49
Incremental Delay, d2					129.4		1.6	48.2				0.1
Delay (s)					135.1		51.6	108.0				25.8
Level of Service					F		D	F				C
Approach Delay (s)		0.0			135.1			96.8			25.8	
Approach LOS		A			F			F			C	

Intersection Summary			
HCM 2000 Control Delay	125.9	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.22		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	9.7
Intersection Capacity Utilization	114.7%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	140	2470	130	240	850	0	0	420	110
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				171.0	166.0	171.0	166.0	166.0	0.0	0.0	166.0	171.0
Lanes				0	2	0	1	2	0	0	2	0
Cap, veh/h				109	2013	111	185	812	0	0	351	91
Arrive On Green				0.22	0.22	0.22	0.09	0.24	0.00	0.00	0.14	0.14
Sat Flow, veh/h				161	2960	163	1581	3320	0	0	2542	662
Grp Volume(v), veh/h				1510	0	1374	253	895	0	0	287	271
Grp Sat Flow(s),veh/h/ln				1652	0	1631	1581	1660	0	0	1660	1543
Q Serve(g_s), s				102.0	0.0	102.0	13.0	36.7	0.0	0.0	20.7	20.7
Cycle Q Clear(g_c), s				102.0	0.0	102.0	13.0	36.7	0.0	0.0	20.7	20.7
Prop In Lane				0.10		0.10	1.00		0.00	0.00		0.43
Lane Grp Cap(c), veh/h				1123	0	1109	185	812	0	0	229	213
V/C Ratio(X)				1.34	0.00	1.24	1.37	1.10	0.00	0.00	1.25	1.27
Avail Cap(c_a), veh/h				1123	0	1109	185	812	0	0	229	213
HCM Platoon Ratio				0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.09	0.00	0.09	1.00	1.00	0.00	0.00	0.96	0.96
Uniform Delay (d), s/veh				58.2	0.0	58.2	53.4	56.7	0.0	0.0	64.7	64.7
Incr Delay (d2), s/veh				155.4	0.0	108.1	195.9	63.2	0.0	0.0	144.0	152.2
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				94.3	0.0	78.5	10.1	23.0	0.0	0.0	18.2	17.4
Lane Grp Delay (d), s/veh				213.5	0.0	166.3	249.2	119.8	0.0	0.0	208.6	216.8
Lane Grp LOS				F		F	F	F			F	F
Approach Vol, veh/h					2884			1148			558	
Approach Delay, s/veh					191.0			148.3			212.6	
Approach LOS					F			F			F	

Timer					
Assigned Phs		2	7	4	8
Phs Duration (G+Y+Rc), s		107.0	16.0	43.0	27.0
Change Period (Y+Rc), s		5.0	3.0	6.3	6.3
Max Green Setting (Gmax), s		102.0	13.0	36.7	20.7
Max Q Clear Time (g_c+I1), s		104.0	15.0	38.7	22.7
Green Ext Time (p_c), s		0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	183.0
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	250	2200	0	0	0	0	0	950	340
Number				5	2	12				3	8	18
Initial Q (Qb), veh				0	0	0				0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00				1.00		1.00
Parking Bus Adj				1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow veh/h/ln				171.0	166.0	0.0				0.0	166.0	171.0
Lanes				0	2	0				0	2	0
Cap, veh/h				48	906	0				0	787	279
Arrive On Green				0.20	0.20	0.00				0.00	0.34	0.34
Sat Flow, veh/h				0	1511	0				0	2343	831
Grp Volume(v), veh/h				263	2316	0				0	706	652
Grp Sat Flow(s),veh/h/ln				0	1511	0				0	1660	1514
Q Serve(g_s), s				0.0	90.0	0.0				0.0	50.4	50.4
Cycle Q Clear(g_c), s				90.0	90.0	0.0				0.0	50.4	50.4
Prop In Lane				1.00		0.00				0.00		0.55
Lane Grp Cap(c), veh/h				48	906	0				0	558	509
V/C Ratio(X)				5.48	2.55	0.00				0.00	1.26	1.28
Avail Cap(c_a), veh/h				48	906	0				0	558	509
HCM Platoon Ratio				0.33	0.33	1.00				1.00	1.00	1.00
Upstream Filter(I)				0.09	0.09	0.00				0.00	0.09	0.09
Uniform Delay (d), s/veh				105.2	60.1	0.0				0.0	49.8	49.8
Incr Delay (d2), s/veh				2019.7	700.0	0.0				0.0	120.6	128.7
Initial Q Delay(d3),s/veh				0.0	0.0	0.0				0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				28.9	213.3	0.0				0.0	40.4	38.0
Lane Grp Delay (d), s/veh				2124.9	760.2	0.0				0.0	170.4	178.5
Lane Grp LOS				F	F						F	F
Approach Vol, veh/h					2579						1358	
Approach Delay, s/veh					899.4						174.3	
Approach LOS					F						F	

Timer	
Assigned Phs	2	8
Phs Duration (G+Y+Rc), s	95.0	55.0
Change Period (Y+Rc), s	5.0	4.6
Max Green Setting (Gmax), s	90.0	50.4
Max Q Clear Time (g_c+I1), s	92.0	52.4
Green Ext Time (p_c), s	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	649.3
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	0	2180	210	310	830	0	0	0	0
Number				5	2	12	7	4	14			
Initial Q (Qb), veh				0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00			
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow veh/h/ln				0.0	166.0	171.0	171.0	166.0	0.0			
Lanes				0	2	0	0	3	0			
Cap, veh/h				0	2091	198	48	713	0			
Arrive On Green				0.00	0.70	0.70	0.24	0.24	0.00			
Sat Flow, veh/h				0	2988	283	0	3022	0			
Grp Volume(v), veh/h				0	1258	1258	326	874	0			
Grp Sat Flow(s),veh/h/ln				0	1660	1610	0	1511	0			
Q Serve(g_s), s				0.0	105.0	105.0	0.0	35.4	0.0			
Cycle Q Clear(g_c), s				0.0	105.0	105.0	35.4	35.4	0.0			
Prop In Lane				0.00		0.18	1.00		0.00			
Lane Grp Cap(c), veh/h				0	1162	1127	48	713	0			
V/C Ratio(X)				0.00	1.08	1.12	6.79	1.23	0.00			
Avail Cap(c_a), veh/h				0	1162	1127	48	713	0			
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)				0.00	0.09	0.09	1.00	1.00	0.00			
Uniform Delay (d), s/veh				0.0	22.5	22.5	75.0	57.3	0.0			
Incr Delay (d2), s/veh				0.0	38.9	53.6	2649.5	113.8	0.0			
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0			
%ile Back of Q (50%), veh/ln				0.0	53.2	56.2	37.2	25.2	0.0			
Lane Grp Delay (d), s/veh				0.0	61.4	76.1	2724.5	171.1	0.0			
Lane Grp LOS					F	F	F	F				
Approach Vol, veh/h					2516			1200				
Approach Delay, s/veh					68.7			864.8				
Approach LOS					E			F				
Timer												
Assigned Phs					2			4				
Phs Duration (G+Y+Rc), s					110.0			40.0				
Change Period (Y+Rc), s					5.0			4.6				
Max Green Setting (Gmax), s					105.0			35.4				
Max Q Clear Time (g_c+I1), s					107.0			37.4				
Green Ext Time (p_c), s					0.0			0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			325.8									
HCM 2010 LOS			F									
Notes												

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	400	1030	290	660	1110	300	450	1490	510
Number				7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				166.0	166.0	166.0	166.0	166.0	166.0	166.0	166.0	166.0
Lanes				1	1	1	1	2	1	2	2	1
Cap, veh/h				579	608	517	271	1125	478	512	1110	472
Arrive On Green				0.37	0.37	0.37	0.17	0.34	0.34	0.22	0.44	0.44
Sat Flow, veh/h				1581	1660	1411	1581	3320	1411	3067	3320	1411
Grp Volume(v), veh/h				421	1084	305	695	1168	316	474	1568	537
Grp Sat Flow(s),veh/h/ln				1581	1660	1411	1581	1660	1411	1534	1660	1411
Q Serve(g_s), s				32.2	51.3	24.5	24.0	47.4	26.7	21.2	46.8	46.8
Cycle Q Clear(g_c), s				32.2	51.3	24.5	24.0	47.4	26.7	21.2	46.8	46.8
Prop In Lane				1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h				579	608	517	271	1125	478	512	1110	472
V/C Ratio(X)				0.73	1.78	0.59	2.56	1.04	0.66	0.93	1.41	1.14
Avail Cap(c_a), veh/h				579	608	517	271	1125	478	526	1110	472
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	1.00	0.09	0.09	0.09
Uniform Delay (d), s/veh				38.3	44.3	35.8	58.0	46.3	39.4	53.6	38.9	38.9
Incr Delay (d2), s/veh				4.6	358.5	1.8	714.6	37.2	7.0	3.1	186.2	65.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				13.7	82.4	19.5	63.7	26.1	10.6	8.5	47.8	24.7
Lane Grp Delay (d), s/veh				42.8	402.8	37.6	772.6	83.5	46.4	56.7	225.1	103.8
Lane Grp LOS				D	F	D	F	F	D	E	F	F
Approach Vol, veh/h					1810			2179			2579	
Approach Delay, s/veh					257.6			297.9			168.9	
Approach LOS					F			F			F	

Timer							
Assigned Phs		4		1	6		5	2
Phs Duration (G+Y+Rc), s		58.0		29.0	53.6		28.4	53.0
Change Period (Y+Rc), s		6.7		5.0	6.2		5.0	6.2
Max Green Setting (Gmax), s		51.3		24.0	46.8		24.0	46.8
Max Q Clear Time (g_c+I1), s		53.3		26.0	49.4		23.2	48.8
Green Ext Time (p_c), s		0.0		0.0	0.0		0.2	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	236.1
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	450	30	1100	90	0	140	0	1860	20	30	2160	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	6.7		6.7		6.2		3.0	6.2	
Lane Util. Factor	0.95	0.95	1.00	1.00		1.00		0.91		1.00	0.95	
Frt	1.00	1.00	0.85	1.00		0.85		1.00		1.00	1.00	
Flt Protected	0.95	0.96	1.00	0.95		1.00		1.00		0.95	1.00	
Satd. Flow (prot)	1498	1511	1411	1577		1411		4525		1577	3154	
Flt Permitted	0.95	0.96	1.00	0.59		1.00		1.00		0.05	1.00	
Satd. Flow (perm)	1498	1511	1411	986		1411		4525		81	3154	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	474	32	1158	95	0	147	0	1958	21	32	2274	0
RTOR Reduction (vph)	0	0	75	0	0	72	0	0	0	0	0	0
Lane Group Flow (vph)	251	255	1083	95	0	75	0	1979	0	32	2274	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Split	NA	Perm	custom		custom		NA		pm+pt	NA	
Protected Phases	3	3						6		5	2	
Permitted Phases			3	4		4				2		
Actuated Green, G (s)	31.0	31.0	31.0	15.8		15.8		79.3		85.3	85.3	
Effective Green, g (s)	31.0	31.0	31.0	15.8		15.8		79.3		85.3	85.3	
Actuated g/C Ratio	0.21	0.21	0.21	0.11		0.11		0.53		0.57	0.57	
Clearance Time (s)	5.0	5.0	5.0	6.7		6.7		6.2		3.0	6.2	
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0		3.0		3.0	3.0	
Lane Grp Cap (vph)	309	312	291	103		148		2392		75	1793	
v/s Ratio Prot	0.17	0.17						0.44		0.01	c0.72	
v/s Ratio Perm			c0.77	c0.10		0.05				0.23		
v/c Ratio	0.81	0.82	3.72	0.92		0.50		0.83		0.43	1.27	
Uniform Delay, d1	56.7	56.8	59.5	66.5		63.4		29.6		22.3	32.4	
Progression Factor	0.81	0.81	0.80	1.00		1.00		0.35		1.00	1.00	
Incremental Delay, d2	1.6	1.6	1226.2	64.0		2.7		0.3		3.9	125.3	
Delay (s)	47.4	47.5	1274.0	130.4		66.1		10.6		26.2	157.6	
Level of Service	D	D	F	F		E		B		C	F	
Approach Delay (s)		901.0			91.3			10.6			155.8	
Approach LOS		F			F			B			F	

Intersection Summary			
HCM 2000 Control Delay	307.2	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.84		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	20.9
Intersection Capacity Utilization	160.2%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	1010	1540	0	0	0	0	0	1250	170	0	0	0
Number	1	6	16				7	4	14			
Initial Q (Qb), veh	0	0	0				0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00			
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00			
Adj Sat Flow veh/h/ln	171.0	166.0	0.0				0.0	166.0	166.0			
Lanes	0	2	0				0	2	1			
Cap, veh/h	48	937	0				0	1058	450			
Arrive On Green	0.20	0.20	0.00				0.00	0.32	0.32			
Sat Flow, veh/h	0	1511	0				0	3320	1411			
Grp Volume(v), veh/h	1063	1621	0				0	1316	179			
Grp Sat Flow(s),veh/h/ln	0	1511	0				0	1660	1411			
Q Serve(g_s), s	0.0	93.0	0.0				0.0	47.8	14.8			
Cycle Q Clear(g_c), s	93.0	93.0	0.0				0.0	47.8	14.8			
Prop In Lane	1.00		0.00				0.00		1.00			
Lane Grp Cap(c), veh/h	48	937	0				0	1058	450			
V/C Ratio(X)	22.15	1.73	0.00				0.00	1.24	0.40			
Avail Cap(c_a), veh/h	48	937	0				0	1058	450			
HCM Platoon Ratio	0.33	0.33	1.00				1.00	1.00	1.00			
Upstream Filter(I)	0.09	0.09	0.00				0.00	0.09	0.09			
Uniform Delay (d), s/veh	106.2	59.7	0.0				0.0	51.1	39.9			
Incr Delay (d2), s/veh	9519.1	329.2	0.0				0.0	110.5	0.1			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0			
%ile Back of Q (50%), veh/ln	128.9	123.9	0.0				0.0	36.8	5.4			
Lane Grp Delay (d), s/veh	9625.3	388.8	0.0				0.0	161.6	39.9			
Lane Grp LOS	F	F						F	D			
Approach Vol, veh/h		2684						1495				
Approach Delay, s/veh		4046.9						147.0				
Approach LOS		F						F				

Timer	
Assigned Phs	6
Phs Duration (G+Y+Rc), s	98.0
Change Period (Y+Rc), s	5.0
Max Green Setting (Gmax), s	93.0
Max Q Clear Time (g_c+I1), s	95.0
Green Ext Time (p_c), s	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	2651.8
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1900	460	0	0	0	0	0	0	410	1180	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0								4.6	4.6	
Lane Util. Factor		0.95								0.95	0.95	
Frt		0.97								1.00	1.00	
Flt Protected		1.00								0.95	1.00	
Satd. Flow (prot)		3062								1498	1575	
Flt Permitted		1.00								0.95	1.00	
Satd. Flow (perm)		3062								1498	1575	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	2000	484	0	0	0	0	0	0	432	1242	0
RTOR Reduction (vph)	0	14	0	0	0	0	0	0	0	8	8	0
Lane Group Flow (vph)	0	2470	0	0	0	0	0	0	0	381	1277	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type		NA								Perm	NA	
Protected Phases		6									8	
Permitted Phases										8		
Actuated Green, G (s)		70.0								70.4	70.4	
Effective Green, g (s)		70.0								70.4	70.4	
Actuated g/C Ratio		0.47								0.47	0.47	
Clearance Time (s)		5.0								4.6	4.6	
Vehicle Extension (s)		3.0								3.0	3.0	
Lane Grp Cap (vph)		1428								703	739	
v/s Ratio Prot		c0.81										
v/s Ratio Perm										0.25	0.81	
v/c Ratio		1.73								0.54	1.73	
Uniform Delay, d1		40.0								28.3	39.8	
Progression Factor		0.94								1.00	1.00	
Incremental Delay, d2		328.7								0.9	333.3	
Delay (s)		366.3								29.2	373.1	
Level of Service		F								C	F	
Approach Delay (s)		366.3			0.0			0.0			293.2	
Approach LOS		F			A			A			F	

Intersection Summary			
HCM 2000 Control Delay	336.9	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.73		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	9.6
Intersection Capacity Utilization	136.4%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	650	1890	470	0	0	0	0	760	90	160	480	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	171.0	166.0	171.0				0.0	166.0	171.0	166.0	166.0	0.0
Lanes	0	2	0				0	2	0	1	2	0
Cap, veh/h	434	1300	333				0	610	72	143	961	0
Arrive On Green	0.21	0.21	0.21				0.00	0.21	0.21	0.06	0.29	0.00
Sat Flow, veh/h	671	2011	515				0	2913	346	1581	3320	0
Grp Volume(v), veh/h	1659	0	1509				0	456	439	168	505	0
Grp Sat Flow(s),veh/h/ln	1627	0	1569				0	1660	1599	1581	1660	0
Q Serve(g_s), s	97.0	0.0	97.0				0.0	31.4	31.4	9.0	19.1	0.0
Cycle Q Clear(g_c), s	97.0	0.0	97.0				0.0	31.4	31.4	9.0	19.1	0.0
Prop In Lane	0.41		0.33				0.00		0.22	1.00		0.00
Lane Grp Cap(c), veh/h	1052	0	1015				0	348	335	143	961	0
V/C Ratio(X)	1.58	0.00	1.49				0.00	1.31	1.31	1.18	0.53	0.00
Avail Cap(c_a), veh/h	1052	0	1015				0	348	335	143	961	0
HCM Platoon Ratio	0.33	0.33	0.33				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.00	0.09				0.00	0.67	0.67	1.00	1.00	0.00
Uniform Delay (d), s/veh	59.0	0.0	59.0				0.0	59.3	59.3	49.8	44.7	0.0
Incr Delay (d2), s/veh	260.0	0.0	219.8				0.0	153.6	154.2	130.3	2.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	118.9	0.0	103.4				0.0	28.4	27.4	5.2	8.5	0.0
Lane Grp Delay (d), s/veh	319.0	0.0	278.7				0.0	212.9	213.5	180.2	46.7	0.0
Lane Grp LOS	F		F					F	F	F	D	
Approach Vol, veh/h		3168						895			673	
Approach Delay, s/veh		299.8						213.1			80.0	
Approach LOS		F						F			F	

Timer					
Assigned Phs		6		4	3	8
Phs Duration (G+Y+Rc), s		102.0		36.0	12.0	48.0
Change Period (Y+Rc), s		5.0		4.6	3.0	4.6
Max Green Setting (Gmax), s		97.0		31.4	9.0	43.4
Max Q Clear Time (g_c+I1), s		99.0		33.4	11.0	21.1
Green Ext Time (p_c), s		0.0		0.0	0.0	10.0

Intersection Summary	
HCM 2010 Ctrl Delay	252.2
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	310	2350	240	0	0	0	0	360	400	0	0	0
Number	1	6	16				7	4	14			
Initial Q (Qb), veh	0	0	0				0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00			
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00			
Adj Sat Flow veh/h/ln	171.0	166.0	171.0				0.0	166.0	171.0			
Lanes	0	2	0				0	1	0			
Cap, veh/h	48	827	85				0	234	260			
Arrive On Green	0.20	0.20	0.20				0.00	0.11	0.11			
Sat Flow, veh/h	0	1349	138				0	720	799			
Grp Volume(v), veh/h	326	0	2727				0	0	800			
Grp Sat Flow(s),veh/h/ln	0	0	1486				0	0	1519			
Q Serve(g_s), s	0.0	0.0	92.0				0.0	0.0	48.7			
Cycle Q Clear(g_c), s	92.0	0.0	92.0				0.0	0.0	48.7			
Prop In Lane	1.00		0.09				0.00		0.53			
Lane Grp Cap(c), veh/h	48	0	912				0	0	493			
V/C Ratio(X)	6.79	0.00	2.99				0.00	0.00	1.62			
Avail Cap(c_a), veh/h	48	0	912				0	0	493			
HCM Platoon Ratio	0.33	0.33	0.33				1.00	0.33	0.33			
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.00	0.09			
Uniform Delay (d), s/veh	105.8	0.0	59.8				0.0	0.0	67.0			
Incr Delay (d2), s/veh	2649.5	0.0	899.0				0.0	0.0	280.8			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0			
%ile Back of Q (50%), veh/ln	37.3	0.0	264.9				0.0	0.0	58.7			
Lane Grp Delay (d), s/veh	2755.3	0.0	958.8				0.0	0.0	347.7			
Lane Grp LOS	F		F						F			
Approach Vol, veh/h		3053						800				
Approach Delay, s/veh		1150.6						347.7				
Approach LOS		F						F				

Timer	
Assigned Phs	6
Phs Duration (G+Y+Rc), s	97.0
Change Period (Y+Rc), s	5.0
Max Green Setting (Gmax), s	92.0
Max Q Clear Time (g_c+I1), s	94.0
Green Ext Time (p_c), s	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	983.9
HCM 2010 LOS	F

Notes

Movement	EBT	EBR	SBL	SBT	SWL2	SWL
Lane Configurations						
Volume (vph)	2900	210	690	140	570	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0			7.0	7.0	
Lane Util. Factor	0.95			0.95	0.97	
Frt	0.99			1.00	1.00	
Flt Protected	1.00			0.96	0.95	
Satd. Flow (prot)	3153			3058	3090	
Flt Permitted	1.00			0.96	0.95	
Satd. Flow (perm)	3153			3058	3090	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	3053	221	726	147	600	0
RTOR Reduction (vph)	4	0	0	0	52	0
Lane Group Flow (vph)	3270	0	0	873	548	0
Turn Type	NA		Perm	NA	Perm	
Protected Phases	6			9		8
Permitted Phases			9		8	
Actuated Green, G (s)	71.0			30.6	29.4	
Effective Green, g (s)	71.0			30.6	29.4	
Actuated g/C Ratio	0.47			0.20	0.20	
Clearance Time (s)	5.0			7.0	7.0	
Vehicle Extension (s)	3.0			3.0	3.0	
Lane Grp Cap (vph)	1492			623	605	
v/s Ratio Prot	c1.04					
v/s Ratio Perm				0.29	c0.18	
v/c Ratio	2.19			2.24dl	0.91	
Uniform Delay, d1	39.5			59.7	58.9	
Progression Factor	1.15			1.00	1.00	
Incremental Delay, d2	536.6			190.2	17.1	
Delay (s)	582.2			249.9	76.0	
Level of Service	F			F	E	
Approach Delay (s)	582.2			249.9		76.0
Approach LOS	F			F		E

Intersection Summary			
HCM 2000 Control Delay	457.1	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.72		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	19.0
Intersection Capacity Utilization	172.9%	ICU Level of Service	H
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	230	2700	60	0	0	0	0	250	40	120	190	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	186.3	190.0	190.0	193.7	0.0
Lanes	0	2	0				0	1	0	0	1	0
Cap, veh/h	177	2188	51				0	432	69	109	140	0
Arrive On Green	0.22	0.22	0.22				0.00	0.28	0.28	0.28	0.28	0.00
Sat Flow, veh/h	272	3349	78				0	1568	250	273	509	0
Grp Volume(v), veh/h	1648	0	1499				0	0	305	326	0	0
Grp Sat Flow(s),veh/h/ln	1849	0	1849				0	0	1819	782	0	0
Q Serve(g_s), s	98.0	0.0	98.0				0.0	0.0	21.9	19.4	0.0	0.0
Cycle Q Clear(g_c), s	98.0	0.0	98.0				0.0	0.0	21.9	41.3	0.0	0.0
Prop In Lane	0.15		0.04				0.00		0.14	0.39		0.00
Lane Grp Cap(c), veh/h	1208	0	1208				0	0	501	249	0	0
V/C Ratio(X)	1.36	0.00	1.24				0.00	0.00	0.61	1.31	0.00	0.00
Avail Cap(c_a), veh/h	1208	0	1208				0	0	501	249	0	0
HCM Platoon Ratio	0.33	0.33	0.33				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.00	0.49	1.00	0.00	0.00
Uniform Delay (d), s/veh	58.8	0.0	58.8				0.0	0.0	47.3	64.0	0.0	0.0
Incr Delay (d2), s/veh	169.1	0.0	115.7				0.0	0.0	0.9	165.8	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	106.1	0.0	88.2				0.0	0.0	10.5	21.3	0.0	0.0
Lane Grp Delay (d), s/veh	227.9	0.0	174.5				0.0	0.0	48.3	229.8	0.0	0.0
Lane Grp LOS	F		F						D	F		
Approach Vol, veh/h		3147						305			326	
Approach Delay, s/veh		202.5						48.3			229.8	
Approach LOS		F						D			F	

Timer												
Assigned Phs		6						4			8	
Phs Duration (G+Y+Rc), s		103.0						47.0			47.0	
Change Period (Y+Rc), s		5.0						5.7			5.7	
Max Green Setting (Gmax), s		98.0						41.3			41.3	
Max Q Clear Time (g_c+I1), s		100.0						23.9			43.3	
Green Ext Time (p_c), s		0.0						1.9			0.0	

Intersection Summary												
HCM 2010 Ctrl Delay			192.4									
HCM 2010 LOS			F									

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	170	2600	90	0	0	0	0	600	130	170	680	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	184.5	190.0				0.0	184.5	190.0	190.0	177.1	0.0
Lanes	0	2	0				0	2	0	0	2	0
Cap, veh/h	119	1908	69				0	1059	229	159	596	0
Arrive On Green	0.19	0.19	0.19				0.00	0.36	0.35	0.35	0.36	0.00
Sat Flow, veh/h	208	3329	121				0	2941	636	317	1654	0
Grp Volume(v), veh/h	1576	0	1435				0	396	373	203	692	0
Grp Sat Flow(s),veh/h/ln	1834	0	1823				0	1845	1732	359	1611	0
Q Serve(g_s), s	86.0	0.0	86.0				0.0	26.2	26.4	26.6	54.0	0.0
Cycle Q Clear(g_c), s	86.0	0.0	86.0				0.0	26.2	26.4	53.0	54.0	0.0
Prop In Lane	0.11		0.07				0.00		0.37	0.88		0.00
Lane Grp Cap(c), veh/h	1052	0	1045				0	664	624	172	580	0
V/C Ratio(X)	1.50	0.00	1.37				0.00	0.60	0.60	1.18	1.19	0.00
Avail Cap(c_a), veh/h	1052	0	1045				0	664	624	172	580	0
HCM Platoon Ratio	0.33	0.33	0.33				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.00	0.09				0.00	0.09	0.09	1.00	1.00	0.00
Uniform Delay (d), s/veh	60.8	0.0	60.8				0.0	39.1	39.3	64.8	48.0	0.0
Incr Delay (d2), s/veh	225.0	0.0	168.1				0.0	0.4	0.4	125.5	102.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	108.7	0.0	91.5				0.0	12.5	11.8	12.8	39.0	0.0
Lane Grp Delay (d), s/veh	285.8	0.0	228.9				0.0	39.5	39.7	190.3	150.8	0.0
Lane Grp LOS	F		F					D	D	F	F	
Approach Vol, veh/h		3011						769			895	
Approach Delay, s/veh		258.7						39.6			159.8	
Approach LOS		F						D			F	

Timer												
Assigned Phs		6						4			8	
Phs Duration (G+Y+Rc), s		91.0						59.0			59.0	
Change Period (Y+Rc), s		5.0						6.0			6.0	
Max Green Setting (Gmax), s		86.0						53.0			53.0	
Max Q Clear Time (g_c+I1), s		88.0						28.4			56.0	
Green Ext Time (p_c), s		0.0						8.6			0.0	

Intersection Summary												
HCM 2010 Ctrl Delay			203.7									
HCM 2010 LOS			F									

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	2870	90	0	0	0	0	0	0	40	60	0
Number	1	6	16							3	8	18
Initial Q (Qb), veh	0	0	0							0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00							1.00		1.00
Parking Bus Adj	1.00	1.00	1.00							1.00	1.00	1.00
Adj Sat Flow veh/h/ln	0.0	182.7	190.0							190.0	190.0	0.0
Lanes	0	2	0							0	1	0
Cap, veh/h	0	2772	87							34	38	0
Arrive On Green	0.00	0.26	0.26							0.15	0.15	0.00
Sat Flow, veh/h	0	3524	110							0	258	0
Grp Volume(v), veh/h	0	1558	1558							105	0	0
Grp Sat Flow(s),veh/h/ln	0	1827	1807							258	0	0
Q Serve(g_s), s	0.0	118.0	118.0							0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	118.0	118.0							22.0	0.0	0.0
Prop In Lane	0.00		0.06							0.40		0.00
Lane Grp Cap(c), veh/h	0	1437	1422							71	0	0
V/C Ratio(X)	0.00	1.08	1.10							1.47	0.00	0.00
Avail Cap(c_a), veh/h	0	1437	1422							71	0	0
HCM Platoon Ratio	1.00	0.33	0.33							1.00	1.00	1.00
Upstream Filter(I)	0.00	0.09	0.09							1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	55.5	55.5							64.1	0.0	0.0
Incr Delay (d2), s/veh	0.0	39.2	44.3							272.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0							0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.0	74.2	75.5							8.2	0.0	0.0
Lane Grp Delay (d), s/veh	0.0	94.8	99.9							336.5	0.0	0.0
Lane Grp LOS		F	F							F		
Approach Vol, veh/h		3116									105	
Approach Delay, s/veh		97.3									336.5	
Approach LOS		F									F	

Timer	
Assigned Phs	6
Phs Duration (G+Y+Rc), s	123.0
Change Period (Y+Rc), s	5.0
Max Green Setting (Gmax), s	118.0
Max Q Clear Time (g_c+I1), s	120.0
Green Ext Time (p_c), s	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	105.1
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	110	2600	90	0	0	0	0	780	160	200	1080	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	184.5	190.0				0.0	184.5	190.0	184.5	184.5	0.0
Lanes	0	2	0				0	2	0	1	2	0
Cap, veh/h	80	1972	72				0	737	151	212	1308	0
Arrive On Green	0.19	0.19	0.19				0.00	0.25	0.24	0.09	0.35	0.00
Sat Flow, veh/h	138	3399	123				0	2973	608	1757	3689	0
Grp Volume(v), veh/h	1543	0	1405				0	509	480	211	1137	0
Grp Sat Flow(s),veh/h/ln	1838	0	1823				0	1845	1737	1757	1845	0
Q Serve(g_s), s	87.0	0.0	87.0				0.0	37.2	37.2	13.9	43.1	0.0
Cycle Q Clear(g_c), s	87.0	0.0	87.0				0.0	37.2	37.2	13.9	43.1	0.0
Prop In Lane	0.08		0.07				0.00		0.35	1.00		0.00
Lane Grp Cap(c), veh/h	1066	0	1057				0	457	431	212	1308	0
V/C Ratio(X)	1.45	0.00	1.33				0.00	1.11	1.11	1.00	0.87	0.00
Avail Cap(c_a), veh/h	1066	0	1057				0	457	431	212	1308	0
HCM Platoon Ratio	0.33	0.33	0.33				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.00	0.09				0.00	0.79	0.79	1.00	1.00	0.00
Uniform Delay (d), s/veh	60.6	0.0	60.6				0.0	56.4	56.6	44.1	45.1	0.0
Incr Delay (d2), s/veh	202.1	0.0	148.4				0.0	72.6	73.6	60.4	8.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	103.4	0.0	86.8				0.0	27.0	25.6	11.9	22.0	0.0
Lane Grp Delay (d), s/veh	262.8	0.0	209.1				0.0	129.0	130.1	104.6	53.2	0.0
Lane Grp LOS	F		F					F	F	F	D	
Approach Vol, veh/h		2948						989			1348	
Approach Delay, s/veh		237.2						129.5			61.2	
Approach LOS		F						F			E	

Timer					
Assigned Phs		6		4		3	8
Phs Duration (G+Y+Rc), s		92.0		41.0		17.0	58.0
Change Period (Y+Rc), s		5.0		4.8		3.0	4.8
Max Green Setting (Gmax), s		87.0		36.2		14.0	53.2
Max Q Clear Time (g_c+I1), s		89.0		39.2		15.9	45.1
Green Ext Time (p_c), s		0.0		0.0		0.0	2.3

Intersection Summary	
HCM 2010 Ctrl Delay	172.2
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	90	2610	30	0	0	0	0	90	70	120	110	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	186.3	190.0	190.0	186.3	0.0
Lanes	0	2	0				0	1	0	0	1	0
Cap, veh/h	85	2569	31				0	208	162	132	97	0
Arrive On Green	0.24	0.24	0.24				0.00	0.21	0.21	0.21	0.21	0.00
Sat Flow, veh/h	117	3551	43				0	972	757	446	453	0
Grp Volume(v), veh/h	1505	0	1369				0	0	169	242	0	0
Grp Sat Flow(s),veh/h/ln	1857	0	1855				0	0	1729	899	0	0
Q Serve(g_s), s	108.5	0.0	108.5				0.0	0.0	12.8	18.3	0.0	0.0
Cycle Q Clear(g_c), s	108.5	0.0	108.5				0.0	0.0	12.8	31.1	0.0	0.0
Prop In Lane	0.06		0.02				0.00		0.44	0.52		0.00
Lane Grp Cap(c), veh/h	1343	0	1342				0	0	370	223	0	0
V/C Ratio(X)	1.12	0.00	1.02				0.00	0.00	0.46	1.09	0.00	0.00
Avail Cap(c_a), veh/h	1343	0	1342				0	0	370	223	0	0
HCM Platoon Ratio	0.33	0.33	0.33				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.00	0.78	1.00	0.00	0.00
Uniform Delay (d), s/veh	57.1	0.0	57.1				0.0	0.0	51.6	65.9	0.0	0.0
Incr Delay (d2), s/veh	64.6	0.0	29.8				0.0	0.0	0.5	85.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	79.4	0.0	66.4				0.0	0.0	5.8	14.1	0.0	0.0
Lane Grp Delay (d), s/veh	121.7	0.0	86.9				0.0	0.0	52.1	150.9	0.0	0.0
Lane Grp LOS	F		F						D	F		
Approach Vol, veh/h		2874						169			242	
Approach Delay, s/veh		105.1						52.1			150.9	
Approach LOS		F						D			F	

Timer												
Assigned Phs		6						4			8	
Phs Duration (G+Y+Rc), s		113.0						37.0			37.0	
Change Period (Y+Rc), s		4.5						5.9			5.9	
Max Green Setting (Gmax), s		108.5						31.1			31.1	
Max Q Clear Time (g_c+I1), s		110.5						14.8			33.1	
Green Ext Time (p_c), s		0.0						1.2			0.0	

Intersection Summary												
HCM 2010 Ctrl Delay			105.8									
HCM 2010 LOS			F									

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	120	2400	60	0	0	0	0	900	130	60	1430	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	186.3	190.0	186.3	186.3	0.0
Lanes	0	2	0				0	2	0	1	2	0
Cap, veh/h	94	1976	52				0	961	139	110	1329	0
Arrive On Green	0.19	0.19	0.19				0.00	0.30	0.30	0.03	0.36	0.00
Sat Flow, veh/h	164	3447	90				0	3184	460	1774	3725	0
Grp Volume(v), veh/h	1421	0	1294				0	554	530	63	1505	0
Grp Sat Flow(s),veh/h/ln	1855	0	1847				0	1863	1781	1774	1863	0
Q Serve(g_s), s	86.0	0.0	86.0				0.0	44.3	44.4	3.6	53.5	0.0
Cycle Q Clear(g_c), s	86.0	0.0	86.0				0.0	44.3	44.4	3.6	53.5	0.0
Prop In Lane	0.09		0.05				0.00		0.26	1.00		0.00
Lane Grp Cap(c), veh/h	1063	0	1059				0	562	537	110	1329	0
V/C Ratio(X)	1.34	0.00	1.22				0.00	0.99	0.99	0.57	1.13	0.00
Avail Cap(c_a), veh/h	1063	0	1059				0	562	537	143	1329	0
HCM Platoon Ratio	0.33	0.33	0.33				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.00	0.09				0.00	0.79	0.79	1.00	1.00	0.00
Uniform Delay (d), s/veh	60.8	0.0	60.8				0.0	52.0	52.2	40.7	48.3	0.0
Incr Delay (d2), s/veh	152.2	0.0	100.6				0.0	30.1	31.0	4.6	69.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	88.4	0.0	72.8				0.0	26.1	25.1	2.6	38.5	0.0
Lane Grp Delay (d), s/veh	213.0	0.0	161.4				0.0	82.2	83.2	45.3	117.9	0.0
Lane Grp LOS	F		F					F	F	D	F	
Approach Vol, veh/h		2715						1084			1568	
Approach Delay, s/veh		188.4						82.7			114.9	
Approach LOS		F						F			F	

Timer					
Assigned Phs		6		4	3	8
Phs Duration (G+Y+Rc), s		91.0		50.8	8.2	59.0
Change Period (Y+Rc), s		5.0		6.5	3.0	6.5
Max Green Setting (Gmax), s		86.0		41.5	8.0	52.5
Max Q Clear Time (g_c+I1), s		88.0		46.4	5.6	55.5
Green Ext Time (p_c), s		0.0		0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	145.6
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Volume (veh/h)	150	2300	60	0	0	0	0	280	120	270	410	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	186.3	190.0	186.3	193.7	0.0
Lanes	0	2	0				0	2	0	1	1	0
Cap, veh/h	137	2195	60				0	358	149	274	536	0
Arrive On Green	0.65	0.65	0.65				0.00	0.14	0.14	0.11	0.28	0.00
Sat Flow, veh/h	212	3395	92				0	2499	1042	1774	1937	0
Grp Volume(v), veh/h	1383	0	1259				0	218	203	284	432	0
Grp Sat Flow(s),veh/h/ln	1852	0	1846				0	1863	1679	1774	1937	0
Q Serve(g_s), s	97.0	0.0	97.0				0.0	17.0	17.7	17.0	31.1	0.0
Cycle Q Clear(g_c), s	97.0	0.0	97.0				0.0	17.0	17.7	17.0	31.1	0.0
Prop In Lane	0.11		0.05				0.00		0.62	1.00		0.00
Lane Grp Cap(c), veh/h	1198	0	1194				0	267	241	274	536	0
V/C Ratio(X)	1.15	0.00	1.05				0.00	0.82	0.84	1.04	0.81	0.00
Avail Cap(c_a), veh/h	1198	0	1194				0	267	241	274	536	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.00	0.09				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	26.5	0.0	26.5				0.0	62.3	62.6	51.3	50.5	0.0
Incr Delay (d2), s/veh	70.7	0.0	26.8				0.0	23.4	28.7	64.6	12.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	66.8	0.0	52.0				0.0	10.1	9.7	4.9	17.5	0.0
Lane Grp Delay (d), s/veh	97.2	0.0	53.3				0.0	85.7	91.3	115.9	62.7	0.0
Lane Grp LOS	F		F					F	F	F	E	
Approach Vol, veh/h		2642						421			716	
Approach Delay, s/veh		76.3						88.4			83.8	
Approach LOS		E						F			F	
Timer												
Assigned Phs		6						4		3	8	
Phs Duration (G+Y+Rc), s		102.0						28.0		20.0	48.0	
Change Period (Y+Rc), s		5.0						6.5		3.0	6.5	
Max Green Setting (Gmax), s		97.0						21.5		17.0	41.5	
Max Q Clear Time (g_c+I1), s		99.0						19.7		19.0	33.1	
Green Ext Time (p_c), s		0.0						0.6		0.0	1.8	
Intersection Summary												
HCM 2010 Ctrl Delay			79.1									
HCM 2010 LOS			E									
Notes												

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	150	0	30	0	0	0	0	1650	1900	420	1710	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	9	12	9	11	11	11	12	10	12	12	10	12
Total Lost time (s)	3.9		3.9					3.6	4.6	4.6	3.6	
Lane Util. Factor	1.00		1.00					0.91	0.91	0.97	0.95	
Frt	1.00		0.85					0.95	0.85	1.00	1.00	
Flt Protected	0.95		1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1593		1425					3009	1441	3433	3303	
Flt Permitted	0.95		1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1593		1425					3009	1441	3433	3303	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	158	0	32	0	0	0	0	1737	2000	442	1800	0
RTOR Reduction (vph)	0	0	25	0	0	0	0	40	309	0	0	0
Lane Group Flow (vph)	158	0	7	0	0	0	0	2537	851	442	1800	0
Turn Type	custom		custom					NA	Perm	Prot	NA	
Protected Phases			8					6		5	2	
Permitted Phases	8								6			
Actuated Green, G (s)	28.1		28.1					69.5	69.5	18.3	92.4	
Effective Green, g (s)	29.1		29.1					70.5	69.5	18.3	93.4	
Actuated g/C Ratio	0.22		0.22					0.54	0.53	0.14	0.72	
Clearance Time (s)	4.9		4.9					4.6	4.6	4.6	4.6	
Vehicle Extension (s)	2.5		2.5					2.5	2.5	3.0	2.5	
Lane Grp Cap (vph)	356		318					1631	770	483	2373	
v/s Ratio Prot			0.01					c0.84		c0.13	0.54	
v/s Ratio Perm	c0.10								0.59			
v/c Ratio	0.44		0.02					1.56	1.10	0.92	0.76	
Uniform Delay, d1	43.5		39.4					29.8	30.2	55.1	11.3	
Progression Factor	1.00		1.00					0.65	0.83	1.00	1.00	
Incremental Delay, d2	4.0		0.1					250.2	49.2	21.9	2.3	
Delay (s)	47.4		39.5					269.6	74.4	77.0	13.7	
Level of Service	D		D					F	E	E	B	
Approach Delay (s)		46.1			0.0			209.0			26.1	
Approach LOS		D			A			F			C	

Intersection Summary			
HCM 2000 Control Delay	137.5	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.18		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	12.1
Intersection Capacity Utilization	98.1%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1310	0	60	220	1360	320	240	1610	0	0	1700	180
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	11	12	12	11	12	11	10	12	10	10	12
Total Lost time (s)	6.7		6.7	6.7	5.7		3.5	5.0			5.0	5.0
Lane Util. Factor	0.97		1.00	0.97	1.00		1.00	0.91			0.95	1.00
Frt	1.00		0.85	1.00	0.97		1.00	1.00			1.00	0.85
Flt Protected	0.95		1.00	0.95	1.00		0.95	1.00			1.00	1.00
Satd. Flow (prot)	3433		1583	3433	1749		1711	4746			3303	1583
Flt Permitted	0.09		1.00	0.95	1.00		0.12	1.00			1.00	1.00
Satd. Flow (perm)	334		1583	3433	1749		218	4746			3303	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	1379	0	63	232	1432	337	253	1695	0	0	1789	189
RTOR Reduction (vph)	0	0	42	0	2	0	0	0	0	0	0	85
Lane Group Flow (vph)	1379	0	21	232	1767	0	253	1695	0	0	1789	104
Turn Type	custom		custom	Split	NA		pm+pt	NA			NA	Perm
Protected Phases				2	2		7	4			8	
Permitted Phases	1		1				4					8
Actuated Green, G (s)	43.3		43.3	27.3	27.3		40.0	40.0			30.0	30.0
Effective Green, g (s)	43.3		43.3	27.3	28.3		39.5	41.0			31.0	31.0
Actuated g/C Ratio	0.33		0.33	0.21	0.22		0.30	0.32			0.24	0.24
Clearance Time (s)	6.7		6.7	6.7	6.7		3.0	6.0			6.0	6.0
Vehicle Extension (s)	2.5		2.5	2.5	2.5		2.0	2.5			2.5	2.5
Lane Grp Cap (vph)	111		527	720	380		140	1496			787	377
v/s Ratio Prot				0.07	c1.01		c0.09	0.36			c0.54	
v/s Ratio Perm	c4.13		0.01				0.46					0.07
v/c Ratio	12.42		0.04	0.32	4.65		1.81	1.13			2.27	0.28
Uniform Delay, d1	43.4		29.3	43.5	50.9		42.1	44.5			49.5	40.3
Progression Factor	1.00		1.00	1.00	1.00		1.00	1.00			0.95	1.06
Incremental Delay, d2	5158.1		0.1	1.2	1649.0		390.0	68.8			575.8	1.3
Delay (s)	5201.5		29.4	44.7	1699.9		432.1	113.3			622.7	44.2
Level of Service	F		C	D	F		F	F			F	D
Approach Delay (s)		4975.5			1508.0			154.7			567.4	
Approach LOS		F			F			F			F	

Intersection Summary			
HCM 2000 Control Delay	1576.3	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	6.94		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	21.9
Intersection Capacity Utilization	204.3%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	30	1650	50	40	60	0	0	110	60
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	186.3	190.0	190.0	186.3	0.0	0.0	186.3	190.0
Lanes				0	2	0	0	1	0	0	1	0
Cap, veh/h				48	2709	87	71	93	0	0	177	96
Arrive On Green				0.25	0.25	0.25	0.16	0.16	0.00	0.00	0.16	0.16
Sat Flow, veh/h				62	3528	113	235	599	0	0	1137	617
Grp Volume(v), veh/h				955	0	867	105	0	0	0	0	179
Grp Sat Flow(s),veh/h/ln				1860	0	1843	834	0	0	0	0	1754
Q Serve(g_s), s				66.7	0.0	60.1	6.1	0.0	0.0	0.0	0.0	13.9
Cycle Q Clear(g_c), s				66.7	0.0	60.1	20.0	0.0	0.0	0.0	0.0	13.9
Prop In Lane				0.03		0.06	0.40		0.00	0.00		0.35
Lane Grp Cap(c), veh/h				1428	0	1415	165	0	0	0	0	274
V/C Ratio(X)				0.67	0.00	0.61	0.64	0.00	0.00	0.00	0.00	0.65
Avail Cap(c_a), veh/h				1428	0	1415	223	0	0	0	0	340
HCM Platoon Ratio				0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.09	0.00	0.09	1.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				37.4	0.0	35.0	61.1	0.0	0.0	0.0	0.0	57.3
Incr Delay (d2), s/veh				0.2	0.0	0.2	4.0	0.0	0.0	0.0	0.0	3.2
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				34.2	0.0	30.5	4.1	0.0	0.0	0.0	0.0	6.6
Lane Grp Delay (d), s/veh				37.7	0.0	35.1	65.1	0.0	0.0	0.0	0.0	60.5
Lane Grp LOS				D		D	E					E
Approach Vol, veh/h					1822			105			179	
Approach Delay, s/veh					36.5			65.1			60.5	
Approach LOS					D			E			E	

Timer	
Assigned Phs	2 4 8
Phs Duration (G+Y+Rc), s	116.0 28.5 28.5
Change Period (Y+Rc), s	5.0 6.0 6.0
Max Green Setting (Gmax), s	111.0 28.0 28.0
Max Q Clear Time (g_c+I1), s	68.7 22.0 15.9
Green Ext Time (p_c), s	14.0 0.6 0.9

Intersection Summary	
HCM 2010 Ctrl Delay	39.9
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	240	1550	170	90	830	0	0	1450	90
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	186.3	190.0	186.3	186.3	0.0	0.0	186.3	190.0
Lanes				0	2	0	1	2	0	0	2	0
Cap, veh/h				204	1366	155	126	1714	0	0	1376	85
Arrive On Green				0.16	0.16	0.16	0.04	0.46	0.00	0.00	0.40	0.39
Sat Flow, veh/h				431	2886	329	1774	3725	0	0	3472	215
Grp Volume(v), veh/h				1081	0	983	95	874	0	0	815	806
Grp Sat Flow(s),veh/h/ln				1841	0	1805	1774	1863	0	0	1863	1825
Q Serve(g_s), s				71.0	0.0	71.0	4.7	24.8	0.0	0.0	59.4	59.4
Cycle Q Clear(g_c), s				71.0	0.0	71.0	4.7	24.8	0.0	0.0	59.4	59.4
Prop In Lane				0.23		0.18	1.00		0.00	0.00		0.12
Lane Grp Cap(c), veh/h				871	0	854	126	1714	0	0	738	723
V/C Ratio(X)				1.24	0.00	1.15	0.76	0.51	0.00	0.00	1.10	1.11
Avail Cap(c_a), veh/h				871	0	854	131	1714	0	0	738	723
HCM Platoon Ratio				0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.71	0.00	0.71	1.00	1.00	0.00	0.00	0.09	0.09
Uniform Delay (d), s/veh				63.3	0.0	63.3	36.4	28.6	0.0	0.0	45.3	45.3
Incr Delay (d2), s/veh				115.1	0.0	78.0	21.2	1.1	0.0	0.0	49.3	53.7
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				63.5	0.0	53.4	4.5	11.9	0.0	0.0	38.6	38.7
Lane Grp Delay (d), s/veh				178.4	0.0	141.3	57.6	29.7	0.0	0.0	94.6	99.1
Lane Grp LOS				F		F	E	C			F	F
Approach Vol, veh/h					2064			969			1621	
Approach Delay, s/veh					160.7			32.4			96.8	
Approach LOS					F			C			F	

Timer												
Assigned Phs					2		7	4			8	
Phs Duration (G+Y+Rc), s					76.0		9.6	74.0			64.4	
Change Period (Y+Rc), s					5.0		3.0	6.0			6.0	
Max Green Setting (Gmax), s					71.0		7.0	68.0			58.3	
Max Q Clear Time (g_c+I1), s					73.0		6.7	26.8			61.4	
Green Ext Time (p_c), s					0.0		0.0	14.8			0.0	

Intersection Summary		
HCM 2010 Ctrl Delay		111.7
HCM 2010 LOS		F

Notes

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations			↑↑			↱
Volume (vph)	0	0	1960	0	0	70
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	12	11	12	12	11	12
Total Lost time (s)			5.0			4.3
Lane Util. Factor			0.95			1.00
Frt			1.00			0.86
Flt Protected			1.00			1.00
Satd. Flow (prot)			3610			1644
Flt Permitted			1.00			1.00
Satd. Flow (perm)			3610			1644
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	2063	0	0	74
RTOR Reduction (vph)	0	0	0	0	0	29
Lane Group Flow (vph)	0	0	2063	0	0	45
Heavy Vehicles (%)	2%	2%	0%	0%	2%	0%
Turn Type			NA			custom
Protected Phases			2			
Permitted Phases						8
Actuated Green, G (s)			131.6			9.1
Effective Green, g (s)			131.6			9.1
Actuated g/C Ratio			0.88			0.06
Clearance Time (s)			5.0			4.3
Vehicle Extension (s)			3.0			2.5
Lane Grp Cap (vph)			3167			99
v/s Ratio Prot			c0.57			
v/s Ratio Perm						c0.03
v/c Ratio			0.65			0.45
Uniform Delay, d1			2.6			68.0
Progression Factor			1.57			1.00
Incremental Delay, d2			0.7			2.4
Delay (s)			4.9			70.4
Level of Service			A			E
Approach Delay (s)		0.0	4.9		70.4	
Approach LOS		A	A		E	

Intersection Summary			
HCM 2000 Control Delay	7.2	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	9.3
Intersection Capacity Utilization	66.3%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	30	1670	90	70	90	0	0	110	120
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	190.0	190.0	190.0	195.4	0.0	0.0	195.7	190.0
Lanes				0	2	0	0	1	0	0	1	0
Cap, veh/h				43	2429	137	122	147	0	0	216	235
Arrive On Green				0.69	0.69	0.69	0.24	0.25	0.00	0.00	0.25	0.24
Sat Flow, veh/h				61	3503	198	348	583	0	0	859	933
Grp Volume(v), veh/h				988	0	897	169	0	0	0	0	242
Grp Sat Flow(s),veh/h/ln				1897	0	1865	931	0	0	0	0	1793
Q Serve(g_s), s				50.0	0.0	42.6	12.6	0.0	0.0	0.0	0.0	17.6
Cycle Q Clear(g_c), s				50.0	0.0	42.6	30.2	0.0	0.0	0.0	0.0	17.6
Prop In Lane				0.03		0.11	0.44		0.00	0.00		0.52
Lane Grp Cap(c), veh/h				1315	0	1293	262	0	0	0	0	451
V/C Ratio(X)				0.75	0.00	0.69	0.64	0.00	0.00	0.00	0.00	0.54
Avail Cap(c_a), veh/h				1315	0	1293	262	0	0	0	0	451
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.09
Uniform Delay (d), s/veh				14.7	0.0	13.6	57.5	0.0	0.0	0.0	0.0	48.8
Incr Delay (d2), s/veh				4.0	0.0	3.1	11.6	0.0	0.0	0.0	0.0	0.4
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				23.7	0.0	19.8	7.3	0.0	0.0	0.0	0.0	8.3
Lane Grp Delay (d), s/veh				18.7	0.0	16.7	69.0	0.0	0.0	0.0	0.0	49.3
Lane Grp LOS				B		B	E					D
Approach Vol, veh/h					1885			169			242	
Approach Delay, s/veh					17.7			69.0			49.3	
Approach LOS					B			E			D	

Timer			
Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	109.0	41.0	41.0
Change Period (Y+Rc), s	5.0	4.3	4.3
Max Green Setting (Gmax), s	104.0	36.7	36.7
Max Q Clear Time (g_c+I1), s	52.0	32.2	19.6
Green Ext Time (p_c), s	15.8	0.6	1.2

Intersection Summary	
HCM 2010 Ctrl Delay	24.8
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	190	1550	110	100	760	0	0	1120	140
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	190.0	190.0	186.3	186.3	0.0	0.0	186.3	190.0
Lanes				0	2	0	1	2	0	0	2	1
Cap, veh/h				194	1655	122	152	1540	0	0	1275	542
Arrive On Green				0.53	0.53	0.53	0.05	0.41	0.00	0.00	0.34	0.34
Sat Flow, veh/h				369	3139	232	1774	3725	0	0	3725	1615
Grp Volume(v), veh/h				1020	0	928	105	800	0	0	1179	147
Grp Sat Flow(s),veh/h/ln				1882	0	1859	1774	1863	0	0	1863	1615
Q Serve(g_s), s				78.0	0.0	69.8	5.6	23.7	0.0	0.0	45.1	9.8
Cycle Q Clear(g_c), s				78.0	0.0	69.8	5.6	23.7	0.0	0.0	45.1	9.8
Prop In Lane				0.20		0.12	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				992	0	980	152	1540	0	0	1275	542
V/C Ratio(X)				1.03	0.00	0.95	0.69	0.52	0.00	0.00	0.92	0.27
Avail Cap(c_a), veh/h				992	0	980	169	1591	0	0	1289	548
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	0.21	0.21
Uniform Delay (d), s/veh				35.0	0.0	33.0	37.1	32.4	0.0	0.0	46.8	35.9
Incr Delay (d2), s/veh				36.0	0.0	18.5	10.1	0.3	0.0	0.0	3.0	0.1
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				46.6	0.0	37.3	4.5	11.3	0.0	0.0	22.3	4.1
Lane Grp Delay (d), s/veh				71.0	0.0	51.5	47.1	32.7	0.0	0.0	49.8	36.0
Lane Grp LOS				F		D	D	C			D	D
Approach Vol, veh/h					1948			905			1326	
Approach Delay, s/veh					61.7			34.4			48.2	
Approach LOS					E			C			D	
Timer												
Assigned Phs					2		7	4			8	
Phs Duration (G+Y+Rc), s					83.0		10.5	65.0			54.4	
Change Period (Y+Rc), s					5.0		3.0	4.8			4.8	
Max Green Setting (Gmax), s					78.0		9.0	62.2			50.2	
Max Q Clear Time (g_c+I1), s					80.0		7.6	25.7			47.1	
Green Ext Time (p_c), s					0.0		0.0	15.4			2.6	
Intersection Summary												
HCM 2010 Ctrl Delay			51.5									
HCM 2010 LOS			D									
Notes												

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	190	1500	110	180	640	0	0	680	110
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	190.0	190.0	190.0	186.3	0.0	0.0	186.8	190.0
Lanes				0	2	0	0	2	0	0	2	0
Cap, veh/h				202	1665	127	197	698	0	0	1282	208
Arrive On Green				0.18	0.18	0.18	0.40	0.41	0.00	0.00	0.41	0.40
Sat Flow, veh/h				379	3121	239	366	1707	0	0	3138	508
Grp Volume(v), veh/h				993	0	902	195	668	0	0	426	406
Grp Sat Flow(s),veh/h/ln				1881	0	1858	378	1695	0	0	1868	1778
Q Serve(g_s), s				79.0	0.0	71.5	34.0	57.7	0.0	0.0	26.2	26.3
Cycle Q Clear(g_c), s				79.0	0.0	71.5	60.3	57.7	0.0	0.0	26.2	26.3
Prop In Lane				0.20		0.13	0.97		0.00	0.00		0.29
Lane Grp Cap(c), veh/h				1003	0	991	199	693	0	0	763	727
V/C Ratio(X)				0.99	0.00	0.91	0.98	0.96	0.00	0.00	0.56	0.56
Avail Cap(c_a), veh/h				1003	0	991	199	693	0	0	763	727
HCM Platoon Ratio				0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.71	0.00	0.71	1.00	1.00	0.00	0.00	0.09	0.09
Uniform Delay (d), s/veh				61.4	0.0	58.3	61.4	43.3	0.0	0.0	34.0	34.1
Incr Delay (d2), s/veh				21.5	0.0	10.4	58.5	26.5	0.0	0.0	0.1	0.1
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				46.5	0.0	39.0	11.0	30.1	0.0	0.0	12.6	12.0
Lane Grp Delay (d), s/veh				82.9	0.0	68.7	120.0	69.7	0.0	0.0	34.1	34.2
Lane Grp LOS				F		E	F	E			C	C
Approach Vol, veh/h					1895			863			832	
Approach Delay, s/veh					76.1			81.1			34.1	
Approach LOS					E			F			C	

Timer			
Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	85.0	65.0	65.0
Change Period (Y+Rc), s	5.0	4.7	4.7
Max Green Setting (Gmax), s	80.0	60.3	60.3
Max Q Clear Time (g_c+I1), s	81.0	62.3	28.3
Green Ext Time (p_c), s	0.0	0.0	9.4

Intersection Summary	
HCM 2010 Ctrl Delay	67.6
HCM 2010 LOS	E

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	60	1740	0	50	0	0	0	80	70
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	10	12	12	12	12	12	11	12	12	11	12
Total Lost time (s)					5.0		4.3				4.3	4.3
Lane Util. Factor					0.95		1.00				1.00	1.00
Frt					1.00		1.00				1.00	0.85
Flt Protected					1.00		0.95				1.00	1.00
Satd. Flow (prot)					3533		1805				1801	1615
Flt Permitted					1.00		0.64				1.00	1.00
Satd. Flow (perm)					3533		1221				1801	1615
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	63	1832	0	53	0	0	0	84	74
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	41
Lane Group Flow (vph)	0	0	0	0	1895	0	53	0	0	0	84	33
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	0%	2%	2%	2%	2%	0%
Turn Type				Perm	NA		custom				NA	Perm
Protected Phases					2						8	
Permitted Phases				2			4					8
Actuated Green, G (s)					118.0		22.7				22.7	22.7
Effective Green, g (s)					118.0		22.7				22.7	22.7
Actuated g/C Ratio					0.79		0.15				0.15	0.15
Clearance Time (s)					5.0		4.3				4.3	4.3
Vehicle Extension (s)					3.0		3.0				3.0	3.0
Lane Grp Cap (vph)					2779		184				272	244
v/s Ratio Prot											c0.05	
v/s Ratio Perm					0.54		0.04					0.02
v/c Ratio					0.68		0.29				0.31	0.14
Uniform Delay, d1					7.4		56.5				56.7	55.2
Progression Factor					0.17		1.00				1.00	1.00
Incremental Delay, d2					0.8		3.9				0.6	0.3
Delay (s)					2.0		60.4				57.3	55.4
Level of Service					A		E				E	E
Approach Delay (s)		0.0			2.0			60.4			56.4	
Approach LOS		A			A			E			E	

Intersection Summary			
HCM 2000 Control Delay	7.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	9.3
Intersection Capacity Utilization	68.6%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	110	1500	80	90	250	0	0	190	60
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	186.3	190.0	190.0	186.3	0.0	0.0	186.3	190.0
Lanes				0	2	0	0	1	0	0	1	0
Cap, veh/h				130	1853	103	136	354	0	0	491	155
Arrive On Green				0.19	0.19	0.19	0.36	0.36	0.00	0.00	0.36	0.36
Sat Flow, veh/h				230	3270	182	291	979	0	0	1359	428
Grp Volume(v), veh/h				933	0	846	358	0	0	0	0	263
Grp Sat Flow(s),veh/h/ln				1851	0	1831	1271	0	0	0	0	1787
Q Serve(g_s), s				73.7	0.0	66.5	25.3	0.0	0.0	0.0	0.0	16.5
Cycle Q Clear(g_c), s				73.7	0.0	66.5	41.8	0.0	0.0	0.0	0.0	16.5
Prop In Lane				0.12		0.10	0.27		0.00	0.00		0.24
Lane Grp Cap(c), veh/h				1049	0	1037	489	0	0	0	0	646
V/C Ratio(X)				0.89	0.00	0.82	0.73	0.00	0.00	0.00	0.00	0.41
Avail Cap(c_a), veh/h				1049	0	1037	489	0	0	0	0	646
HCM Platoon Ratio				0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.40	0.00	0.40	1.00	0.00	0.00	0.00	0.00	0.09
Uniform Delay (d), s/veh				56.4	0.0	53.5	46.9	0.0	0.0	0.0	0.0	35.9
Incr Delay (d2), s/veh				5.1	0.0	3.0	9.3	0.0	0.0	0.0	0.0	0.2
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				38.6	0.0	34.0	14.1	0.0	0.0	0.0	0.0	7.6
Lane Grp Delay (d), s/veh				61.4	0.0	56.4	56.2	0.0	0.0	0.0	0.0	36.0
Lane Grp LOS				E		E	E					D
Approach Vol, veh/h					1779			358			263	
Approach Delay, s/veh					59.1			56.2			36.0	
Approach LOS					E			E			D	

Timer	
Assigned Phs	2 4 8
Phs Duration (G+Y+Rc), s	90.0 60.0 60.0
Change Period (Y+Rc), s	5.0 5.8 5.8
Max Green Setting (Gmax), s	85.0 54.2 54.2
Max Q Clear Time (g_c+I1), s	75.7 43.8 18.5
Green Ext Time (p_c), s	6.0 1.6 2.0

Intersection Summary	
HCM 2010 Ctrl Delay	56.1
HCM 2010 LOS	E

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	0	1560	150	150	390	0	0	0	0
Number				5	2	12	7	4	14			
Initial Q (Qb), veh				0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00			
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow veh/h/ln				0.0	186.3	190.0	190.0	186.3	0.0			
Lanes				0	2	0	0	1	0			
Cap, veh/h				0	1921	183	31	15	0			
Arrive On Green				0.00	0.19	0.19	0.36	0.36	0.00			
Sat Flow, veh/h				0	3351	319	0	43	0			
Grp Volume(v), veh/h				0	904	896	569	0	0			
Grp Sat Flow(s),veh/h/ln				0	1863	1807	43	0	0			
Q Serve(g_s), s				0.0	70.3	72.1	0.0	0.0	0.0			
Cycle Q Clear(g_c), s				0.0	70.3	72.1	54.0	0.0	0.0			
Prop In Lane				0.00		0.18	0.28		0.00			
Lane Grp Cap(c), veh/h				0	1068	1036	46	0	0			
V/C Ratio(X)				0.00	0.85	0.87	12.36	0.00	0.00			
Avail Cap(c_a), veh/h				0	1068	1036	46	0	0			
HCM Platoon Ratio				1.00	0.33	0.33	1.00	1.00	1.00			
Upstream Filter(I)				0.00	0.45	0.45	1.00	0.00	0.00			
Uniform Delay (d), s/veh				0.0	54.4	55.2	57.2	0.0	0.0			
Incr Delay (d2), s/veh				0.0	4.0	4.7	5153.0	0.0	0.0			
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0			
%ile Back of Q (50%), veh/ln				0.0	36.8	36.8	67.7	0.0	0.0			
Lane Grp Delay (d), s/veh				0.0	58.4	59.9	5210.2	0.0	0.0			
Lane Grp LOS					E	E	F					
Approach Vol, veh/h					1800			569				
Approach Delay, s/veh					59.1			5210.2				
Approach LOS					E			F				

Timer	
Assigned Phs	2
Phs Duration (G+Y+Rc), s	91.0
Change Period (Y+Rc), s	5.0
Max Green Setting (Gmax), s	86.0
Max Q Clear Time (g_c+I1), s	74.1
Green Ext Time (p_c), s	9.2

Intersection Summary	
HCM 2010 Ctrl Delay	1296.3
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↑↑						↑↑	↱
Volume (veh/h)	0	0	0	0	1200	0	0	0	0	0	290	540
Number				5	2	12				3	8	18
Initial Q (Qb), veh				0	0	0				0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00				1.00		1.00
Parking Bus Adj				1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow veh/h/ln				0.0	167.6	0.0				0.0	167.6	167.6
Lanes				0	2	0				0	2	1
Cap, veh/h				0	1690	0				0	1397	594
Arrive On Green				0.00	0.17	0.00				0.00	0.42	0.42
Sat Flow, veh/h				0	3353	0				0	3353	1425
Grp Volume(v), veh/h				0	1263	0				0	305	568
Grp Sat Flow(s),veh/h/ln				0	1676	0				0	1676	1425
Q Serve(g_s), s				0.0	49.8	0.0				0.0	8.1	53.7
Cycle Q Clear(g_c), s				0.0	49.8	0.0				0.0	8.1	53.7
Prop In Lane				0.00		0.00				0.00		1.00
Lane Grp Cap(c), veh/h				0	1690	0				0	1397	594
V/C Ratio(X)				0.00	0.75	0.00				0.00	0.22	0.96
Avail Cap(c_a), veh/h				0	1690	0				0	1666	708
HCM Platoon Ratio				1.00	0.33	1.00				1.00	1.00	1.00
Upstream Filter(I)				0.00	1.00	0.00				0.00	0.09	0.09
Uniform Delay (d), s/veh				0.0	49.5	0.0				0.0	26.0	39.3
Incr Delay (d2), s/veh				0.0	3.1	0.0				0.0	0.0	3.3
Initial Q Delay(d3),s/veh				0.0	0.0	0.0				0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				0.0	23.4	0.0				0.0	3.4	19.9
Lane Grp Delay (d), s/veh				0.0	52.5	0.0				0.0	26.0	42.5
Lane Grp LOS					D						C	D
Approach Vol, veh/h					1263						873	
Approach Delay, s/veh					52.5						36.8	
Approach LOS					D						D	

Timer	
Assigned Phs	2	8
Phs Duration (G+Y+Rc), s	75.0	63.9
Change Period (Y+Rc), s	5.0	6.0
Max Green Setting (Gmax), s	70.0	69.0
Max Q Clear Time (g_c+I1), s	51.8	55.7
Green Ext Time (p_c), s	9.1	2.2

Intersection Summary	
HCM 2010 Ctrl Delay	46.1
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	0	2300	320	120	480	0	0	0	240
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					5.0		4.7	4.7				4.7
Lane Util. Factor					0.95		1.00	1.00				1.00
Frt					0.98		1.00	1.00				0.86
Flt Protected					1.00		0.95	1.00				1.00
Satd. Flow (prot)					3127		1593	1676				1450
Flt Permitted					1.00		0.95	1.00				1.00
Satd. Flow (perm)					3127		1593	1676				1450
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	0	2421	337	126	505	0	0	0	253
RTOR Reduction (vph)	0	0	0	0	7	0	11	0	0	0	0	11
Lane Group Flow (vph)	0	0	0	0	2751	0	115	505	0	0	0	242
Turn Type					NA		Perm	NA				custom
Protected Phases					2			4				
Permitted Phases							4					8
Actuated Green, G (s)					101.0		39.3	39.3				39.3
Effective Green, g (s)					101.0		39.3	39.3				39.3
Actuated g/C Ratio					0.67		0.26	0.26				0.26
Clearance Time (s)					5.0		4.7	4.7				4.7
Vehicle Extension (s)					3.0		3.0	3.0				2.5
Lane Grp Cap (vph)					2105		417	439				379
v/s Ratio Prot					c0.88			c0.30				
v/s Ratio Perm							0.07					0.17
v/c Ratio					1.31		0.28	1.15				0.64
Uniform Delay, d1					24.5		44.0	55.4				49.1
Progression Factor					0.60		1.00	1.00				1.20
Incremental Delay, d2					138.4		1.6	91.0				0.3
Delay (s)					153.1		45.7	146.3				59.3
Level of Service					F		D	F				E
Approach Delay (s)		0.0			153.1			126.2			59.3	
Approach LOS		A			F			F			E	

Intersection Summary			
HCM 2000 Control Delay	141.9	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.26		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	9.7
Intersection Capacity Utilization	118.1%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	110	2400	110	260	680	0	0	610	240
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				171.0	166.0	171.0	166.0	166.0	0.0	0.0	166.0	171.0
Lanes				0	2	0	1	2	0	0	2	0
Cap, veh/h				79	1787	86	217	1100	0	0	464	183
Arrive On Green				0.20	0.20	0.20	0.11	0.33	0.00	0.00	0.20	0.20
Sat Flow, veh/h				133	3011	144	1581	3320	0	0	2269	894
Grp Volume(v), veh/h				1444	0	1314	274	716	0	0	470	425
Grp Sat Flow(s),veh/h/ln				1654	0	1635	1581	1660	0	0	1660	1502
Q Serve(g_s), s				89.0	0.0	89.0	16.0	27.6	0.0	0.0	30.7	30.7
Cycle Q Clear(g_c), s				89.0	0.0	89.0	16.0	27.6	0.0	0.0	30.7	30.7
Prop In Lane				0.08		0.09	1.00		0.00	0.00		0.59
Lane Grp Cap(c), veh/h				981	0	970	217	1100	0	0	340	308
V/C Ratio(X)				1.47	0.00	1.35	1.26	0.65	0.00	0.00	1.38	1.38
Avail Cap(c_a), veh/h				981	0	970	217	1100	0	0	340	308
HCM Platoon Ratio				0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.09	0.00	0.09	1.00	1.00	0.00	0.00	0.81	0.81
Uniform Delay (d), s/veh				60.3	0.0	60.3	43.3	42.8	0.0	0.0	59.7	59.7
Incr Delay (d2), s/veh				212.8	0.0	160.3	150.5	3.0	0.0	0.0	186.4	188.2
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				98.1	0.0	82.8	17.6	12.3	0.0	0.0	31.0	28.2
Lane Grp Delay (d), s/veh				273.1	0.0	220.6	193.8	45.7	0.0	0.0	246.1	247.8
Lane Grp LOS				F		F	F	D			F	F
Approach Vol, veh/h					2758			990			895	
Approach Delay, s/veh					248.1			86.7			246.9	
Approach LOS					F			F			F	
Timer												
Assigned Phs					2		7	4			8	
Phs Duration (G+Y+Rc), s					94.0		19.0	56.0			37.0	
Change Period (Y+Rc), s					5.0		3.0	6.3			6.3	
Max Green Setting (Gmax), s					89.0		16.0	49.7			30.7	
Max Q Clear Time (g_c+I1), s					91.0		18.0	29.6			32.7	
Green Ext Time (p_c), s					0.0		0.0	4.4			0.0	
Intersection Summary												
HCM 2010 Ctrl Delay			213.5									
HCM 2010 LOS			F									
Notes												

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	370	2300	0	0	0	0	0	1180	340
Number				5	2	12				3	8	18
Initial Q (Qb), veh				0	0	0				0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00				1.00		1.00
Parking Bus Adj				1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow veh/h/ln				171.0	166.0	0.0				0.0	166.0	171.0
Lanes				0	2	0				0	2	0
Cap, veh/h				48	876	0				0	887	250
Arrive On Green				0.19	0.19	0.00				0.00	0.36	0.36
Sat Flow, veh/h				0	1511	0				0	2493	704
Grp Volume(v), veh/h				389	2421	0				0	818	782
Grp Sat Flow(s),veh/h/ln				0	1511	0				0	1660	1536
Q Serve(g_s), s				0.0	87.0	0.0				0.0	53.4	53.4
Cycle Q Clear(g_c), s				87.0	87.0	0.0				0.0	53.4	53.4
Prop In Lane				1.00		0.00				0.00		0.46
Lane Grp Cap(c), veh/h				48	876	0				0	591	547
V/C Ratio(X)				8.10	2.76	0.00				0.00	1.38	1.43
Avail Cap(c_a), veh/h				48	876	0				0	591	547
HCM Platoon Ratio				0.33	0.33	1.00				1.00	1.00	1.00
Upstream Filter(I)				0.09	0.09	0.00				0.00	0.09	0.09
Uniform Delay (d), s/veh				104.1	60.6	0.0				0.0	48.3	48.3
Incr Delay (d2), s/veh				3200.7	793.6	0.0				0.0	174.2	194.1
Initial Q Delay(d3),s/veh				0.0	0.0	0.0				0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				44.6	229.0	0.0				0.0	51.4	50.6
Lane Grp Delay (d), s/veh				3304.9	854.2	0.0				0.0	222.5	242.4
Lane Grp LOS				F	F						F	F
Approach Vol, veh/h					2810						1600	
Approach Delay, s/veh					1193.5						232.2	
Approach LOS					F						F	

Timer	
Assigned Phs	2	8
Phs Duration (G+Y+Rc), s	92.0	58.0
Change Period (Y+Rc), s	5.0	4.6
Max Green Setting (Gmax), s	87.0	53.4
Max Q Clear Time (g_c+I1), s	89.0	55.4
Green Ext Time (p_c), s	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	844.7
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	0	2000	390	630	1190	0	0	0	0
Number				5	2	12	7	4	14			
Initial Q (Qb), veh				0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00			
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow veh/h/ln				0.0	166.0	171.0	171.0	166.0	0.0			
Lanes				0	2	0	0	3	0			
Cap, veh/h				0	1648	311	48	995	0			
Arrive On Green				0.00	0.20	0.20	0.33	0.33	0.00			
Sat Flow, veh/h				0	2717	513	0	3022	0			
Grp Volume(v), veh/h				0	1258	1258	663	1253	0			
Grp Sat Flow(s),veh/h/ln				0	1660	1570	0	1511	0			
Q Serve(g_s), s				0.0	91.0	91.0	0.0	49.4	0.0			
Cycle Q Clear(g_c), s				0.0	91.0	91.0	49.4	49.4	0.0			
Prop In Lane				0.00		0.33	1.00		0.00			
Lane Grp Cap(c), veh/h				0	1007	952	48	995	0			
V/C Ratio(X)				0.00	1.25	1.32	13.81	1.26	0.00			
Avail Cap(c_a), veh/h				0	1007	952	48	995	0			
HCM Platoon Ratio				1.00	0.33	0.33	1.00	1.00	1.00			
Upstream Filter(I)				0.00	0.09	0.09	1.00	1.00	0.00			
Uniform Delay (d), s/veh				0.0	60.0	60.0	75.0	50.3	0.0			
Incr Delay (d2), s/veh				0.0	112.9	145.2	5805.8	124.8	0.0			
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0			
%ile Back of Q (50%), veh/ln				0.0	72.7	77.3	79.3	36.6	0.0			
Lane Grp Delay (d), s/veh				0.0	172.8	205.1	5880.8	175.1	0.0			
Lane Grp LOS					F	F	F	F				
Approach Vol, veh/h					2516			1916				
Approach Delay, s/veh					189.0			2149.5				
Approach LOS					F			F				

Timer	
Assigned Phs	2	4
Phs Duration (G+Y+Rc), s	96.0	54.0
Change Period (Y+Rc), s	5.0	4.6
Max Green Setting (Gmax), s	91.0	49.4
Max Q Clear Time (g_c+I1), s	93.0	51.4
Green Ext Time (p_c), s	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	1036.5
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	620	940	310	750	1650	260	1050	1680	700
Number				7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				166.0	166.0	166.0	166.0	166.0	166.0	166.0	166.0	166.0
Lanes				1	1	1	1	2	1	2	2	1
Cap, veh/h				488	512	436	306	1257	534	593	1257	534
Arrive On Green				0.31	0.31	0.31	0.19	0.38	0.38	0.26	0.50	0.50
Sat Flow, veh/h				1581	1660	1411	1581	3320	1411	3067	3320	1411
Grp Volume(v), veh/h				653	989	326	789	1737	274	1105	1768	737
Grp Sat Flow(s),veh/h/ln				1581	1660	1411	1581	1660	1411	1534	1660	1411
Q Serve(g_s), s				46.3	46.3	31.2	29.0	56.8	22.5	29.0	56.8	56.8
Cycle Q Clear(g_c), s				46.3	46.3	31.2	29.0	56.8	22.5	29.0	56.8	56.8
Prop In Lane				1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h				488	512	436	306	1257	534	593	1257	534
V/C Ratio(X)				1.34	1.93	0.75	2.58	1.38	0.51	1.86	1.41	1.38
Avail Cap(c_a), veh/h				488	512	436	306	1257	534	593	1257	534
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	1.00	0.09	0.09	0.09
Uniform Delay (d), s/veh				51.8	51.8	46.6	60.5	46.6	35.9	55.7	37.2	37.2
Incr Delay (d2), s/veh				165.5	425.6	7.0	721.0	176.7	3.5	389.1	183.2	171.7
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				41.4	80.5	23.7	73.2	55.3	8.7	43.3	55.1	45.1
Lane Grp Delay (d), s/veh				217.4	477.5	53.6	781.5	223.3	39.4	444.8	220.4	209.0
Lane Grp LOS				F	F	D	F	F	D	F	F	F
Approach Vol, veh/h					1968			2800			3610	
Approach Delay, s/veh					321.0			362.6			286.8	
Approach LOS					F			F			F	
Timer												
Assigned Phs					4		1	6		5	2	
Phs Duration (G+Y+Rc), s					53.0		34.0	63.0		34.0	63.0	
Change Period (Y+Rc), s					6.7		5.0	6.2		5.0	6.2	
Max Green Setting (Gmax), s					46.3		29.0	56.8		29.0	56.8	
Max Q Clear Time (g_c+I1), s					48.3		31.0	58.8		31.0	58.8	
Green Ext Time (p_c), s					0.0		0.0	0.0		0.0	0.0	
Intersection Summary												
HCM 2010 Ctrl Delay			320.1									
HCM 2010 LOS			F									
Notes												

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	5	50	50	470	1490	270	220	1250	300
Number				7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				171.0	166.0	171.0	166.0	166.0	171.0	166.0	166.0	166.0
Lanes				0	2	0	2	3	0	1	2	1
Cap, veh/h				8	88	82	589	2914	525	285	2004	852
Arrive On Green				0.06	0.06	0.06	0.13	0.48	0.48	0.08	0.60	0.60
Sat Flow, veh/h				143	1511	1411	3067	4109	741	1581	3320	1411
Grp Volume(v), veh/h				58	0	53	495	1266	586	232	1316	316
Grp Sat Flow(s),veh/h/ln				1653	0	1411	1534	1660	1529	1581	1660	1411
Q Serve(g_s), s				3.7	0.0	4.0	17.1	29.2	29.4	6.0	28.3	12.4
Cycle Q Clear(g_c), s				3.7	0.0	4.0	17.1	29.2	29.4	6.0	28.3	12.4
Prop In Lane				0.09		1.00	1.00		0.48	1.00		1.00
Lane Grp Cap(c), veh/h				96	0	82	589	2355	1085	285	2004	852
V/C Ratio(X)				0.60	0.00	0.65	0.84	0.54	0.54	0.81	0.66	0.37
Avail Cap(c_a), veh/h				458	0	391	1045	2355	1085	396	2004	852
HCM Platoon Ratio				1.00	1.00	1.00	0.67	0.67	0.67	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.09	0.09	0.09	1.00	1.00	1.00
Uniform Delay (d), s/veh				49.9	0.0	50.0	45.7	15.9	16.0	16.3	14.1	11.0
Incr Delay (d2), s/veh				5.9	0.0	8.2	0.3	0.1	0.2	8.8	1.7	1.2
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				1.8	0.0	1.6	7.0	12.5	11.6	7.1	11.6	4.4
Lane Grp Delay (d), s/veh				55.8	0.0	58.2	46.0	16.0	16.2	25.1	15.8	12.2
Lane Grp LOS				E		E	D	B	B	C	B	B
Approach Vol, veh/h					111			2347			1864	
Approach Delay, s/veh					57.0			22.4			16.4	
Approach LOS					E			C			B	

Timer												
Assigned Phs					4		1	6		5	2	
Phs Duration (G+Y+Rc), s					13.0		23.8	83.2		12.4	71.7	
Change Period (Y+Rc), s					6.7		3.0	6.2		4.0	6.2	
Max Green Setting (Gmax), s					30.1		37.0	77.0		16.0	57.0	
Max Q Clear Time (g_c+I1), s					6.0		19.1	31.4		8.0	30.3	
Green Ext Time (p_c), s					0.6		1.7	39.9		0.4	24.6	

Intersection Summary		
HCM 2010 Ctrl Delay		20.7
HCM 2010 LOS		C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	0	960	210	370	710	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.2		4.2	4.2				
Lane Util. Factor					0.91		0.91	0.91				
Frt					0.97		1.00	1.00				
Flt Protected					1.00		0.95	1.00				
Satd. Flow (prot)					4410		1435	3014				
Flt Permitted					1.00		0.95	1.00				
Satd. Flow (perm)					4410		1435	3014				
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	0	1011	221	389	747	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	175	9	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	1232	0	175	777	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type					NA		Perm	NA				
Protected Phases					2			4				
Permitted Phases							4					
Actuated Green, G (s)					94.8		16.8	16.8				
Effective Green, g (s)					94.8		16.8	16.8				
Actuated g/C Ratio					0.79		0.14	0.14				
Clearance Time (s)					4.2		4.2	4.2				
Vehicle Extension (s)					3.0		3.0	3.0				
Lane Grp Cap (vph)					3483		200	421				
v/s Ratio Prot					c0.28							
v/s Ratio Perm							0.12	0.26				
v/c Ratio					0.35		0.87	1.84				
Uniform Delay, d1					3.7		50.6	51.6				
Progression Factor					1.00		0.66	0.76				
Incremental Delay, d2					0.3		20.9	385.4				
Delay (s)					4.0		54.2	424.7				
Level of Service					A		D	F				
Approach Delay (s)		0.0			4.0			310.5			0.0	
Approach LOS		A			A			F			A	

Intersection Summary			
HCM 2000 Control Delay	151.0	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.4
Intersection Capacity Utilization	116.6%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	230	1140	0	0	0	0	0	970	400
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					5.8						4.6	4.6
Lane Util. Factor					0.91						0.91	0.91
Frt					1.00						0.99	0.85
Flt Protected					0.99						1.00	1.00
Satd. Flow (prot)					4495						3004	1284
Flt Permitted					0.99						1.00	1.00
Satd. Flow (perm)					4495						3004	1284
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	242	1200	0	0	0	0	0	1021	421
RTOR Reduction (vph)	0	0	0	0	24	0	0	0	0	0	2	17
Lane Group Flow (vph)	0	0	0	0	1418	0	0	0	0	0	1061	362
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type				Perm	NA						NA	Perm
Protected Phases					2						8	
Permitted Phases				2								8
Actuated Green, G (s)					57.9						51.7	51.7
Effective Green, g (s)					57.9						51.7	51.7
Actuated g/C Ratio					0.48						0.43	0.43
Clearance Time (s)					5.8						4.6	4.6
Vehicle Extension (s)					3.0						3.0	3.0
Lane Grp Cap (vph)					2168						1294	553
v/s Ratio Prot											c0.35	
v/s Ratio Perm					0.32							0.28
v/c Ratio					0.65						0.82	0.65
Uniform Delay, d1					23.5						30.0	27.1
Progression Factor					1.15						1.00	1.00
Incremental Delay, d2					1.2						4.2	2.8
Delay (s)					28.2						34.2	29.9
Level of Service					C						C	C
Approach Delay (s)		0.0			28.2			0.0			33.1	
Approach LOS		A			C			A			C	

Intersection Summary			
HCM 2000 Control Delay	30.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	10.4
Intersection Capacity Utilization	72.8%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	120	1140	130	290	1020	0	0	230	130
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				171.0	166.0	171.0	166.0	166.0	0.0	0.0	166.0	171.0
Lanes				0	3	0	1	2	0	0	2	0
Cap, veh/h				165	1671	197	505	1671	0	0	664	362
Arrive On Green				0.14	0.14	0.14	0.30	1.00	0.00	0.00	0.33	0.33
Sat Flow, veh/h				395	4011	472	1581	3320	0	0	2022	1104
Grp Volume(v), veh/h				523	482	458	305	1074	0	0	197	182
Grp Sat Flow(s),veh/h/ln				1640	1660	1577	1581	1660	0	0	1660	1465
Q Serve(g_s), s				36.9	33.2	33.2	15.7	0.0	0.0	0.0	10.9	11.4
Cycle Q Clear(g_c), s				36.9	33.2	33.2	15.7	0.0	0.0	0.0	10.9	11.4
Prop In Lane				0.24		0.30	1.00		0.00	0.00		0.75
Lane Grp Cap(c), veh/h				684	692	657	505	1671	0	0	545	481
V/C Ratio(X)				0.77	0.70	0.70	0.60	0.64	0.00	0.00	0.36	0.38
Avail Cap(c_a), veh/h				684	692	657	545	1671	0	0	545	481
HCM Platoon Ratio				0.33	0.33	0.33	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.70	0.70	0.70	0.14	0.14	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				46.1	44.5	44.5	16.7	0.0	0.0	0.0	30.7	30.9
Incr Delay (d2), s/veh				5.7	4.1	4.3	0.2	0.3	0.0	0.0	1.9	2.3
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				17.5	15.7	15.0	5.0	0.1	0.0	0.0	4.8	4.5
Lane Grp Delay (d), s/veh				51.8	48.6	48.8	17.0	0.3	0.0	0.0	32.6	33.1
Lane Grp LOS				D	D	D	B	A			C	C
Approach Vol, veh/h					1463			1379			379	
Approach Delay, s/veh					49.8			4.0			32.8	
Approach LOS					D			A			C	

Timer												
Assigned Phs					2		7	4			8	
Phs Duration (G+Y+Rc), s					55.0		21.0	65.0			44.0	
Change Period (Y+Rc), s					5.0		3.0	4.6			4.6	
Max Green Setting (Gmax), s					50.0		21.0	60.4			36.4	
Max Q Clear Time (g_c+I1), s					38.9		17.7	2.0			13.4	
Green Ext Time (p_c), s					6.8		0.3	15.4			11.2	

Intersection Summary		
HCM 2010 Ctrl Delay		28.2
HCM 2010 LOS		C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	350	990	190	100	250	0	0	0	0
Number				5	2	12	7	4	14			
Initial Q (Qb), veh				0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00			
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow veh/h/ln				171.0	166.0	171.0	166.0	166.0	0.0			
Lanes				0	3	0	1	1	0			
Cap, veh/h				60	1598	307	60	466	0			
Arrive On Green				0.21	0.21	0.21	0.56	0.56	0.00			
Sat Flow, veh/h				0	2465	473	1581	1660	0			
Grp Volume(v), veh/h				368	638	604	105	263	0			
Grp Sat Flow(s),veh/h/ln				0	1511	1427	1581	1660	0			
Q Serve(g_s), s				0.0	46.3	46.4	0.0	12.2	0.0			
Cycle Q Clear(g_c), s				77.8	46.3	46.4	33.7	12.2	0.0			
Prop In Lane				1.00		0.33	1.00		0.00			
Lane Grp Cap(c), veh/h				60	979	925	60	466	0			
V/C Ratio(X)				6.13	0.65	0.65	1.75	0.56	0.00			
Avail Cap(c_a), veh/h				60	979	925	60	466	0			
HCM Platoon Ratio				0.33	0.33	0.33	2.00	2.00	1.00			
Upstream Filter(I)				0.57	0.57	0.57	0.22	0.22	0.00			
Uniform Delay (d), s/veh				86.1	34.8	34.8	43.2	21.6	0.0			
Incr Delay (d2), s/veh				2330.3	1.9	2.1	352.2	1.1	0.0			
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0			
%ile Back of Q (50%), veh/ln				40.8	19.9	18.8	7.6	4.3	0.0			
Lane Grp Delay (d), s/veh				2416.3	36.7	36.9	395.3	22.7	0.0			
Lane Grp LOS				F	D	D	F	C				
Approach Vol, veh/h					1610			368				
Approach Delay, s/veh					580.7			129.0				
Approach LOS					F			F				
Timer												
Assigned Phs					2			4				
Phs Duration (G+Y+Rc), s					82.0			38.0				
Change Period (Y+Rc), s					4.2			4.3				
Max Green Setting (Gmax), s					77.8			33.7				
Max Q Clear Time (g_c+I1), s					79.8			35.7				
Green Ext Time (p_c), s					0.0			0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			496.7									
HCM 2010 LOS			F									
Notes												

Movement	WBL	WBT	SBT	SBR	SWL	SWR
Lane Configurations						
Volume (vph)	600	600	520	70	2080	280
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.5	6.5	7.0		7.0	7.0
Lane Util. Factor	0.91	0.91	0.95		0.97	0.91
Frt	1.00	1.00	0.98		1.00	0.85
Flt Protected	0.95	0.99	1.00		0.95	1.00
Satd. Flow (prot)	1449	3012	3128		3093	1297
Flt Permitted	0.95	0.99	1.00		0.95	1.00
Satd. Flow (perm)	1449	3012	3128		3093	1297
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	632	632	547	74	2189	295
RTOR Reduction (vph)	72	72	9	0	0	0
Lane Group Flow (vph)	339	781	612	0	2219	265
Turn Type	Perm	NA	NA		NA	Perm
Protected Phases		2	9		8	
Permitted Phases	2					8
Actuated Green, G (s)	33.5	33.5	11.0		55.0	55.0
Effective Green, g (s)	33.5	33.5	11.0		55.0	55.0
Actuated g/C Ratio	0.28	0.28	0.09		0.46	0.46
Clearance Time (s)	6.5	6.5	7.0		7.0	7.0
Vehicle Extension (s)	1.0	1.0	3.0		3.0	3.0
Lane Grp Cap (vph)	404	840	286		1417	594
v/s Ratio Prot			c0.20		c0.72	
v/s Ratio Perm	0.23	0.26				0.20
v/c Ratio	0.84	0.93	2.14		1.57	0.45
Uniform Delay, d1	40.7	42.1	54.5		32.5	22.1
Progression Factor	1.21	1.18	1.00		1.00	1.00
Incremental Delay, d2	16.8	16.5	524.4		258.2	0.5
Delay (s)	66.2	66.3	578.9		290.7	22.7
Level of Service	E	E	F		F	C
Approach Delay (s)		66.3	578.9		262.1	
Approach LOS		E	F		F	

Intersection Summary			
HCM 2000 Control Delay	250.5	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.41		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	20.5
Intersection Capacity Utilization	129.9%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	100	720	80	70	300	0	0	270	110
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	186.3	190.0	190.0	186.3	0.0	0.0	193.7	190.0
Lanes				0	3	0	0	1	0	0	1	0
Cap, veh/h				300	2311	262	102	387	0	0	478	195
Arrive On Green				0.53	0.53	0.51	0.12	0.12	0.00	0.00	0.36	0.36
Sat Flow, veh/h				571	4401	500	156	1061	0	0	1308	534
Grp Volume(v), veh/h				337	311	298	390	0	0	0	0	400
Grp Sat Flow(s),veh/h/ln				1834	1863	1775	1217	0	0	0	0	1843
Q Serve(g_s), s				10.2	9.1	9.2	14.5	0.0	0.0	0.0	0.0	16.8
Cycle Q Clear(g_c), s				10.2	9.1	9.2	31.3	0.0	0.0	0.0	0.0	16.8
Prop In Lane				0.31		0.28	0.19		0.00	0.00		0.29
Lane Grp Cap(c), veh/h				963	978	932	489	0	0	0	0	673
V/C Ratio(X)				0.35	0.32	0.32	0.80	0.00	0.00	0.00	0.00	0.59
Avail Cap(c_a), veh/h				963	978	932	562	0	0	0	0	758
HCM Platoon Ratio				1.00	1.00	1.00	0.33	0.33	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.47	0.47	0.47	0.89	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				13.2	12.9	13.0	41.3	0.0	0.0	0.0	0.0	24.6
Incr Delay (d2), s/veh				0.5	0.4	0.4	5.9	0.0	0.0	0.0	0.0	0.8
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				4.5	4.1	3.9	10.8	0.0	0.0	0.0	0.0	7.7
Lane Grp Delay (d), s/veh				13.7	13.3	13.5	47.2	0.0	0.0	0.0	0.0	25.4
Lane Grp LOS				B	B	B	D					C
Approach Vol, veh/h					947			390			400	
Approach Delay, s/veh					13.5			47.2			25.4	
Approach LOS					B			D			C	
Timer												
Assigned Phs					2			4			8	
Phs Duration (G+Y+Rc), s					55.0			40.6			40.6	
Change Period (Y+Rc), s					5.8			5.7			5.7	
Max Green Setting (Gmax), s					49.2			39.3			39.3	
Max Q Clear Time (g_c+I1), s					12.2			33.3			18.8	
Green Ext Time (p_c), s					3.2			1.5			2.6	
Intersection Summary												
HCM 2010 Ctrl Delay			23.8									
HCM 2010 LOS			C									
Notes												

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	100	800	90	160	550	0	0	400	120
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99
Adj Sat Flow veh/h/ln				190.0	184.5	190.0	190.0	184.5	0.0	0.0	177.1	190.0
Lanes				0	3	0	0	2	0	0	2	0
Cap, veh/h				182	1556	180	350	1422	0	0	1439	426
Arrive On Green				0.35	0.35	0.34	1.00	1.00	0.00	0.00	0.55	0.54
Sat Flow, veh/h				514	4396	509	532	2089	0	0	2616	775
Grp Volume(v), veh/h				372	343	327	374	373	0	0	284	263
Grp Sat Flow(s),veh/h/ln				1819	1845	1755	1273	1845	0	0	1771	1620
Q Serve(g_s), s				16.6	14.7	14.9	0.1	0.0	0.0	0.0	8.6	8.8
Cycle Q Clear(g_c), s				16.6	14.7	14.9	55.0	0.0	0.0	0.0	8.6	8.8
Prop In Lane				0.28		0.29	0.59		0.00	0.00		0.48
Lane Grp Cap(c), veh/h				644	653	621	83	1015	0	0	974	891
V/C Ratio(X)				0.58	0.52	0.53	4.52	0.37	0.00	0.00	0.29	0.30
Avail Cap(c_a), veh/h				644	653	621	83	1015	0	0	974	891
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	0.93	0.93	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				26.2	25.6	25.8	26.1	0.0	0.0	0.0	12.1	12.2
Incr Delay (d2), s/veh				3.7	3.0	3.2	1609.7	1.0	0.0	0.0	0.8	0.8
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				8.1	7.3	7.0	39.2	0.3	0.0	0.0	3.8	3.5
Lane Grp Delay (d), s/veh				30.0	28.6	29.0	1635.7	1.0	0.0	0.0	12.8	13.1
Lane Grp LOS				C	C	C	F	A			B	B
Approach Vol, veh/h					1042			747			547	
Approach Delay, s/veh					29.2			818.3			12.9	
Approach LOS					C			F			B	

Timer					
Assigned Phs		2	7	4	8
Phs Duration (G+Y+Rc), s		40.0	0.0	60.0	60.0
Change Period (Y+Rc), s		5.6	5.0	6.0	6.0
Max Green Setting (Gmax), s		34.4	7.0	54.0	42.0
Max Q Clear Time (g_c+I1), s		18.6	0.0	57.0	10.8
Green Ext Time (p_c), s		4.1	0.0	0.0	7.2

Intersection Summary	
HCM 2010 Ctrl Delay	277.7
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	50	1180	0	0	0	0	0	40	20
Number				5	2	12				3	8	18
Initial Q (Qb), veh				0	0	0				0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00				1.00		1.00
Parking Bus Adj				1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	182.7	0.0				0.0	190.0	190.0
Lanes				0	3	0				0	1	0
Cap, veh/h				72	2560	0				0	179	90
Arrive On Green				0.25	0.25	0.00				0.00	0.15	0.15
Sat Flow, veh/h				0	3325	0				0	1196	598
Grp Volume(v), veh/h				53	1242	0				0	0	63
Grp Sat Flow(s),veh/h/ln				0	1663	0				0	0	1794
Q Serve(g_s), s				0.0	31.8	0.0				0.0	0.0	3.1
Cycle Q Clear(g_c), s				77.0	31.8	0.0				0.0	0.0	3.1
Prop In Lane				1.00		0.00				0.00		0.33
Lane Grp Cap(c), veh/h				72	2560	0				0	0	269
V/C Ratio(X)				0.74	0.49	0.00				0.00	0.00	0.23
Avail Cap(c_a), veh/h				72	2560	0				0	0	269
HCM Platoon Ratio				0.33	0.33	1.00				1.00	1.00	1.00
Upstream Filter(I)				0.73	0.73	0.00				0.00	0.00	1.00
Uniform Delay (d), s/veh				75.8	20.4	0.0				0.0	0.0	37.4
Incr Delay (d2), s/veh				38.5	0.5	0.0				0.0	0.0	2.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0				0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				2.2	14.3	0.0				0.0	0.0	1.6
Lane Grp Delay (d), s/veh				114.3	20.9	0.0				0.0	0.0	39.5
Lane Grp LOS				F	C							D
Approach Vol, veh/h					1295						63	
Approach Delay, s/veh					24.7						39.5	
Approach LOS					C						D	

Timer	
Assigned Phs	2	8
Phs Duration (G+Y+Rc), s	81.0	19.0
Change Period (Y+Rc), s	5.0	4.0
Max Green Setting (Gmax), s	76.0	15.0
Max Q Clear Time (g_c+I1), s	79.0	5.1
Green Ext Time (p_c), s	0.0	0.1

Intersection Summary	
HCM 2010 Ctrl Delay	25.4
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	140	940	150	150	700	0	0	1030	130
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	184.5	190.0	184.5	184.5	0.0	0.0	184.5	190.0
Lanes				0	3	0	1	2	0	0	2	0
Cap, veh/h				188	1351	222	290	2221	0	0	1613	204
Arrive On Green				0.11	0.11	0.10	0.12	1.00	0.00	0.00	0.50	0.50
Sat Flow, veh/h				575	4131	679	1757	3689	0	0	3212	405
Grp Volume(v), veh/h				464	429	401	158	737	0	0	622	599
Grp Sat Flow(s),veh/h/ln				1816	1845	1725	1757	1845	0	0	1845	1773
Q Serve(g_s), s				24.9	22.5	22.5	4.2	0.0	0.0	0.0	25.3	25.4
Cycle Q Clear(g_c), s				24.9	22.5	22.5	4.2	0.0	0.0	0.0	25.3	25.4
Prop In Lane				0.32		0.39	1.00		0.00	0.00		0.23
Lane Grp Cap(c), veh/h				594	603	564	290	2221	0	0	926	890
V/C Ratio(X)				0.78	0.71	0.71	0.54	0.33	0.00	0.00	0.67	0.67
Avail Cap(c_a), veh/h				594	603	564	290	2221	0	0	926	890
HCM Platoon Ratio				0.33	0.33	0.33	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.95	0.95	0.95	0.37	0.37	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				41.1	40.0	40.1	14.0	0.0	0.0	0.0	18.7	18.7
Incr Delay (d2), s/veh				9.4	6.6	7.1	0.4	0.1	0.0	0.0	3.9	4.1
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				13.9	12.4	11.7	1.6	0.0	0.0	0.0	12.1	11.7
Lane Grp Delay (d), s/veh				50.5	46.6	47.2	14.4	0.1	0.0	0.0	22.6	22.8
Lane Grp LOS				D	D	D	B	A			C	C
Approach Vol, veh/h					1294			895			1221	
Approach Delay, s/veh					48.2			2.7			22.7	
Approach LOS					D			A			C	

Timer												
Assigned Phs					2		7	4			8	
Phs Duration (G+Y+Rc), s					36.0		9.0	64.0			55.0	
Change Period (Y+Rc), s					4.3		4.2	4.8			4.8	
Max Green Setting (Gmax), s					31.7		4.8	59.2			50.2	
Max Q Clear Time (g_c+I1), s					26.9		6.2	2.0			27.4	
Green Ext Time (p_c), s					0.9		0.0	2.3			2.3	

Intersection Summary		
HCM 2010 Ctrl Delay		27.1
HCM 2010 LOS		C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	50	1150	20	60	60	0	0	110	60
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	186.3	190.0	190.0	186.3	0.0	0.0	186.3	190.0
Lanes				0	3	0	0	1	0	0	1	0
Cap, veh/h				148	3604	64	141	120	0	0	220	119
Arrive On Green				0.23	0.23	0.22	0.06	0.06	0.00	0.00	0.19	0.18
Sat Flow, veh/h				216	5251	94	383	621	0	0	1137	617
Grp Volume(v), veh/h				455	417	413	126	0	0	0	0	179
Grp Sat Flow(s),veh/h/ln				1852	1863	1846	1004	0	0	0	0	1754
Q Serve(g_s), s				16.6	15.0	15.0	4.3	0.0	0.0	0.0	0.0	7.4
Cycle Q Clear(g_c), s				16.6	15.0	15.0	11.7	0.0	0.0	0.0	0.0	7.4
Prop In Lane				0.12		0.05	0.50		0.00	0.00		0.35
Lane Grp Cap(c), veh/h				1271	1278	1267	261	0	0	0	0	339
V/C Ratio(X)				0.36	0.33	0.33	0.48	0.00	0.00	0.00	0.00	0.53
Avail Cap(c_a), veh/h				1271	1278	1267	616	0	0	0	0	765
HCM Platoon Ratio				0.33	0.33	0.33	0.33	0.33	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.48	0.48	0.48	0.95	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				16.2	15.6	15.6	36.4	0.0	0.0	0.0	0.0	29.3
Incr Delay (d2), s/veh				0.4	0.3	0.3	1.0	0.0	0.0	0.0	0.0	0.9
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				8.6	7.8	7.7	2.8	0.0	0.0	0.0	0.0	3.3
Lane Grp Delay (d), s/veh				16.6	15.9	15.9	37.3	0.0	0.0	0.0	0.0	30.3
Lane Grp LOS				B	B	B	D					C
Approach Vol, veh/h					1285			126			179	
Approach Delay, s/veh					16.1			37.3			30.3	
Approach LOS					B			D			C	

Timer	
Assigned Phs	2 4 8
Phs Duration (G+Y+Rc), s	60.0 20.4 20.4
Change Period (Y+Rc), s	5.8 5.9 5.9
Max Green Setting (Gmax), s	54.2 34.1 34.1
Max Q Clear Time (g_c+I1), s	18.6 13.7 9.4
Green Ext Time (p_c), s	4.6 0.9 0.9

Intersection Summary	
HCM 2010 Ctrl Delay	19.4
HCM 2010 LOS	B

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	200	960	90	90	820	0	0	900	70
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	186.3	190.0	186.3	186.3	0.0	0.0	186.3	190.0
Lanes				0	3	0	1	2	0	0	2	0
Cap, veh/h				288	1482	142	320	1878	0	0	1228	96
Arrive On Green				0.35	0.35	0.34	0.03	0.17	0.00	0.00	0.36	0.35
Sat Flow, veh/h				824	4243	408	1774	3725	0	0	3412	267
Grp Volume(v), veh/h				466	434	417	95	863	0	0	517	504
Grp Sat Flow(s),veh/h/ln				1822	1863	1791	1774	1863	0	0	1863	1816
Q Serve(g_s), s				17.1	15.1	15.1	2.4	16.0	0.0	0.0	18.8	18.8
Cycle Q Clear(g_c), s				17.1	15.1	15.1	2.4	16.0	0.0	0.0	18.8	18.8
Prop In Lane				0.45		0.23	1.00		0.00	0.00		0.15
Lane Grp Cap(c), veh/h				636	651	626	320	1878	0	0	671	654
V/C Ratio(X)				0.73	0.67	0.67	0.30	0.46	0.00	0.00	0.77	0.77
Avail Cap(c_a), veh/h				1199	1227	1179	320	1878	0	0	671	654
HCM Platoon Ratio				1.00	1.00	1.00	0.33	0.33	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	0.09	0.09	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				21.7	21.1	21.2	16.2	22.5	0.0	0.0	21.7	21.7
Incr Delay (d2), s/veh				7.3	5.3	5.5	0.2	0.0	0.0	0.0	8.4	8.6
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				8.7	7.7	7.5	1.0	8.0	0.0	0.0	9.9	9.7
Lane Grp Delay (d), s/veh				29.0	26.4	26.7	16.4	22.5	0.0	0.0	30.0	30.3
Lane Grp LOS				C	C	C	B	C			C	C
Approach Vol, veh/h					1317			958			1021	
Approach Delay, s/veh					27.4			21.9			30.1	
Approach LOS					C			C			C	

Timer												
Assigned Phs					2		7	4			8	
Phs Duration (G+Y+Rc), s					32.4		11.0	44.0			33.0	
Change Period (Y+Rc), s					6.7		3.0	6.5			6.5	
Max Green Setting (Gmax), s					49.3		8.0	37.5			26.5	
Max Q Clear Time (g_c+I1), s					19.1		4.4	18.0			20.8	
Green Ext Time (p_c), s					6.6		0.1	9.4			4.0	

Intersection Summary		
HCM 2010 Ctrl Delay		26.7
HCM 2010 LOS		C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Volume (vph)	0	0	0	490	580	0	180	260	0	0	320	390
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	10	12	11	10	12	12	13	12
Total Lost time (s)				6.7	6.7		3.0	6.5			6.5	
Lane Util. Factor				0.91	0.91		1.00	0.95			0.95	
Frt				1.00	1.00		1.00	1.00			0.92	
Flt Protected				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (prot)				1610	3123		1711	3303			3356	
Flt Permitted				0.95	0.99		0.17	1.00			1.00	
Satd. Flow (perm)				1610	3123		298	3303			3356	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	516	611	0	189	274	0	0	337	411
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	175	0
Lane Group Flow (vph)	0	0	0	294	833	0	189	274	0	0	573	0
Turn Type				Perm	NA		pm+pt	NA			NA	
Protected Phases					2		7	4			8	
Permitted Phases				2			4					
Actuated Green, G (s)				44.0	44.0		42.8	42.8			27.5	
Effective Green, g (s)				44.0	44.0		42.8	42.8			27.5	
Actuated g/C Ratio				0.44	0.44		0.43	0.43			0.28	
Clearance Time (s)				6.7	6.7		3.0	6.5			6.5	
Vehicle Extension (s)				2.5	2.5		3.0	2.0			2.5	
Lane Grp Cap (vph)				708	1374		301	1413			922	
v/s Ratio Prot							c0.08	0.08			0.17	
v/s Ratio Perm				0.18	0.27		c0.19					
v/c Ratio				0.42	0.61		0.63	0.19			0.62	
Uniform Delay, d1				19.2	21.4		20.4	17.8			31.7	
Progression Factor				0.31	0.39		1.00	1.00			1.00	
Incremental Delay, d2				1.5	1.7		4.1	0.3			3.2	
Delay (s)				7.5	10.1		24.4	18.1			34.9	
Level of Service				A	B		C	B			C	
Approach Delay (s)		0.0			9.4			20.7			34.9	
Approach LOS		A			A			C			C	

Intersection Summary			
HCM 2000 Control Delay	19.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	16.2
Intersection Capacity Utilization	65.9%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	150	0	40	220	110	240	0	1520	0	0	2090	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	9	12	9	11	11	11	12	10	12	12	10	12
Total Lost time (s)	3.9		3.9	3.9	3.9	3.9		3.6			4.0	
Lane Util. Factor	1.00		1.00	0.97	1.00	1.00		0.91			0.86	
Frt	1.00		0.85	1.00	1.00	0.85		1.00			1.00	
Flt Protected	0.95		1.00	0.95	1.00	1.00		1.00			1.00	
Satd. Flow (prot)	1593		1425	3319	1801	1531		4746			5968	
Flt Permitted	0.68		1.00	0.95	1.00	1.00		1.00			1.00	
Satd. Flow (perm)	1144		1425	3319	1801	1531		4746			5968	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	158	0	42	232	116	253	0	1600	0	0	2200	32
RTOR Reduction (vph)	0	0	38	0	0	46	0	0	0	0	1	0
Lane Group Flow (vph)	158	0	4	232	116	207	0	1600	0	0	2231	0
Turn Type	custom		custom	Split	NA	Perm		NA			NA	
Protected Phases			8	4	4			6			2	
Permitted Phases	8					4						
Actuated Green, G (s)	9.1		9.1	32.1	32.1	32.1		64.4			64.0	
Effective Green, g (s)	10.1		10.1	33.1	33.1	33.1		65.4			65.0	
Actuated g/C Ratio	0.08		0.08	0.28	0.28	0.28		0.55			0.54	
Clearance Time (s)	4.9		4.9	4.9	4.9	4.9		4.6			5.0	
Vehicle Extension (s)	2.5		2.5	2.5	2.5	2.5		2.5			2.5	
Lane Grp Cap (vph)	96		119	915	496	422		2586			3232	
v/s Ratio Prot			0.00	0.07	0.06			0.34			c0.37	
v/s Ratio Perm	c0.14					c0.14						
v/c Ratio	1.65		0.03	0.25	0.23	0.49		0.62			0.69	
Uniform Delay, d1	55.0		50.5	33.8	33.6	36.4		18.7			20.1	
Progression Factor	1.00		1.00	1.00	1.00	1.00		0.81			1.00	
Incremental Delay, d2	332.4		0.5	0.7	1.1	4.0		0.1			1.2	
Delay (s)	387.4		50.9	34.5	34.7	40.4		15.2			21.4	
Level of Service	F		D	C	C	D		B			C	
Approach Delay (s)		316.7			37.0			15.2			21.4	
Approach LOS		F			D			B			C	

Intersection Summary			
HCM 2000 Control Delay	34.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	11.8
Intersection Capacity Utilization	62.5%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	1270	60	0	1180	20	190	1660	360	210	1800	100
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	0.0	186.3	190.0	0.0	186.3	190.0	186.3	186.3	190.0	186.3	186.3	186.3
Lanes	0	2	0	0	2	0	1	3	0	1	2	1
Cap, veh/h	0	1480	70	0	1531	26	203	1712	366	203	1428	607
Arrive On Green	0.00	0.42	0.41	0.00	0.42	0.41	0.08	0.38	0.38	0.08	0.38	0.38
Sat Flow, veh/h	0	3530	166	0	3653	62	1774	4466	954	1774	3725	1583
Grp Volume(v), veh/h	0	704	696	0	633	630	200	1453	673	221	1895	105
Grp Sat Flow(s),veh/h/ln	0	1863	1833	0	1863	1852	1774	1863	1694	1774	1863	1583
Q Serve(g_s), s	0.0	42.4	42.6	0.0	35.9	35.9	9.3	46.0	46.0	9.5	46.0	5.3
Cycle Q Clear(g_c), s	0.0	42.4	42.6	0.0	35.9	35.9	9.3	46.0	46.0	9.5	46.0	5.3
Prop In Lane	0.00		0.09	0.00		0.03	1.00		0.56	1.00		1.00
Lane Grp Cap(c), veh/h	0	781	769	0	781	776	203	1428	650	203	1428	607
V/C Ratio(X)	0.00	0.90	0.91	0.00	0.81	0.81	0.98	1.02	1.04	1.09	1.33	0.17
Avail Cap(c_a), veh/h	0	781	769	0	781	776	203	1428	650	203	1428	607
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.72	0.72	0.72
Uniform Delay (d), s/veh	0.0	32.6	32.7	0.0	30.7	30.7	33.0	37.0	37.3	33.5	37.0	24.4
Incr Delay (d2), s/veh	0.0	15.7	16.2	0.0	8.9	9.0	58.4	28.2	45.1	79.8	150.7	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.0	23.2	23.0	0.0	18.6	18.6	9.5	27.0	27.7	10.8	51.3	2.1
Lane Grp Delay (d), s/veh	0.0	48.2	48.8	0.0	39.6	39.7	91.4	65.2	82.4	113.2	187.7	24.9
Lane Grp LOS		D	D		D	D	F	F	F	F	F	C
Approach Vol, veh/h		1400			1263			2326			2221	
Approach Delay, s/veh		48.5			39.7			72.4			172.6	
Approach LOS		D			D			E			F	

Timer							
Assigned Phs	6	2	7	4	3	8	
Phs Duration (G+Y+Rc), s	56.0	56.0	13.0	51.0	13.0	51.0	
Change Period (Y+Rc), s	6.7	6.7	3.0	6.0	3.0	6.0	
Max Green Setting (Gmax), s	49.3	49.3	10.0	45.0	10.0	45.0	
Max Q Clear Time (g_c+I1), s	44.6	37.9	11.3	48.0	11.5	48.0	
Green Ext Time (p_c), s	3.7	7.6	0.0	0.0	0.0	0.0	

Intersection Summary	
HCM 2010 Ctrl Delay	92.9
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	50	1600	40	0	0	0	0	50	80	40	60	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	186.3	190.0	190.0	186.3	0.0
Lanes	0	3	0				0	1	0	0	1	0
Cap, veh/h	116	3940	101				0	87	137	90	111	0
Arrive On Green	0.74	0.75	0.74				0.00	0.13	0.13	0.13	0.13	0.00
Sat Flow, veh/h	156	5265	135				0	650	1031	263	834	0
Grp Volume(v), veh/h	632	577	570				0	0	137	105	0	0
Grp Sat Flow(s),veh/h/ln	1855	1863	1839				0	0	1681	1097	0	0
Q Serve(g_s), s	11.9	10.3	10.3				0.0	0.0	7.0	2.5	0.0	0.0
Cycle Q Clear(g_c), s	11.9	10.3	10.3				0.0	0.0	7.0	9.6	0.0	0.0
Prop In Lane	0.08		0.07				0.00		0.61	0.40		0.00
Lane Grp Cap(c), veh/h	1388	1394	1376				0	0	224	202	0	0
V/C Ratio(X)	0.46	0.41	0.41				0.00	0.00	0.61	0.52	0.00	0.00
Avail Cap(c_a), veh/h	1388	1394	1376				0	0	387	353	0	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	4.4	4.2	4.2				0.0	0.0	37.3	38.0	0.0	0.0
Incr Delay (d2), s/veh	1.1	0.9	0.9				0.0	0.0	2.7	2.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	4.6	4.0	4.0				0.0	0.0	3.1	2.5	0.0	0.0
Lane Grp Delay (d), s/veh	5.5	5.1	5.1				0.0	0.0	40.0	40.0	0.0	0.0
Lane Grp LOS	A	A	A						D	D		
Approach Vol, veh/h		1779						137			105	
Approach Delay, s/veh		5.2						40.0			40.0	
Approach LOS		A						D			D	

Timer			
Assigned Phs	6	4	8
Phs Duration (G+Y+Rc), s	73.0	18.1	18.1
Change Period (Y+Rc), s	5.8	6.0	6.0
Max Green Setting (Gmax), s	67.2	21.0	21.0
Max Q Clear Time (g_c+I1), s	13.9	9.0	11.6
Green Ext Time (p_c), s	11.3	0.7	0.6

Intersection Summary	
HCM 2010 Ctrl Delay	9.4
HCM 2010 LOS	A

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	100	1670	80	0	0	0	0	870	180	150	1070	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	186.3	190.0	186.3	186.3	0.0
Lanes	0	3	0				0	2	0	1	2	0
Cap, veh/h	136	2420	119				0	846	174	213	1497	0
Arrive On Green	0.16	0.16	0.16				0.00	0.28	0.27	0.03	0.13	0.00
Sat Flow, veh/h	280	5004	246				0	2998	618	1774	3725	0
Grp Volume(v), veh/h	692	634	621				0	569	536	158	1126	0
Grp Sat Flow(s),veh/h/ln	1849	1863	1819				0	1863	1754	1774	1863	0
Q Serve(g_s), s	36.0	32.3	32.4				0.0	28.3	28.3	6.1	29.2	0.0
Cycle Q Clear(g_c), s	36.0	32.3	32.4				0.0	28.3	28.3	6.1	29.2	0.0
Prop In Lane	0.15		0.14				0.00		0.35	1.00		0.00
Lane Grp Cap(c), veh/h	894	901	880				0	526	495	213	1497	0
V/C Ratio(X)	0.77	0.70	0.71				0.00	1.08	1.08	0.74	0.75	0.00
Avail Cap(c_a), veh/h	894	901	880				0	526	495	213	1497	0
HCM Platoon Ratio	0.33	0.33	0.33				1.00	1.00	1.00	0.33	0.33	1.00
Upstream Filter(I)	0.88	0.88	0.88				0.00	1.00	1.00	0.09	0.09	0.00
Uniform Delay (d), s/veh	36.9	35.3	35.4				0.0	36.0	36.2	27.5	38.7	0.0
Incr Delay (d2), s/veh	5.7	4.1	4.2				0.0	63.4	64.9	1.3	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	19.5	17.3	17.0				0.0	22.4	21.3	4.3	14.8	0.0
Lane Grp Delay (d), s/veh	42.6	39.4	39.6				0.0	99.4	101.1	28.8	39.0	0.0
Lane Grp LOS	D	D	D					F	F	C	D	
Approach Vol, veh/h		1947						1105			1284	
Approach Delay, s/veh		40.6						100.2			37.8	
Approach LOS		D						F			D	

Timer												
Assigned Phs		6						4		3	8	
Phs Duration (G+Y+Rc), s		55.0						33.3		12.0	45.3	
Change Period (Y+Rc), s		6.5						6.0		4.0	6.0	
Max Green Setting (Gmax), s		48.5						27.0		8.0	39.3	
Max Q Clear Time (g_c+I1), s		38.0						30.3		8.1	31.2	
Green Ext Time (p_c), s		5.5						0.0		0.0	5.3	

Intersection Summary			
HCM 2010 Ctrl Delay		55.0	
HCM 2010 LOS		D	

Notes

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	70	1930	0	0	40	0
Number	1	6			3	18
Initial Q (Qb), veh	0	0			0	0
Ped-Bike Adj(A_pbT)	1.00				1.00	1.00
Parking Bus Adj	1.00	1.00			1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3			186.3	0.0
Lanes	0	3			1	0
Cap, veh/h	98	3220			0	0
Arrive On Green	0.31	0.31			0.00	0.00
Sat Flow, veh/h	0	3390			0	
Grp Volume(v), veh/h	74	2032			0.0	
Grp Sat Flow(s),veh/h/ln	0	1695				
Q Serve(g_s), s	0.0	37.8				
Cycle Q Clear(g_c), s	70.0	37.8				
Prop In Lane	1.00					
Lane Grp Cap(c), veh/h	98	3220				
V/C Ratio(X)	0.76	0.63				
Avail Cap(c_a), veh/h	98	3220				
HCM Platoon Ratio	0.33	0.33				
Upstream Filter(I)	0.47	0.47				
Uniform Delay (d), s/veh	60.3	14.2				
Incr Delay (d2), s/veh	22.6	0.5				
Initial Q Delay(d3),s/veh	0.0	0.0				
%ile Back of Q (50%), veh/ln	0.6	14.8				
Lane Grp Delay (d), s/veh	82.9	14.7				
Lane Grp LOS	F	B				
Approach Vol, veh/h		2106				
Approach Delay, s/veh		17.1				
Approach LOS		B				

Timer	
Assigned Phs	6
Phs Duration (G+Y+Rc), s	73.7
Change Period (Y+Rc), s	4.7
Max Green Setting (Gmax), s	69.0
Max Q Clear Time (g_c+I1), s	72.0
Green Ext Time (p_c), s	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	17.1
HCM 2010 LOS	B

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	70	1860	30	0	0	0	0	70	90	50	80	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	193.7	190.0	190.0	193.7	0.0
Lanes	0	3	0				0	1	0	0	1	0
Cap, veh/h	125	3537	60				0	201	258	162	239	0
Arrive On Green	0.22	0.22	0.22				0.00	0.26	0.25	0.09	0.09	0.00
Sat Flow, veh/h	187	5287	89				0	772	991	432	921	0
Grp Volume(v), veh/h	732	669	664				0	0	169	137	0	0
Grp Sat Flow(s),veh/h/ln	1853	1863	1847				0	0	1762	1353	0	0
Q Serve(g_s), s	35.4	31.7	31.8				0.0	0.0	7.9	4.3	0.0	0.0
Cycle Q Clear(g_c), s	35.4	31.7	31.8				0.0	0.0	7.9	12.2	0.0	0.0
Prop In Lane	0.10		0.05				0.00		0.56	0.39		0.00
Lane Grp Cap(c), veh/h	1240	1246	1236				0	0	458	402	0	0
V/C Ratio(X)	0.59	0.54	0.54				0.00	0.00	0.37	0.34	0.00	0.00
Avail Cap(c_a), veh/h	1240	1246	1236				0	0	458	402	0	0
HCM Platoon Ratio	0.33	0.33	0.33				1.00	1.00	1.00	0.33	0.33	1.00
Upstream Filter(I)	0.88	0.88	0.88				0.00	0.00	1.00	0.72	0.00	0.00
Uniform Delay (d), s/veh	26.7	25.3	25.3				0.0	0.0	30.5	39.4	0.0	0.0
Incr Delay (d2), s/veh	1.8	1.5	1.5				0.0	0.0	2.3	1.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	18.8	16.8	16.7				0.0	0.0	3.8	3.7	0.0	0.0
Lane Grp Delay (d), s/veh	28.5	26.7	26.8				0.0	0.0	32.8	41.1	0.0	0.0
Lane Grp LOS	C	C	C						C	D		
Approach Vol, veh/h		2064						169			137	
Approach Delay, s/veh		27.4						32.8			41.1	
Approach LOS		C						C			D	

Timer												
Assigned Phs		6						4			8	
Phs Duration (G+Y+Rc), s		70.7						29.3			29.3	
Change Period (Y+Rc), s		4.8						4.3			4.3	
Max Green Setting (Gmax), s		65.9						25.0			25.0	
Max Q Clear Time (g_c+I1), s		37.4						9.9			14.2	
Green Ext Time (p_c), s		9.4						0.8			0.7	

Intersection Summary												
HCM 2010 Ctrl Delay			28.5									
HCM 2010 LOS			C									

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	200	1780	80	0	0	0	0	740	300	250	1040	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	186.3	190.0	186.3	186.3	0.0
Lanes	0	3	0				0	2	0	1	2	0
Cap, veh/h	215	2044	94				0	982	398	257	1837	0
Arrive On Green	0.43	0.43	0.42				0.00	0.39	0.38	0.05	0.33	0.00
Sat Flow, veh/h	505	4799	220				0	2523	1022	1774	3725	0
Grp Volume(v), veh/h	768	706	695				0	575	520	263	1095	0
Grp Sat Flow(s),veh/h/ln	1838	1863	1824				0	1863	1682	1774	1863	0
Q Serve(g_s), s	39.7	33.7	34.0				0.0	26.3	26.4	7.0	23.6	0.0
Cycle Q Clear(g_c), s	39.7	33.7	34.0				0.0	26.3	26.4	7.0	23.6	0.0
Prop In Lane	0.27		0.12				0.00		0.61	1.00		0.00
Lane Grp Cap(c), veh/h	783	793	777				0	725	655	257	1837	0
V/C Ratio(X)	0.98	0.89	0.89				0.00	0.79	0.79	1.02	0.60	0.00
Avail Cap(c_a), veh/h	783	793	777				0	797	720	257	1982	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	0.67	0.67	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	0.61	0.61	0.00
Uniform Delay (d), s/veh	27.3	25.5	25.7				0.0	26.0	26.3	26.2	24.2	0.0
Incr Delay (d2), s/veh	27.9	14.3	14.9				0.0	5.1	5.6	49.5	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	24.0	18.4	18.5				0.0	13.0	11.9	3.5	11.3	0.0
Lane Grp Delay (d), s/veh	55.2	39.8	40.6				0.0	31.1	31.9	75.7	24.5	0.0
Lane Grp LOS	E	D	D					C	C	F	C	
Approach Vol, veh/h		2169						1095			1358	
Approach Delay, s/veh		45.5						31.5			34.4	
Approach LOS		D						C			C	

Timer												
Assigned Phs		6						4		3	8	
Phs Duration (G+Y+Rc), s		45.0						41.3		10.0	51.3	
Change Period (Y+Rc), s		5.0						4.8		3.0	4.8	
Max Green Setting (Gmax), s		40.0						40.2		7.0	50.2	
Max Q Clear Time (g_c+I1), s		41.7						28.4		9.0	25.6	
Green Ext Time (p_c), s		0.0						8.1		0.0	13.0	

Intersection Summary												
HCM 2010 Ctrl Delay			38.9									
HCM 2010 LOS			D									

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	210	2140	110	0	0	0	0	490	110	150	360	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	186.3	190.0	190.0	186.3	0.0
Lanes	0	3	0				0	2	0	0	2	0
Cap, veh/h	186	2026	107				0	1483	332	356	1227	0
Arrive On Green	0.42	0.42	0.41				0.00	0.50	0.49	0.16	0.17	0.00
Sat Flow, veh/h	443	4825	254				0	2949	660	574	1794	0
Grp Volume(v), veh/h	918	840	832				0	325	307	269	268	0
Grp Sat Flow(s),veh/h/ln	1841	1863	1818				0	1863	1746	1151	1863	0
Q Serve(g_s), s	42.0	42.0	42.0				0.0	10.5	10.7	0.1	12.6	0.0
Cycle Q Clear(g_c), s	42.0	42.0	42.0				0.0	10.5	10.7	50.3	12.6	0.0
Prop In Lane	0.24		0.14				0.00		0.38	0.87		0.00
Lane Grp Cap(c), veh/h	773	782	764				0	937	878	73	937	0
V/C Ratio(X)	1.19	1.07	1.09				0.00	0.35	0.35	3.68	0.29	0.00
Avail Cap(c_a), veh/h	773	782	764				0	937	878	73	937	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	0.33	0.33	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	0.96	0.96	0.00
Uniform Delay (d), s/veh	29.0	29.0	29.1				0.0	15.0	15.1	63.1	26.0	0.0
Incr Delay (d2), s/veh	97.4	53.7	59.5				0.0	1.0	1.1	1238.8	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	39.6	30.6	31.1				0.0	5.0	4.7	25.1	6.4	0.0
Lane Grp Delay (d), s/veh	126.4	82.7	88.6				0.0	16.0	16.2	1301.9	26.1	0.0
Lane Grp LOS	F	F	F					B	B	F	C	
Approach Vol, veh/h		2590						632			537	
Approach Delay, s/veh		100.1						16.1			664.0	
Approach LOS		F						B			F	

Timer					
Assigned Phs		6		4		3	8
Phs Duration (G+Y+Rc), s		46.0		54.0		0.0	54.0
Change Period (Y+Rc), s		5.0		4.7		4.0	4.7
Max Green Setting (Gmax), s		41.0		35.3		10.0	49.3
Max Q Clear Time (g_c+I1), s		44.0		12.7		0.0	52.3
Green Ext Time (p_c), s		0.0		6.2		0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	166.6
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	2360	40	0	0	0	0	0	30	90	60	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	186.3	190.0	186.3	186.3	0.0
Lanes	0	3	0				0	1	0	1	1	0
Cap, veh/h	0	3726	63				0	0	359	361	423	0
Arrive On Green	0.00	0.22	0.22				0.00	0.00	0.23	0.23	0.23	0.00
Sat Flow, veh/h	0	5480	92				0	0	1583	1372	1863	0
Grp Volume(v), veh/h	0	1686	840				0	0	32	95	63	0
Grp Sat Flow(s),veh/h/ln	0	1863	1846				0	0	1583	1372	1863	0
Q Serve(g_s), s	0.0	41.3	41.5				0.0	0.0	1.6	5.9	2.7	0.0
Cycle Q Clear(g_c), s	0.0	41.3	41.5				0.0	0.0	1.6	7.5	2.7	0.0
Prop In Lane	0.00		0.05				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	0	2533	1256				0	0	359	361	423	0
V/C Ratio(X)	0.00	0.67	0.67				0.00	0.00	0.09	0.26	0.15	0.00
Avail Cap(c_a), veh/h	0	2533	1256				0	0	359	361	423	0
HCM Platoon Ratio	0.33	0.33	0.33				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.09	0.09				0.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	28.4	28.5				0.0	0.0	30.5	33.4	30.9	0.0
Incr Delay (d2), s/veh	0.0	0.1	0.3				0.0	0.0	0.5	0.4	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.0	20.8	20.7				0.0	0.0	0.7	2.1	1.3	0.0
Lane Grp Delay (d), s/veh	0.0	28.5	28.8				0.0	0.0	31.0	33.8	31.1	0.0
Lane Grp LOS		C	C						C	C	C	
Approach Vol, veh/h		2526						32			158	
Approach Delay, s/veh		28.6						31.0			32.7	
Approach LOS		C						C			C	

Timer												
Assigned Phs		6						4			8	
Phs Duration (G+Y+Rc), s		73.0						27.0			27.0	
Change Period (Y+Rc), s		5.0						4.3			4.3	
Max Green Setting (Gmax), s		68.0						22.7			22.7	
Max Q Clear Time (g_c+I1), s		43.5						3.6			9.5	
Green Ext Time (p_c), s		16.5						0.6			0.5	

Intersection Summary			
HCM 2010 Ctrl Delay		28.9	
HCM 2010 LOS		C	

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	160	1940	60	0	0	0	0	200	60	190	160	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	186.3	190.0	190.0	186.3	0.0
Lanes	0	3	0				0	1	0	0	1	0
Cap, veh/h	209	2719	86				0	471	141	217	167	0
Arrive On Green	0.18	0.18	0.18				0.00	0.34	0.34	0.11	0.11	0.00
Sat Flow, veh/h	385	4998	158				0	1379	412	472	488	0
Grp Volume(v), veh/h	805	738	730				0	0	274	368	0	0
Grp Sat Flow(s),veh/h/ln	1844	1863	1835				0	0	1790	960	0	0
Q Serve(g_s), s	41.9	37.4	37.6				0.0	0.0	11.9	0.1	0.0	0.0
Cycle Q Clear(g_c), s	41.9	37.4	37.6				0.0	0.0	11.9	34.2	0.0	0.0
Prop In Lane	0.21		0.09				0.00		0.23	0.54		0.00
Lane Grp Cap(c), veh/h	1003	1013	998				0	0	612	384	0	0
V/C Ratio(X)	0.80	0.73	0.73				0.00	0.00	0.45	0.96	0.00	0.00
Avail Cap(c_a), veh/h	1003	1013	998				0	0	612	384	0	0
HCM Platoon Ratio	0.33	0.33	0.33				1.00	1.00	1.00	0.33	0.33	1.00
Upstream Filter(I)	0.55	0.55	0.55				0.00	0.00	1.00	0.80	0.00	0.00
Uniform Delay (d), s/veh	35.9	34.0	34.1				0.0	0.0	25.6	49.8	0.0	0.0
Incr Delay (d2), s/veh	3.9	2.6	2.7				0.0	0.0	2.4	31.9	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	22.0	19.6	19.4				0.0	0.0	5.7	3.4	0.0	0.0
Lane Grp Delay (d), s/veh	39.8	36.6	36.8				0.0	0.0	27.9	81.6	0.0	0.0
Lane Grp LOS	D	D	D						C	F		
Approach Vol, veh/h		2273						274			368	
Approach Delay, s/veh		37.8						27.9			81.6	
Approach LOS		D						C			F	

Timer				
Assigned Phs	6	4	3	8
Phs Duration (G+Y+Rc), s	60.0	40.0	0.0	40.0
Change Period (Y+Rc), s	5.6	5.8	3.0	5.8
Max Green Setting (Gmax), s	54.4	19.2	12.0	34.2
Max Q Clear Time (g_c+I1), s	43.9	13.9	0.0	36.2
Green Ext Time (p_c), s	6.5	1.2	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	42.4
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	130	2000	10	0	0	0	0	90	240	0	0	0
Number	1	6	16				7	4	14			
Initial Q (Qb), veh	0	0	0				0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00			
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00			
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	186.3	190.0			
Lanes	0	3	0				0	1	0			
Cap, veh/h	60	1966	10				0	158	420			
Arrive On Green	0.58	0.58	0.58				0.00	0.35	0.35			
Sat Flow, veh/h	0	3369	18				0	451	1200			
Grp Volume(v), veh/h	137	1059	1057				0	0	348			
Grp Sat Flow(s),veh/h/ln	0	1695	1692				0	0	1651			
Q Serve(g_s), s	0.0	70.0	70.0				0.0	0.0	20.8			
Cycle Q Clear(g_c), s	70.0	70.0	70.0				0.0	0.0	20.8			
Prop In Lane	1.00		0.01				0.00		0.73			
Lane Grp Cap(c), veh/h	60	989	987				0	0	578			
V/C Ratio(X)	2.28	1.07	1.07				0.00	0.00	0.60			
Avail Cap(c_a), veh/h	60	989	987				0	0	578			
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	1.00				0.00	0.00	1.00			
Uniform Delay (d), s/veh	60.0	25.0	25.0				0.0	0.0	32.1			
Incr Delay (d2), s/veh	626.7	49.5	49.7				0.0	0.0	4.6			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0			
%ile Back of Q (50%), veh/ln	12.3	41.9	41.9				0.0	0.0	9.3			
Lane Grp Delay (d), s/veh	686.7	74.5	74.7				0.0	0.0	36.7			
Lane Grp LOS	F	F	F						D			
Approach Vol, veh/h		2253						348				
Approach Delay, s/veh		111.8						36.7				
Approach LOS		F						D				

Timer	
Assigned Phs	6
Phs Duration (G+Y+Rc), s	74.0
Change Period (Y+Rc), s	4.0
Max Green Setting (Gmax), s	70.0
Max Q Clear Time (g_c+I1), s	72.0
Green Ext Time (p_c), s	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	101.8
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1980	100	0	0	0	0	0	0	2960	610	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.7	6.7							6.0	6.0	
Lane Util. Factor		0.91	1.00							0.86	0.86	
Frt		1.00	0.85							1.00	1.00	
Flt Protected		1.00	1.00							0.95	0.97	
Satd. Flow (prot)		4424	1425							2739	2797	
Flt Permitted		1.00	1.00							0.95	0.97	
Satd. Flow (perm)		4424	1425							2739	2797	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	2084	105	0	0	0	0	0	0	3116	642	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	0	0	16	16	0
Lane Group Flow (vph)	0	2084	76	0	0	0	0	0	0	2072	1654	0
Parking (#/hr)		0										
Turn Type		NA	Perm							Perm	NA	
Protected Phases		6									8	
Permitted Phases			6							8		
Actuated Green, G (s)		44.3	44.3							63.0	63.0	
Effective Green, g (s)		44.3	44.3							63.0	63.0	
Actuated g/C Ratio		0.37	0.37							0.52	0.52	
Clearance Time (s)		6.7	6.7							6.0	6.0	
Vehicle Extension (s)		2.0	2.0							2.0	2.0	
Lane Grp Cap (vph)		1633	526							1437	1468	
v/s Ratio Prot		c0.47										
v/s Ratio Perm			0.05							c0.76	0.59	
v/c Ratio		1.28	0.14							1.44	1.32dl	
Uniform Delay, d1		37.9	25.2							28.5	28.5	
Progression Factor		0.85	0.63							1.00	1.00	
Incremental Delay, d2		127.5	0.4							199.2	57.9	
Delay (s)		159.6	16.2							227.7	86.4	
Level of Service		F	B							F	F	
Approach Delay (s)		152.7			0.0			0.0			164.9	
Approach LOS		F			A			A			F	

Intersection Summary			
HCM 2000 Control Delay	160.4	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.37		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.7
Intersection Capacity Utilization	115.6%	ICU Level of Service	H
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	160	2600	210	0	0	0	0	260	250	150	440	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	171.0	167.6	171.0				0.0	167.6	167.6	167.6	167.6	0.0
Lanes	0	3	0				0	1	1	1	1	0
Cap, veh/h	198	3471	0				0	312	265	85	312	0
Arrive On Green	0.73	0.73	0.00				0.00	0.19	0.19	0.25	0.25	0.00
Sat Flow, veh/h	271	4745	0				0	1676	1425	778	1676	0
Grp Volume(v), veh/h	1030	1875	0				0	274	263	158	463	0
Grp Sat Flow(s),veh/h/ln	1663	1676	0				0	1676	1425	778	1676	0
Q Serve(g_s), s	48.8	38.1	0.0				0.0	17.8	20.6	3.0	20.8	0.0
Cycle Q Clear(g_c), s	48.8	38.1	0.0				0.0	17.8	20.6	20.8	20.8	0.0
Prop In Lane	0.16		0.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	1217	2453	0				0	312	265	85	312	0
V/C Ratio(X)	0.85	0.76	0.00				0.00	0.88	0.99	1.85	1.48	0.00
Avail Cap(c_a), veh/h	1339	2699	0				0	312	265	85	312	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.33	1.33	1.00
Upstream Filter(I)	1.00	1.00	0.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	10.6	9.1	0.0				0.0	44.3	45.4	52.1	42.1	0.0
Incr Delay (d2), s/veh	4.7	1.1	0.0				0.0	27.7	53.3	423.4	234.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	18.8	13.9	0.0				0.0	10.0	11.4	12.4	28.9	0.0
Lane Grp Delay (d), s/veh	15.3	10.3	0.0				0.0	71.9	98.7	475.5	276.4	0.0
Lane Grp LOS	B	B						E	F	F	F	
Approach Vol, veh/h		2905						537			621	
Approach Delay, s/veh		12.0						85.0			327.1	
Approach LOS		B						F			F	

Timer												
Assigned Phs		6						4			8	
Phs Duration (G+Y+Rc), s		86.3						25.5			25.5	
Change Period (Y+Rc), s		4.5						4.7			4.7	
Max Green Setting (Gmax), s		90.0						20.8			20.8	
Max Q Clear Time (g_c+I1), s		50.8						22.6			22.8	
Green Ext Time (p_c), s		31.0						0.0			0.0	

Intersection Summary			
HCM 2010 Ctrl Delay		69.8	
HCM 2010 LOS		E	

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	480	2390	300	0	0	0	0	970	90	140	230	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	171.0	166.0	171.0				0.0	166.0	171.0	171.0	166.0	0.0
Lanes	0	3	0				0	2	0	0	2	0
Cap, veh/h	368	1968	246				0	1090	101	77	1170	0
Arrive On Green	0.18	0.18	0.18				0.00	0.36	0.36	0.12	0.12	0.00
Sat Flow, veh/h	694	3707	463				0	2993	278	46	1511	0
Grp Volume(v), veh/h	1183	1077	1077				0	566	550	195	194	0
Grp Sat Flow(s),veh/h/ln	1626	1660	1578				0	1660	1611	1600	1660	0
Q Serve(g_s), s	63.7	63.7	63.7				0.0	39.5	39.5	0.1	12.9	0.0
Cycle Q Clear(g_c), s	63.7	63.7	63.7				0.0	39.5	39.5	43.7	12.9	0.0
Prop In Lane	0.43		0.29				0.00		0.17	1.00		0.00
Lane Grp Cap(c), veh/h	863	881	838				0	605	587	60	605	0
V/C Ratio(X)	1.37	1.22	1.29				0.00	0.94	0.94	3.24	0.32	0.00
Avail Cap(c_a), veh/h	863	881	838				0	605	587	60	605	0
HCM Platoon Ratio	0.33	0.33	0.33				1.00	1.00	1.00	0.33	0.33	1.00
Upstream Filter(I)	0.09	0.09	0.09				0.00	1.00	1.00	0.94	0.94	0.00
Uniform Delay (d), s/veh	49.5	49.5	49.5				0.0	36.8	36.8	74.6	39.2	0.0
Incr Delay (d2), s/veh	167.8	100.9	129.2				0.0	23.9	24.5	1048.0	1.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	68.6	53.7	57.6				0.0	20.7	20.2	17.5	6.1	0.0
Lane Grp Delay (d), s/veh	217.3	150.4	178.7				0.0	60.7	61.3	1122.6	40.5	0.0
Lane Grp LOS	F	F	F					E	E	F	D	
Approach Vol, veh/h		3337						1116			389	
Approach Delay, s/veh		183.2						61.0			581.6	
Approach LOS		F						E			F	

Timer					
Assigned Phs		6		4	3	8
Phs Duration (G+Y+Rc), s		70.0		50.0	0.0	50.0
Change Period (Y+Rc), s		6.3		6.3	3.0	6.3
Max Green Setting (Gmax), s		63.7		32.7	8.0	43.7
Max Q Clear Time (g_c+I1), s		65.7		41.5	0.0	45.7
Green Ext Time (p_c), s		0.0		0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	187.1
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	2260	580	0	0	0	0	0	0	530	600	0
Number	1	6	16							3	8	18
Initial Q (Qb), veh	0	0	0							0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00							1.00		1.00
Parking Bus Adj	1.00	1.00	1.00							1.00	1.00	1.00
Adj Sat Flow veh/h/ln	0.0	166.0	171.0							171.0	166.0	0.0
Lanes	0	3	0							0	2	0
Cap, veh/h	0	2743	646							60	332	0
Arrive On Green	0.00	0.23	0.23							0.07	0.07	0.00
Sat Flow, veh/h	0	3900	918							0	1511	0
Grp Volume(v), veh/h	0	1993	997							558	632	0
Grp Sat Flow(s),veh/h/ln	0	1660	1498							0	1511	0
Q Serve(g_s), s	0.0	69.0	78.5							0.0	26.4	0.0
Cycle Q Clear(g_c), s	0.0	69.0	78.5							26.4	26.4	0.0
Prop In Lane	0.00		0.61							1.00		0.00
Lane Grp Cap(c), veh/h	0	2335	1054							60	332	0
V/C Ratio(X)	0.00	0.85	0.95							9.30	1.90	0.00
Avail Cap(c_a), veh/h	0	2335	1054							60	332	0
HCM Platoon Ratio	1.00	0.33	0.33							0.33	0.33	1.00
Upstream Filter(I)	0.00	0.09	0.09							0.47	0.47	0.00
Uniform Delay (d), s/veh	0.0	40.2	43.8							68.8	55.6	0.0
Incr Delay (d2), s/veh	0.0	0.4	2.4							3750.6	410.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0							0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.0	31.4	32.8							64.5	48.8	0.0
Lane Grp Delay (d), s/veh	0.0	40.6	46.3							3819.4	466.6	0.0
Lane Grp LOS		D	D							F	F	
Approach Vol, veh/h		2990									1190	
Approach Delay, s/veh		42.5									2038.8	
Approach LOS		D									F	

Timer	
Assigned Phs	6
Phs Duration (G+Y+Rc), s	89.0
Change Period (Y+Rc), s	4.6
Max Green Setting (Gmax), s	84.4
Max Q Clear Time (g_c+I1), s	80.5
Green Ext Time (p_c), s	3.8

Intersection Summary	
HCM 2010 Ctrl Delay	610.8
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	390	2300	0	0	0	0	0	720	120	0	0	0
Number	1	6	16				7	4	14			
Initial Q (Qb), veh	0	0	0				0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00			
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00			
Adj Sat Flow veh/h/ln	171.0	166.0	0.0				0.0	166.0	171.0			
Lanes	0	3	0				0	3	0			
Cap, veh/h	64	2076	0				0	965	159			
Arrive On Green	0.23	0.23	0.00				0.00	0.23	0.23			
Sat Flow, veh/h	0	3022	0				0	4172	687			
Grp Volume(v), veh/h	411	2421	0				0	602	282			
Grp Sat Flow(s),veh/h/ln	0	1511	0				0	1660	1539			
Q Serve(g_s), s	0.0	77.4	0.0				0.0	19.2	19.4			
Cycle Q Clear(g_c), s	77.4	77.4	0.0				0.0	19.2	19.4			
Prop In Lane	1.00		0.00				0.00		0.45			
Lane Grp Cap(c), veh/h	64	2076	0				0	768	356			
V/C Ratio(X)	6.43	1.17	0.00				0.00	0.78	0.79			
Avail Cap(c_a), veh/h	64	2076	0				0	984	456			
HCM Platoon Ratio	0.33	0.33	1.00				1.00	1.00	1.00			
Upstream Filter(I)	0.17	0.17	0.00				0.00	1.00	1.00			
Uniform Delay (d), s/veh	82.3	43.6	0.0				0.0	40.7	40.8			
Incr Delay (d2), s/veh	2449.8	75.9	0.0				0.0	3.2	7.2			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0			
%ile Back of Q (50%), veh/ln	45.5	54.0	0.0				0.0	8.5	8.3			
Lane Grp Delay (d), s/veh	2532.0	119.4	0.0				0.0	43.9	48.0			
Lane Grp LOS	F	F						D	D			
Approach Vol, veh/h		2832						884				
Approach Delay, s/veh		469.6						45.2				
Approach LOS		F						D				

Timer	
Assigned Phs	6
Phs Duration (G+Y+Rc), s	82.0
Change Period (Y+Rc), s	4.6
Max Green Setting (Gmax), s	77.4
Max Q Clear Time (g_c+I1), s	79.4
Green Ext Time (p_c), s	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	368.6
HCM 2010 LOS	F

Notes

HCM Signalized Intersection Capacity Analysis
2243: SR 5 & SW 8 St

No Build
Timing Plan: 2020 AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	700	840	300	270	0	720	0	920	250	380	880	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.7	6.7		6.7		6.7		6.2	6.2	4.0	6.2	
Lane Util. Factor	0.97	0.95		1.00		1.00		0.95	1.00	0.97	0.95	
Frt	1.00	0.96		1.00		0.85		1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00		0.95		1.00		1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3060	3030		1577		1411		3154	1411	3060	3154	
Flt Permitted	0.95	1.00		0.10		1.00		1.00	1.00	0.95	1.00	
Satd. Flow (perm)	3060	3030		173		1411		3154	1411	3060	3154	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	737	884	316	284	0	758	0	968	263	400	926	0
RTOR Reduction (vph)	0	25	0	0	0	112	0	0	146	0	0	0
Lane Group Flow (vph)	737	1175	0	284	0	646	0	968	117	400	926	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Split	NA		D.Pm		custom		NA	Perm	Prot	NA	
Protected Phases	8	8						6		5	2	
Permitted Phases				8		4			6			
Actuated Green, G (s)	38.3	38.3		38.3		28.3		39.8	39.8	10.0	53.8	
Effective Green, g (s)	38.3	38.3		38.3		28.3		39.8	39.8	10.0	53.8	
Actuated g/C Ratio	0.27	0.27		0.27		0.20		0.28	0.28	0.07	0.38	
Clearance Time (s)	6.7	6.7		6.7		6.7		6.2	6.2	4.0	6.2	
Vehicle Extension (s)	3.0	3.0		3.0		3.0		3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	837	828		47		285		896	401	218	1212	
v/s Ratio Prot	0.24	0.39						c0.31		c0.13	0.29	
v/s Ratio Perm				c1.64		c0.46			0.08			
v/c Ratio	0.88	1.42		6.04		2.26		1.08	0.29	1.83	0.76	
Uniform Delay, d1	48.7	50.9		50.9		55.9		50.1	39.1	65.0	37.6	
Progression Factor	1.00	1.00		1.00		1.00		1.00	1.00	0.74	1.40	
Incremental Delay, d2	10.7	195.5		2314.1		580.3		54.2	1.8	388.8	3.5	
Delay (s)	59.3	246.3		2365.0		636.2		104.3	40.9	436.6	56.1	
Level of Service	E	F		F		F		F	D	F	E	
Approach Delay (s)		175.2			1107.4			90.8			170.9	
Approach LOS		F			F			F			F	

Intersection Summary			
HCM 2000 Control Delay	330.8	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	3.05		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	23.6
Intersection Capacity Utilization	116.3%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	80	280	110	750	1370	0	20	1580	520
Number				7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				171.0	166.0	171.0	166.0	166.0	171.0	166.0	166.0	166.0
Lanes				0	2	0	2	3	0	1	2	1
Cap, veh/h				94	340	140	776	3457	0	224	1517	645
Arrive On Green				0.18	0.18	0.18	0.51	1.00	0.00	0.02	0.46	0.46
Sat Flow, veh/h				517	1871	771	3067	4981	0	1581	3320	1411
Grp Volume(v), veh/h				266	0	229	789	1442	0	21	1663	547
Grp Sat Flow(s),veh/h/ln				1634	0	1524	1534	1660	0	1581	1660	1411
Q Serve(g_s), s				23.2	0.0	21.2	37.0	0.0	0.0	1.0	66.8	50.3
Cycle Q Clear(g_c), s				23.2	0.0	21.2	37.0	0.0	0.0	1.0	66.8	50.3
Prop In Lane				0.32		0.51	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h				297	0	277	776	3457	0	224	1517	645
V/C Ratio(X)				0.90	0.00	0.83	1.02	0.42	0.00	0.09	1.10	0.85
Avail Cap(c_a), veh/h				336	0	314	776	3457	0	383	1517	645
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.09	0.09	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh				58.5	0.0	57.7	36.1	0.0	0.0	20.6	39.7	35.2
Incr Delay (d2), s/veh				23.3	0.0	15.2	14.2	0.0	0.0	0.2	54.2	13.1
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				11.8	0.0	9.6	14.3	0.0	0.0	0.4	39.7	20.4
Lane Grp Delay (d), s/veh				81.8	0.0	72.8	50.4	0.0	0.0	20.8	94.0	48.4
Lane Grp LOS				F		E	F	A		C	F	D
Approach Vol, veh/h					495			2231			2231	
Approach Delay, s/veh					77.7			17.8			82.1	
Approach LOS					E			B			F	
Timer												
Assigned Phs					4		1	6		5	2	
Phs Duration (G+Y+Rc), s					33.3		40.0	107.7		5.3	73.0	
Change Period (Y+Rc), s					6.7		3.0	6.2		3.0	6.2	
Max Green Setting (Gmax), s					30.1		37.0	87.0		17.0	66.8	
Max Q Clear Time (g_c+I1), s					25.2		39.0	2.0		3.0	68.8	
Green Ext Time (p_c), s					1.3		0.0	70.1		0.0	0.0	
Intersection Summary												
HCM 2010 Ctrl Delay			52.7									
HCM 2010 LOS			D									
Notes												

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	0	1930	450	750	1130	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.2		4.2	4.2				
Lane Util. Factor					0.91		0.91	0.91				
Frt					0.97		1.00	1.00				
Flt Protected					1.00		0.95	0.99				
Satd. Flow (prot)					4404		1435	3005				
Flt Permitted					1.00		0.95	0.99				
Satd. Flow (perm)					4404		1435	3005				
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	0	2032	474	789	1189	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	9	0	6	6	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	2497	0	633	1333	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type					NA		Perm	NA				
Protected Phases					2			4				
Permitted Phases							4					
Actuated Green, G (s)					68.8		52.8	52.8				
Effective Green, g (s)					68.8		52.8	52.8				
Actuated g/C Ratio					0.53		0.41	0.41				
Clearance Time (s)					4.2		4.2	4.2				
Vehicle Extension (s)					3.0		3.0	3.0				
Lane Grp Cap (vph)					2330		582	1220				
v/s Ratio Prot					c0.57							
v/s Ratio Perm							0.44	0.44				
v/c Ratio					1.07		1.09	1.09				
Uniform Delay, d1					30.6		38.6	38.6				
Progression Factor					1.00		0.95	0.95				
Incremental Delay, d2					41.2		51.1	47.7				
Delay (s)					71.8		87.9	84.4				
Level of Service					E		F	F				
Approach Delay (s)		0.0			71.8			85.5			0.0	
Approach LOS		A			E			F			A	

Intersection Summary			
HCM 2000 Control Delay	77.9	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.08		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	8.4
Intersection Capacity Utilization	161.2%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	430	2390	0	0	0	0	0	1050	390
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					5.8						4.6	4.6
Lane Util. Factor					0.91						0.91	0.91
Frt					1.00						0.99	0.85
Flt Protected					0.99						1.00	1.00
Satd. Flow (prot)					4498						3005	1284
Flt Permitted					0.99						1.00	1.00
Satd. Flow (perm)					4498						3005	1284
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	453	2516	0	0	0	0	0	1105	411
RTOR Reduction (vph)	0	0	0	0	18	0	0	0	0	0	0	12
Lane Group Flow (vph)	0	0	0	0	2951	0	0	0	0	0	1146	358
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type				Perm	NA						NA	Perm
Protected Phases					2						8	
Permitted Phases				2								8
Actuated Green, G (s)					56.6						63.0	63.0
Effective Green, g (s)					56.6						63.0	63.0
Actuated g/C Ratio					0.44						0.48	0.48
Clearance Time (s)					5.8						4.6	4.6
Vehicle Extension (s)					3.0						3.0	3.0
Lane Grp Cap (vph)					1958						1456	622
v/s Ratio Prot											c0.38	
v/s Ratio Perm					0.66							0.28
v/c Ratio					1.51						0.79	0.58
Uniform Delay, d1					36.7						27.9	23.9
Progression Factor					1.00						1.00	1.00
Incremental Delay, d2					230.9						2.9	1.3
Delay (s)					267.6						30.8	25.2
Level of Service					F						C	C
Approach Delay (s)		0.0			267.6			0.0			29.4	
Approach LOS		A			F			A			C	

Intersection Summary			
HCM 2000 Control Delay	187.1	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.13		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	10.4
Intersection Capacity Utilization	106.5%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	130	2400	120	320	950	0	0	390	270
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				171.0	166.0	171.0	166.0	166.0	0.0	0.0	166.0	171.0
Lanes				0	3	0	1	2	0	0	2	0
Cap, veh/h				111	2168	110	327	1466	0	0	501	343
Arrive On Green				0.16	0.16	0.16	0.05	0.15	0.00	0.00	0.27	0.27
Sat Flow, veh/h				228	4473	227	1581	3320	0	0	1840	1259
Grp Volume(v), veh/h				990	902	898	337	1000	0	0	371	324
Grp Sat Flow(s),veh/h/ln				1649	1660	1620	1581	1660	0	0	1660	1438
Q Serve(g_s), s				63.0	63.0	63.0	19.0	37.1	0.0	0.0	27.2	27.6
Cycle Q Clear(g_c), s				63.0	63.0	63.0	19.0	37.1	0.0	0.0	27.2	27.6
Prop In Lane				0.14		0.14	1.00		0.00	0.00		0.88
Lane Grp Cap(c), veh/h				799	805	785	327	1466	0	0	452	392
V/C Ratio(X)				1.24	1.12	1.14	1.03	0.68	0.00	0.00	0.82	0.83
Avail Cap(c_a), veh/h				799	805	785	327	1466	0	0	452	392
HCM Platoon Ratio				0.33	0.33	0.33	0.33	0.33	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.09	0.09	0.09	0.09	0.09	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				54.6	54.6	54.6	37.1	46.9	0.0	0.0	44.3	44.4
Incr Delay (d2), s/veh				108.4	56.1	66.2	24.0	0.2	0.0	0.0	15.2	18.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				52.2	40.9	42.1	13.7	16.9	0.0	0.0	13.5	12.1
Lane Grp Delay (d), s/veh				163.0	110.7	120.8	61.1	47.1	0.0	0.0	59.5	62.5
Lane Grp LOS				F	F	F	F	D			E	E
Approach Vol, veh/h					2789			1337			695	
Approach Delay, s/veh					132.5			50.6			60.9	
Approach LOS					F			D			E	

Timer												
Assigned Phs					2		7	4			8	
Phs Duration (G+Y+Rc), s					68.0		22.0	62.0			40.0	
Change Period (Y+Rc), s					5.0		3.0	4.6			4.6	
Max Green Setting (Gmax), s					63.0		19.0	57.4			35.4	
Max Q Clear Time (g_c+I1), s					65.0		21.0	39.1			29.6	
Green Ext Time (p_c), s					0.0		0.0	11.2			4.5	

Intersection Summary												
HCM 2010 Ctrl Delay			99.5									
HCM 2010 LOS			F									

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	670	1730	360	140	400	0	0	0	0
Number				5	2	12	7	4	14			
Initial Q (Qb), veh				0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00			
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow veh/h/ln				171.0	167.6	171.0	167.6	167.6	0.0			
Lanes				0	3	0	1	1	0			
Cap, veh/h				55	1667	335	55	435	0			
Arrive On Green				0.22	0.22	0.22	0.52	0.52	0.00			
Sat Flow, veh/h				0	2468	496	1597	1676	0			
Grp Volume(v), veh/h				705	1101	1099	147	421	0			
Grp Sat Flow(s),veh/h/ln				0	1526	1438	1597	1676	0			
Q Serve(g_s), s				0.0	87.8	87.8	0.0	31.6	0.0			
Cycle Q Clear(g_c), s				87.8	87.8	87.8	33.7	31.6	0.0			
Prop In Lane				1.00		0.34	1.00		0.00			
Lane Grp Cap(c), veh/h				55	1030	971	55	435	0			
V/C Ratio(X)				12.73	1.07	1.13	2.65	0.97	0.00			
Avail Cap(c_a), veh/h				55	1030	971	55	435	0			
HCM Platoon Ratio				0.33	0.33	0.33	2.00	2.00	1.00			
Upstream Filter(I)				0.09	0.09	0.09	0.81	0.81	0.00			
Uniform Delay (d), s/veh				94.4	50.5	50.5	48.2	30.8	0.0			
Incr Delay (d2), s/veh				5281.3	33.0	60.7	784.2	31.7	0.0			
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0			
%ile Back of Q (50%), veh/ln				83.2	46.4	51.2	13.8	15.2	0.0			
Lane Grp Delay (d), s/veh				5375.7	83.5	111.3	832.4	62.5	0.0			
Lane Grp LOS				F	F	F	F	E				
Approach Vol, veh/h					2905			568				
Approach Delay, s/veh					1378.3			261.8				
Approach LOS					F			F				

Timer	
Assigned Phs	2	4
Phs Duration (G+Y+Rc), s	92.0	38.0
Change Period (Y+Rc), s	4.2	4.3
Max Green Setting (Gmax), s	87.8	33.7
Max Q Clear Time (g_c+I1), s	89.8	35.7
Green Ext Time (p_c), s	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	1195.7
HCM 2010 LOS	F

Notes

Movement	WBL	WBT	SBT	SBR	SWL	SWR
Lane Configurations						
Volume (vph)	460	1300	420	120	1680	490
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.5	6.5	7.0		7.0	7.0
Lane Util. Factor	0.91	0.91	0.95		0.97	0.91
Frt	1.00	1.00	0.97		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1449	3046	3079		3088	1297
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	1449	3046	3079		3088	1297
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	484	1368	442	126	1768	516
RTOR Reduction (vph)	61	61	20	0	0	0
Lane Group Flow (vph)	375	1355	548	0	1820	464
Turn Type	Perm	NA	NA		NA	Perm
Protected Phases		2	9		8	
Permitted Phases	2					8
Actuated Green, G (s)	43.5	43.5	11.0		55.0	55.0
Effective Green, g (s)	43.5	43.5	11.0		55.0	55.0
Actuated g/C Ratio	0.33	0.33	0.08		0.42	0.42
Clearance Time (s)	6.5	6.5	7.0		7.0	7.0
Vehicle Extension (s)	1.0	1.0	3.0		3.0	3.0
Lane Grp Cap (vph)	484	1019	260		1306	548
v/s Ratio Prot			c0.18		c0.59	
v/s Ratio Perm	0.26	0.44				0.36
v/c Ratio	0.77	1.33	2.11		1.39	0.85
Uniform Delay, d1	38.8	43.2	59.5		37.5	33.7
Progression Factor	1.14	1.12	1.00		1.00	1.00
Incremental Delay, d2	4.6	150.9	511.1		181.9	11.6
Delay (s)	48.8	199.4	570.6		219.4	45.3
Level of Service	D	F	F		F	D
Approach Delay (s)		164.0	570.6		184.0	
Approach LOS		F	F		F	

Intersection Summary			
HCM 2000 Control Delay	222.8	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.44		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	20.5
Intersection Capacity Utilization	133.1%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	90	1830	90	100	210	0	0	180	70
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	186.3	190.0	190.0	186.3	0.0	0.0	193.7	190.0
Lanes				0	3	0	0	1	0	0	1	0
Cap, veh/h				140	3020	153	138	262	0	0	413	162
Arrive On Green				0.60	0.60	0.59	0.10	0.10	0.00	0.00	0.31	0.31
Sat Flow, veh/h				234	5042	256	312	843	0	0	1326	519
Grp Volume(v), veh/h				753	688	675	326	0	0	0	0	263
Grp Sat Flow(s),veh/h/ln				1851	1863	1818	1155	0	0	0	0	1846
Q Serve(g_s), s				32.2	27.5	27.8	20.3	0.0	0.0	0.0	0.0	13.4
Cycle Q Clear(g_c), s				32.2	27.5	27.8	33.7	0.0	0.0	0.0	0.0	13.4
Prop In Lane				0.13		0.14	0.32		0.00	0.00		0.28
Lane Grp Cap(c), veh/h				1109	1116	1089	400	0	0	0	0	575
V/C Ratio(X)				0.68	0.62	0.62	0.81	0.00	0.00	0.00	0.00	0.46
Avail Cap(c_a), veh/h				1109	1116	1089	437	0	0	0	0	619
HCM Platoon Ratio				1.00	1.00	1.00	0.33	0.33	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.09	0.09	0.09	0.94	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				15.9	14.9	15.0	54.1	0.0	0.0	0.0	0.0	32.4
Incr Delay (d2), s/veh				0.3	0.2	0.2	9.6	0.0	0.0	0.0	0.0	0.4
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				14.1	12.1	11.9	11.4	0.0	0.0	0.0	0.0	6.4
Lane Grp Delay (d), s/veh				16.2	15.2	15.3	63.7	0.0	0.0	0.0	0.0	32.8
Lane Grp LOS				B	B	B	E					C
Approach Vol, veh/h					2116			326			263	
Approach Delay, s/veh					15.6			63.7			32.8	
Approach LOS					B			E			C	

Timer												
Assigned Phs					2			4			8	
Phs Duration (G+Y+Rc), s					75.0			42.2			42.2	
Change Period (Y+Rc), s					5.8			5.7			5.7	
Max Green Setting (Gmax), s					69.2			39.3			39.3	
Max Q Clear Time (g_c+I1), s					34.2			35.7			15.4	
Green Ext Time (p_c), s					10.4			0.8			1.9	

Intersection Summary			
HCM 2010 Ctrl Delay			23.0
HCM 2010 LOS			C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	180	1900	130	200	550	0	0	570	120
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99
Adj Sat Flow veh/h/ln				190.0	186.3	190.0	190.0	186.3	0.0	0.0	178.8	190.0
Lanes				0	3	0	0	2	0	0	2	0
Cap, veh/h				177	1997	140	314	1241	0	0	1429	299
Arrive On Green				0.42	0.42	0.41	0.98	1.00	0.00	0.00	0.50	0.49
Sat Flow, veh/h				421	4754	333	511	1727	0	0	2858	599
Grp Volume(v), veh/h				826	758	742	395	395	0	0	375	351
Grp Sat Flow(s),veh/h/ln				1842	1863	1804	1131	1863	0	0	1788	1668
Q Serve(g_s), s				50.4	47.7	48.6	0.1	0.0	0.0	0.0	15.9	16.1
Cycle Q Clear(g_c), s				50.4	47.7	48.6	60.0	0.0	0.0	0.0	15.9	16.1
Prop In Lane				0.23		0.18	0.95		0.00	0.00		0.36
Lane Grp Cap(c), veh/h				774	782	758	60	931	0	0	894	834
V/C Ratio(X)				1.07	0.97	0.98	6.57	0.42	0.00	0.00	0.42	0.42
Avail Cap(c_a), veh/h				774	782	758	60	931	0	0	894	834
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	0.93	0.93	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				34.8	34.0	34.4	29.8	0.0	0.0	0.0	19.0	19.1
Incr Delay (d2), s/veh				52.2	25.3	28.0	2538.0	1.3	0.0	0.0	1.4	1.6
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				34.4	27.8	28.0	44.4	0.3	0.0	0.0	7.3	6.9
Lane Grp Delay (d), s/veh				87.0	59.4	62.4	2567.8	1.3	0.0	0.0	20.4	20.7
Lane Grp LOS				F	E	E	F	A			C	C
Approach Vol, veh/h					2326			790			726	
Approach Delay, s/veh					70.2			1284.6			20.6	
Approach LOS					E			F			C	

Timer												
Assigned Phs					2		7	4			8	
Phs Duration (G+Y+Rc), s					55.0		0.0	65.0			65.0	
Change Period (Y+Rc), s					5.6		5.0	6.0			6.0	
Max Green Setting (Gmax), s					49.4		13.0	59.0			41.0	
Max Q Clear Time (g_c+I1), s					52.4		0.0	62.0			18.1	
Green Ext Time (p_c), s					0.0		0.0	0.0			9.3	

Intersection Summary		
HCM 2010 Ctrl Delay		310.5
HCM 2010 LOS		F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	70	2040	0	0	0	0	0	50	30
Number				5	2	12				3	8	18
Initial Q (Qb), veh				0	0	0				0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00				1.00		1.00
Parking Bus Adj				1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	186.3	0.0				0.0	193.7	190.0
Lanes				0	3	0				0	1	0
Cap, veh/h				60	2543	0				0	208	125
Arrive On Green				0.25	0.25	0.00				0.00	0.18	0.18
Sat Flow, veh/h				0	3390	0				0	1133	684
Grp Volume(v), veh/h				74	2147	0				0	0	85
Grp Sat Flow(s),veh/h/ln				0	1695	0				0	0	1817
Q Serve(g_s), s				0.0	72.3	0.0				0.0	0.0	4.8
Cycle Q Clear(g_c), s				90.0	72.3	0.0				0.0	0.0	4.8
Prop In Lane				1.00		0.00				0.00		0.38
Lane Grp Cap(c), veh/h				60	2543	0				0	0	333
V/C Ratio(X)				1.23	0.84	0.00				0.00	0.00	0.26
Avail Cap(c_a), veh/h				60	2543	0				0	0	333
HCM Platoon Ratio				0.33	0.33	1.00				1.00	1.00	1.00
Upstream Filter(I)				0.09	0.09	0.00				0.00	0.00	1.00
Uniform Delay (d), s/veh				90.2	38.5	0.0				0.0	0.0	42.0
Incr Delay (d2), s/veh				117.7	0.3	0.0				0.0	0.0	1.8
Initial Q Delay(d3),s/veh				0.0	0.0	0.0				0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				3.9	33.2	0.0				0.0	0.0	2.4
Lane Grp Delay (d), s/veh				207.9	38.8	0.0				0.0	0.0	43.8
Lane Grp LOS				F	D							D
Approach Vol, veh/h					2221						85	
Approach Delay, s/veh					44.5						43.8	
Approach LOS					D						D	

Timer	
Assigned Phs	2	8
Phs Duration (G+Y+Rc), s	94.0	26.0
Change Period (Y+Rc), s	5.0	4.0
Max Green Setting (Gmax), s	89.0	22.0
Max Q Clear Time (g_c+I1), s	92.0	6.8
Green Ext Time (p_c), s	0.0	0.2

Intersection Summary	
HCM 2010 Ctrl Delay	44.4
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	220	1700	120	120	630	0	0	980	130
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	186.3	190.0	186.3	186.3	0.0	0.0	186.3	190.0
Lanes				0	3	0	1	2	0	0	2	0
Cap, veh/h				199	1641	118	277	2179	0	0	1617	214
Arrive On Green				0.12	0.12	0.11	0.10	1.00	0.00	0.00	0.50	0.50
Sat Flow, veh/h				559	4610	332	1774	3725	0	0	3223	427
Grp Volume(v), veh/h				762	701	684	126	663	0	0	596	573
Grp Sat Flow(s),veh/h/ln				1835	1863	1804	1774	1863	0	0	1863	1787
Q Serve(g_s), s				42.7	42.7	42.7	4.0	0.0	0.0	0.0	28.1	28.2
Cycle Q Clear(g_c), s				42.7	42.7	42.7	4.0	0.0	0.0	0.0	28.1	28.2
Prop In Lane				0.30		0.18	1.00		0.00	0.00		0.24
Lane Grp Cap(c), veh/h				653	663	642	277	2179	0	0	934	897
V/C Ratio(X)				1.17	1.06	1.07	0.45	0.30	0.00	0.00	0.64	0.64
Avail Cap(c_a), veh/h				653	663	642	277	2179	0	0	934	897
HCM Platoon Ratio				0.33	0.33	0.33	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.77	0.77	0.77	0.29	0.29	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				53.0	53.0	53.0	15.9	0.0	0.0	0.0	21.9	21.9
Incr Delay (d2), s/veh				87.6	47.1	50.0	0.1	0.1	0.0	0.0	3.3	3.5
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				37.3	30.4	30.0	1.6	0.0	0.0	0.0	13.6	13.3
Lane Grp Delay (d), s/veh				140.6	100.1	103.0	16.0	0.1	0.0	0.0	25.2	25.4
Lane Grp LOS				F	F	F	B	A			C	C
Approach Vol, veh/h					2147			789			1169	
Approach Delay, s/veh					115.4			2.6			25.3	
Approach LOS					F			A			C	

Timer												
Assigned Phs					2		7	4			8	
Phs Duration (G+Y+Rc), s					46.0		9.0	74.0			65.0	
Change Period (Y+Rc), s					4.3		4.2	4.8			4.8	
Max Green Setting (Gmax), s					41.7		4.8	69.2			60.2	
Max Q Clear Time (g_c+I1), s					44.7		6.0	2.0			30.2	
Green Ext Time (p_c), s					0.0		0.0	2.1			2.1	

Intersection Summary												
HCM 2010 Ctrl Delay			68.1									
HCM 2010 LOS			E									

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	80	1810	40	70	70	0	0	100	50
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	186.3	190.0	190.0	186.3	0.0	0.0	186.3	190.0
Lanes				0	3	0	0	1	0	0	1	0
Cap, veh/h				153	3705	84	138	121	0	0	225	114
Arrive On Green				0.23	0.23	0.23	0.06	0.06	0.00	0.00	0.19	0.18
Sat Flow, veh/h				216	5222	119	432	627	0	0	1169	590
Grp Volume(v), veh/h				720	659	652	148	0	0	0	0	158
Grp Sat Flow(s),veh/h/ln				1852	1863	1842	1059	0	0	0	0	1759
Q Serve(g_s), s				33.8	30.3	30.4	7.3	0.0	0.0	0.0	0.0	7.9
Cycle Q Clear(g_c), s				33.8	30.3	30.4	15.2	0.0	0.0	0.0	0.0	7.9
Prop In Lane				0.12		0.06	0.50		0.00	0.00		0.34
Lane Grp Cap(c), veh/h				1314	1322	1307	259	0	0	0	0	339
V/C Ratio(X)				0.55	0.50	0.50	0.57	0.00	0.00	0.00	0.00	0.47
Avail Cap(c_a), veh/h				1314	1322	1307	573	0	0	0	0	713
HCM Platoon Ratio				0.33	0.33	0.33	0.33	0.33	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.09	0.09	0.09	0.97	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				24.0	22.6	22.7	45.7	0.0	0.0	0.0	0.0	35.6
Incr Delay (d2), s/veh				0.1	0.1	0.1	1.4	0.0	0.0	0.0	0.0	0.7
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				17.0	15.3	15.2	4.0	0.0	0.0	0.0	0.0	3.6
Lane Grp Delay (d), s/veh				24.1	22.7	22.8	47.2	0.0	0.0	0.0	0.0	36.3
Lane Grp LOS				C	C	C	D					D
Approach Vol, veh/h					2031			148			158	
Approach Delay, s/veh					23.2			47.2			36.3	
Approach LOS					C			D			D	

Timer	
Assigned Phs	2 4 8
Phs Duration (G+Y+Rc), s	75.0 24.0 24.0
Change Period (Y+Rc), s	5.8 5.9 5.9
Max Green Setting (Gmax), s	69.2 39.1 39.1
Max Q Clear Time (g_c+I1), s	35.8 17.2 9.9
Green Ext Time (p_c), s	9.5 0.9 0.9

Intersection Summary	
HCM 2010 Ctrl Delay	25.6
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	280	1420	200	100	770	0	0	850	80
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	186.3	190.0	186.3	186.3	0.0	0.0	186.3	190.0
Lanes				0	3	0	1	2	0	0	2	0
Cap, veh/h				354	1923	277	246	1594	0	0	1034	97
Arrive On Green				0.47	0.47	0.46	0.12	0.57	0.00	0.00	0.31	0.30
Sat Flow, veh/h				755	4100	591	1774	3725	0	0	3355	315
Grp Volume(v), veh/h				713	660	628	105	811	0	0	497	482
Grp Sat Flow(s),veh/h/ln				1825	1863	1758	1774	1863	0	0	1863	1807
Q Serve(g_s), s				37.0	31.7	32.1	4.1	14.3	0.0	0.0	27.3	27.4
Cycle Q Clear(g_c), s				37.0	31.7	32.1	4.1	14.3	0.0	0.0	27.3	27.4
Prop In Lane				0.41		0.34	1.00		0.00	0.00		0.17
Lane Grp Cap(c), veh/h				856	874	825	246	1594	0	0	574	557
V/C Ratio(X)				0.83	0.76	0.76	0.43	0.51	0.00	0.00	0.87	0.87
Avail Cap(c_a), veh/h				1046	1068	1008	246	1594	0	0	574	557
HCM Platoon Ratio				1.00	1.00	1.00	1.33	1.33	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	0.32	0.32	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				25.1	23.7	24.0	24.7	16.5	0.0	0.0	35.4	35.5
Incr Delay (d2), s/veh				9.3	6.0	6.6	1.8	0.1	0.0	0.0	15.9	16.3
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				18.6	15.8	15.3	1.8	6.0	0.0	0.0	15.5	15.1
Lane Grp Delay (d), s/veh				34.5	29.8	30.6	26.5	16.6	0.0	0.0	51.4	51.9
Lane Grp LOS				C	C	C	C	B			D	D
Approach Vol, veh/h					2001			916			979	
Approach Delay, s/veh					31.7			17.7			51.6	
Approach LOS					C			B			D	

Timer												
Assigned Phs					2		7	4			8	
Phs Duration (G+Y+Rc), s					56.7		13.0	52.0			39.0	
Change Period (Y+Rc), s					6.7		3.0	6.5			6.5	
Max Green Setting (Gmax), s					61.3		10.0	42.5			32.5	
Max Q Clear Time (g_c+I1), s					39.0		6.1	16.3			29.4	
Green Ext Time (p_c), s					11.0		0.1	10.0			2.3	

Intersection Summary		
HCM 2010 Ctrl Delay		33.4
HCM 2010 LOS		C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Volume (vph)	0	0	0	860	770	100	130	240	0	0	340	320
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	10	12	11	10	12	12	13	12
Total Lost time (s)				6.7	6.7		6.5	6.5			4.0	
Lane Util. Factor				0.91	0.91		1.00	0.95			0.95	
Frt				1.00	0.99		1.00	1.00			0.93	
Flt Protected				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (prot)				1610	3080		1711	3303			3391	
Flt Permitted				0.95	0.99		0.28	1.00			1.00	
Satd. Flow (perm)				1610	3080		509	3303			3391	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	905	811	105	137	253	0	0	358	337
RTOR Reduction (vph)	0	0	0	0	5	0	0	0	0	0	65	0
Lane Group Flow (vph)	0	0	0	516	1300	0	137	253	0	0	630	0
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					2			4			8	
Permitted Phases				2			4					
Actuated Green, G (s)				57.3	57.3		49.5	49.5			52.0	
Effective Green, g (s)				57.3	57.3		49.5	49.5			52.0	
Actuated g/C Ratio				0.48	0.48		0.41	0.41			0.43	
Clearance Time (s)				6.7	6.7		6.5	6.5			4.0	
Vehicle Extension (s)				2.5	2.5		2.0	2.0			2.5	
Lane Grp Cap (vph)				768	1470		209	1362			1469	
v/s Ratio Prot								0.08			0.19	
v/s Ratio Perm				0.32	0.42		c0.27					
v/c Ratio				0.67	0.88		0.66	0.19			0.43	
Uniform Delay, d1				24.1	28.3		28.4	22.4			23.7	
Progression Factor				0.33	0.41		1.00	1.00			1.00	
Incremental Delay, d2				3.1	5.6		14.9	0.3			0.9	
Delay (s)				11.2	17.4		43.3	22.7			24.6	
Level of Service				B	B		D	C			C	
Approach Delay (s)		0.0			15.6			30.0			24.6	
Approach LOS		A			B			C			C	

Intersection Summary			
HCM 2000 Control Delay	19.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	13.2
Intersection Capacity Utilization	74.2%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis
3447: SW 27 AVE & SW 7 St

No Build
Timing Plan: 2020 PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	120	0	40	260	430	330	0	1350	0	0	1400	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	9	12	9	11	11	11	12	10	12	12	10	12
Total Lost time (s)	3.9		3.9	3.9	3.9	3.9		3.6			4.0	
Lane Util. Factor	1.00		1.00	0.97	1.00	1.00		0.91			0.86	
Frt	1.00		0.85	1.00	1.00	0.85		1.00			1.00	
Flt Protected	0.95		1.00	0.95	1.00	1.00		1.00			1.00	
Satd. Flow (prot)	1593		1425	3319	1801	1531		4746			5968	
Flt Permitted	0.14		1.00	0.95	1.00	1.00		1.00			1.00	
Satd. Flow (perm)	230		1425	3319	1801	1531		4746			5968	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	126	0	42	274	453	347	0	1421	0	0	1474	21
RTOR Reduction (vph)	0	0	38	0	0	146	0	0	0	0	1	0
Lane Group Flow (vph)	126	0	4	274	453	201	0	1421	0	0	1494	0
Turn Type	D.Pm		custom	Split	NA	Perm		NA			NA	
Protected Phases			8	4	4			6			2	
Permitted Phases	4					4						
Actuated Green, G (s)	28.1		12.1	28.1	28.1	28.1		75.4			75.0	
Effective Green, g (s)	29.1		13.1	29.1	29.1	29.1		76.4			76.0	
Actuated g/C Ratio	0.22		0.10	0.22	0.22	0.22		0.59			0.58	
Clearance Time (s)	4.9		4.9	4.9	4.9	4.9		4.6			5.0	
Vehicle Extension (s)	2.5		2.5	2.5	2.5	2.5		2.5			2.5	
Lane Grp Cap (vph)	51		143	742	403	342		2789			3488	
v/s Ratio Prot			c0.00	0.08	0.25			c0.30			0.25	
v/s Ratio Perm	c0.55					0.13						
v/c Ratio	2.47		0.03	0.37	1.12	0.59		0.51			0.43	
Uniform Delay, d1	50.5		52.7	42.7	50.5	45.1		15.8			15.0	
Progression Factor	1.00		1.00	1.00	1.00	1.00		0.06			1.00	
Incremental Delay, d2	716.5		0.4	1.4	83.0	7.2		0.2			0.4	
Delay (s)	767.0		53.1	44.1	133.5	52.3		1.1			15.3	
Level of Service	F		D	D	F	D		A			B	
Approach Delay (s)		588.5			84.5			1.1			15.3	
Approach LOS		F			F			A			B	

Intersection Summary			
HCM 2000 Control Delay	51.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	11.8
Intersection Capacity Utilization	65.4%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	1070	50	0	1360	40	190	1420	270	310	1400	150
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	0.0	186.3	190.0	0.0	186.3	190.0	186.3	186.3	190.0	186.3	186.3	186.3
Lanes	0	2	0	0	2	0	1	3	0	1	2	1
Cap, veh/h	0	1339	63	0	1366	40	247	1828	346	278	1607	683
Arrive On Green	0.00	0.38	0.37	0.00	0.38	0.37	0.08	0.40	0.39	0.22	0.86	0.86
Sat Flow, veh/h	0	3530	166	0	3601	105	1774	4570	865	1774	3725	1583
Grp Volume(v), veh/h	0	594	585	0	740	734	200	1218	561	326	1474	158
Grp Sat Flow(s),veh/h/ln	0	1863	1833	0	1863	1844	1774	1863	1710	1774	1863	1583
Q Serve(g_s), s	0.0	37.8	37.8	0.0	49.3	49.3	8.8	37.9	38.2	14.5	33.9	2.2
Cycle Q Clear(g_c), s	0.0	37.8	37.8	0.0	49.3	49.3	8.8	37.9	38.2	14.5	33.9	2.2
Prop In Lane	0.00		0.09	0.00		0.06	1.00		0.51	1.00		1.00
Lane Grp Cap(c), veh/h	0	706	695	0	706	699	247	1490	684	278	1607	683
V/C Ratio(X)	0.00	0.84	0.84	0.00	1.05	1.05	0.81	0.82	0.82	1.17	0.92	0.23
Avail Cap(c_a), veh/h	0	706	695	0	706	699	302	1490	684	278	1607	683
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	0.91
Uniform Delay (d), s/veh	0.0	36.8	36.8	0.0	40.3	40.4	28.0	34.8	35.1	30.8	7.4	5.2
Incr Delay (d2), s/veh	0.0	11.6	11.8	0.0	46.9	47.9	10.5	5.1	10.6	106.1	9.1	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.0	20.1	19.8	0.0	32.5	32.4	7.5	18.8	18.4	17.0	5.7	0.9
Lane Grp Delay (d), s/veh	0.0	48.4	48.6	0.0	87.2	88.3	38.5	39.8	45.7	136.9	16.5	6.0
Lane Grp LOS		D	D		F	F	D	D	D	F	B	A
Approach Vol, veh/h		1179			1474			1979			1958	
Approach Delay, s/veh		48.5			87.7			41.4			35.7	
Approach LOS		D			F			D			D	
Timer												
Assigned Phs		6			2		7	4		3	8	
Phs Duration (G+Y+Rc), s		55.0			55.0		13.9	57.0		18.0	61.1	
Change Period (Y+Rc), s		6.7			6.7		3.0	6.0		3.0	6.0	
Max Green Setting (Gmax), s		48.3			48.3		15.0	51.0		15.0	51.0	
Max Q Clear Time (g_c+I1), s		39.8			51.3		10.8	40.2		16.5	35.9	
Green Ext Time (p_c), s		6.1			0.0		0.2	9.2		0.0	12.2	
Intersection Summary												
HCM 2010 Ctrl Delay			51.3									
HCM 2010 LOS			D									
Notes												

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	50	1620	30	0	0	0	0	110	50	60	100	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	186.3	190.0	190.0	186.3	0.0
Lanes	0	3	0				0	1	0	0	1	0
Cap, veh/h	112	3821	74				0	221	101	100	148	0
Arrive On Green	0.71	0.72	0.71				0.00	0.18	0.18	0.18	0.18	0.00
Sat Flow, veh/h	155	5305	103				0	1212	554	306	813	0
Grp Volume(v), veh/h	635	580	575				0	0	169	168	0	0
Grp Sat Flow(s),veh/h/ln	1855	1863	1845				0	0	1765	1118	0	0
Q Serve(g_s), s	16.2	14.1	14.1				0.0	0.0	9.6	7.8	0.0	0.0
Cycle Q Clear(g_c), s	16.2	14.1	14.1				0.0	0.0	9.6	17.4	0.0	0.0
Prop In Lane	0.08		0.06				0.00		0.31	0.37		0.00
Lane Grp Cap(c), veh/h	1336	1342	1329				0	0	322	249	0	0
V/C Ratio(X)	0.48	0.43	0.43				0.00	0.00	0.52	0.68	0.00	0.00
Avail Cap(c_a), veh/h	1336	1342	1329				0	0	460	369	0	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	6.6	6.3	6.3				0.0	0.0	41.1	45.1	0.0	0.0
Incr Delay (d2), s/veh	1.2	1.0	1.0				0.0	0.0	1.3	3.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	7.2	6.2	6.1				0.0	0.0	4.4	4.9	0.0	0.0
Lane Grp Delay (d), s/veh	7.9	7.3	7.4				0.0	0.0	42.4	48.3	0.0	0.0
Lane Grp LOS	A	A	A						D	D		
Approach Vol, veh/h		1790						169			168	
Approach Delay, s/veh		7.5						42.4			48.3	
Approach LOS		A						D			D	

Timer												
Assigned Phs		6						4			8	
Phs Duration (G+Y+Rc), s		85.0						26.3			26.3	
Change Period (Y+Rc), s		5.8						6.0			6.0	
Max Green Setting (Gmax), s		79.2						29.0			29.0	
Max Q Clear Time (g_c+I1), s		18.2						11.6			19.4	
Green Ext Time (p_c), s		11.6						1.2			0.9	

Intersection Summary												
HCM 2010 Ctrl Delay			13.5									
HCM 2010 LOS			B									

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	150	1690	70	0	0	0	0	650	150	60	1170	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	186.3	190.0	186.3	186.3	0.0
Lanes	0	3	0				0	2	0	1	2	0
Cap, veh/h	219	2634	113				0	876	202	174	1372	0
Arrive On Green	0.18	0.18	0.18				0.00	0.30	0.29	0.07	0.74	0.00
Sat Flow, veh/h	408	4912	210				0	2930	676	1774	3725	0
Grp Volume(v), veh/h	713	655	644				0	435	407	63	1232	0
Grp Sat Flow(s),veh/h/ln	1842	1863	1826				0	1863	1743	1774	1863	0
Q Serve(g_s), s	43.9	39.4	39.5				0.0	25.7	25.7	2.9	31.0	0.0
Cycle Q Clear(g_c), s	43.9	39.4	39.5				0.0	25.7	25.7	2.9	31.0	0.0
Prop In Lane	0.22		0.11				0.00		0.39	1.00		0.00
Lane Grp Cap(c), veh/h	988	999	979				0	557	521	174	1372	0
V/C Ratio(X)	0.72	0.66	0.66				0.00	0.78	0.78	0.36	0.90	0.00
Avail Cap(c_a), veh/h	988	999	979				0	557	521	228	1372	0
HCM Platoon Ratio	0.33	0.33	0.33				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	0.87	0.87	0.87				0.00	1.00	1.00	0.09	0.09	0.00
Uniform Delay (d), s/veh	41.0	39.2	39.2				0.0	38.6	38.8	29.3	14.1	0.0
Incr Delay (d2), s/veh	4.0	2.9	3.0				0.0	10.4	11.1	0.1	1.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	23.1	20.7	20.4				0.0	13.8	13.1	1.2	9.1	0.0
Lane Grp Delay (d), s/veh	45.0	42.1	42.2				0.0	49.0	49.9	29.4	15.1	0.0
Lane Grp LOS	D	D	D					D	D	C	B	
Approach Vol, veh/h		2011						842			1295	
Approach Delay, s/veh		43.2						49.4			15.8	
Approach LOS		D						D			B	

Timer					
Assigned Phs		6		4		3	8
Phs Duration (G+Y+Rc), s		71.0		41.0		8.3	49.3
Change Period (Y+Rc), s		6.5		6.0		4.0	6.0
Max Green Setting (Gmax), s		64.5		31.0		8.0	43.3
Max Q Clear Time (g_c+I1), s		45.9		27.7		4.9	33.0
Green Ext Time (p_c), s		7.8		2.4		0.0	6.0

Intersection Summary	
HCM 2010 Ctrl Delay	35.9
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	80	1820	0	0	60	0
Number	1	6			3	18
Initial Q (Qb), veh	0	0			0	0
Ped-Bike Adj(A_pbT)	1.00				1.00	1.00
Parking Bus Adj	1.00	1.00			1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3			186.3	0.0
Lanes	0	3			1	0
Cap, veh/h	77	3256			0	0
Arrive On Green	0.32	0.32			0.00	0.00
Sat Flow, veh/h	0	3390			0	
Grp Volume(v), veh/h	84	1916			0.0	
Grp Sat Flow(s),veh/h/ln	0	1695				
Q Serve(g_s), s	0.0	44.5				
Cycle Q Clear(g_c), s	90.0	44.5				
Prop In Lane	1.00					
Lane Grp Cap(c), veh/h	77	3256				
V/C Ratio(X)	1.09	0.59				
Avail Cap(c_a), veh/h	77	3256				
HCM Platoon Ratio	0.33	0.33				
Upstream Filter(I)	0.57	0.57				
Uniform Delay (d), s/veh	77.0	16.4				
Incr Delay (d2), s/veh	104.7	0.4				
Initial Q Delay(d3),s/veh	0.0	0.0				
%ile Back of Q (50%), veh/ln	2.2	17.4				
Lane Grp Delay (d), s/veh	181.7	16.9				
Lane Grp LOS	F	B				
Approach Vol, veh/h		2000				
Approach Delay, s/veh		23.8				
Approach LOS		C				

Timer	
Assigned Phs	6
Phs Duration (G+Y+Rc), s	93.7
Change Period (Y+Rc), s	4.7
Max Green Setting (Gmax), s	89.0
Max Q Clear Time (g_c+I1), s	92.0
Green Ext Time (p_c), s	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	23.8
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	100	1770	30	0	0	0	0	70	70	130	90	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	193.7	190.0	190.0	193.7	0.0
Lanes	0	3	0				0	1	0	0	1	0
Cap, veh/h	180	3414	60				0	252	252	240	155	0
Arrive On Green	0.22	0.22	0.21				0.00	0.28	0.28	0.09	0.09	0.00
Sat Flow, veh/h	274	5192	92				0	890	890	677	549	0
Grp Volume(v), veh/h	708	648	644				0	0	148	232	0	0
Grp Sat Flow(s),veh/h/ln	1849	1863	1847				0	0	1780	1226	0	0
Q Serve(g_s), s	41.2	37.0	37.0				0.0	0.0	7.8	16.4	0.0	0.0
Cycle Q Clear(g_c), s	41.2	37.0	37.0				0.0	0.0	7.8	24.2	0.0	0.0
Prop In Lane	0.15		0.05				0.00		0.50	0.59		0.00
Lane Grp Cap(c), veh/h	1216	1225	1214				0	0	504	395	0	0
V/C Ratio(X)	0.58	0.53	0.53				0.00	0.00	0.29	0.59	0.00	0.00
Avail Cap(c_a), veh/h	1216	1225	1214				0	0	504	395	0	0
HCM Platoon Ratio	0.33	0.33	0.33				1.00	1.00	1.00	0.33	0.33	1.00
Upstream Filter(I)	0.88	0.88	0.88				0.00	0.00	1.00	0.79	0.00	0.00
Uniform Delay (d), s/veh	32.2	30.6	30.6				0.0	0.0	33.8	52.3	0.0	0.0
Incr Delay (d2), s/veh	1.8	1.5	1.5				0.0	0.0	1.5	5.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	21.7	19.5	19.4				0.0	0.0	3.8	7.9	0.0	0.0
Lane Grp Delay (d), s/veh	34.0	32.0	32.1				0.0	0.0	35.3	57.3	0.0	0.0
Lane Grp LOS	C	C	C						D	E		
Approach Vol, veh/h		2000						148			232	
Approach Delay, s/veh		32.7						35.3			57.3	
Approach LOS		C						D			E	

Timer				
Assigned Phs	6	4	8
Phs Duration (G+Y+Rc), s	82.7	37.3	37.3
Change Period (Y+Rc), s	4.8	4.3	4.3
Max Green Setting (Gmax), s	77.9	33.0	33.0
Max Q Clear Time (g_c+I1), s	43.2	9.8	26.2
Green Ext Time (p_c), s	9.3	1.2	0.7

Intersection Summary	
HCM 2010 Ctrl Delay	35.3
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	140	1840	110	0	0	0	0	640	170	240	950	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	186.3	190.0	186.3	186.3	0.0
Lanes	0	3	0				0	2	0	1	2	0
Cap, veh/h	179	2513	154				0	803	213	289	1558	0
Arrive On Green	0.52	0.52	0.51				0.00	0.28	0.27	0.22	0.84	0.00
Sat Flow, veh/h	347	4872	299				0	2839	753	1774	3725	0
Grp Volume(v), veh/h	782	717	701				0	442	411	253	1000	0
Grp Sat Flow(s),veh/h/ln	1845	1863	1810				0	1863	1730	1774	1863	0
Q Serve(g_s), s	42.1	35.8	36.3				0.0	26.4	26.5	12.4	11.2	0.0
Cycle Q Clear(g_c), s	42.1	35.8	36.3				0.0	26.4	26.5	12.4	11.2	0.0
Prop In Lane	0.19		0.17				0.00		0.44	1.00		0.00
Lane Grp Cap(c), veh/h	952	961	934				0	527	489	289	1558	0
V/C Ratio(X)	0.82	0.75	0.75				0.00	0.84	0.84	0.88	0.64	0.00
Avail Cap(c_a), veh/h	952	961	934				0	554	515	289	1613	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	0.66	0.66	0.00
Uniform Delay (d), s/veh	24.1	22.5	22.7				0.0	39.9	40.1	25.8	6.5	0.0
Incr Delay (d2), s/veh	7.9	5.3	5.6				0.0	10.6	11.4	17.9	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	21.2	17.7	17.6				0.0	14.1	13.2	8.5	2.7	0.0
Lane Grp Delay (d), s/veh	32.0	27.8	28.3				0.0	50.4	51.5	43.7	7.1	0.0
Lane Grp LOS	C	C	C					D	D	D	A	
Approach Vol, veh/h		2200						853			1253	
Approach Delay, s/veh		29.4						50.9			14.5	
Approach LOS		C						D			B	

Timer					
Assigned Phs		6		4	3	8
Phs Duration (G+Y+Rc), s		65.0		37.3	16.0	53.3
Change Period (Y+Rc), s		5.0		4.8	3.0	4.8
Max Green Setting (Gmax), s		60.0		34.2	13.0	50.2
Max Q Clear Time (g_c+I1), s		44.1		28.5	14.4	13.2
Green Ext Time (p_c), s		10.0		4.0	0.0	11.9

Intersection Summary	
HCM 2010 Ctrl Delay	29.3
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	200	1770	100	0	0	0	0	500	120	200	560	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	186.3	190.0	190.0	186.3	0.0
Lanes	0	3	0				0	2	0	0	2	0
Cap, veh/h	201	1896	109				0	1559	372	359	1314	0
Arrive On Green	0.40	0.40	0.39				0.00	0.54	0.53	1.00	1.00	0.00
Sat Flow, veh/h	502	4739	274				0	2909	694	567	1827	0
Grp Volume(v), veh/h	773	710	696				0	336	316	400	400	0
Grp Sat Flow(s),veh/h/ln	1838	1863	1814				0	1863	1740	1157	1863	0
Q Serve(g_s), s	48.0	44.4	44.8				0.0	12.3	12.4	0.1	0.0	0.0
Cycle Q Clear(g_c), s	48.0	44.4	44.8				0.0	12.3	12.4	64.3	0.0	0.0
Prop In Lane	0.27		0.15				0.00		0.40	0.83		0.00
Lane Grp Cap(c), veh/h	735	745	726				0	998	933	61	998	0
V/C Ratio(X)	1.05	0.95	0.96				0.00	0.34	0.34	6.52	0.40	0.00
Avail Cap(c_a), veh/h	735	745	726				0	998	933	61	998	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	0.88	0.88	0.00
Uniform Delay (d), s/veh	36.0	34.9	35.1				0.0	15.8	15.9	31.6	0.0	0.0
Incr Delay (d2), s/veh	47.4	23.3	24.8				0.0	0.9	1.0	2515.7	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	31.7	25.5	25.3				0.0	5.8	5.5	44.9	0.1	0.0
Lane Grp Delay (d), s/veh	83.4	58.3	59.9				0.0	16.7	16.9	2547.3	0.2	0.0
Lane Grp LOS	F	E	E					B	B	F	A	
Approach Vol, veh/h		2179						652			800	
Approach Delay, s/veh		67.7						16.8			1273.8	
Approach LOS		E						B			F	

Timer												
Assigned Phs		6						4		3	8	
Phs Duration (G+Y+Rc), s		52.0						68.0		0.0	68.0	
Change Period (Y+Rc), s		5.0						4.7		4.0	4.7	
Max Green Setting (Gmax), s		47.0						45.3		14.0	63.3	
Max Q Clear Time (g_c+I1), s		50.0						14.4		0.0	66.3	
Green Ext Time (p_c), s		0.0						9.2		0.0	0.0	

Intersection Summary			
HCM 2010 Ctrl Delay		324.3	
HCM 2010 LOS		F	

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	2020	70	0	0	0	0	0	50	80	70	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	186.3	190.0	186.3	186.3	0.0
Lanes	0	3	0				0	1	0	1	1	0
Cap, veh/h	0	3848	134				0	0	326	300	383	0
Arrive On Green	0.00	0.24	0.24				0.00	0.00	0.21	0.21	0.21	0.00
Sat Flow, veh/h	0	5369	186				0	0	1583	1346	1863	0
Grp Volume(v), veh/h	0	1473	727				0	0	53	84	74	0
Grp Sat Flow(s),veh/h/ln	0	1863	1830				0	0	1583	1346	1863	0
Q Serve(g_s), s	0.0	41.7	41.9				0.0	0.0	3.3	6.6	3.9	0.0
Cycle Q Clear(g_c), s	0.0	41.7	41.9				0.0	0.0	3.3	9.9	3.9	0.0
Prop In Lane	0.00		0.10				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	0	2670	1311				0	0	326	300	383	0
V/C Ratio(X)	0.00	0.55	0.55				0.00	0.00	0.16	0.28	0.19	0.00
Avail Cap(c_a), veh/h	0	2670	1311				0	0	326	300	383	0
HCM Platoon Ratio	0.33	0.33	0.33				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.09	0.09				0.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	28.9	29.0				0.0	0.0	39.2	43.2	39.4	0.0
Incr Delay (d2), s/veh	0.0	0.1	0.2				0.0	0.0	1.1	0.5	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.0	21.0	20.8				0.0	0.0	1.5	2.3	1.9	0.0
Lane Grp Delay (d), s/veh	0.0	29.0	29.1				0.0	0.0	40.2	43.7	39.6	0.0
Lane Grp LOS		C	C						D	D	D	
Approach Vol, veh/h		2200						53			158	
Approach Delay, s/veh		29.0						40.2			41.8	
Approach LOS		C						D			D	

Timer												
Assigned Phs		6						4			8	
Phs Duration (G+Y+Rc), s		91.0						29.0			29.0	
Change Period (Y+Rc), s		5.0						4.3			4.3	
Max Green Setting (Gmax), s		86.0						24.7			24.7	
Max Q Clear Time (g_c+I1), s		43.9						5.3			11.9	
Green Ext Time (p_c), s		18.0						0.7			0.6	

Intersection Summary												
HCM 2010 Ctrl Delay			30.1									
HCM 2010 LOS			C									

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	180	2000	60	0	0	0	0	140	40	120	150	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	186.3	190.0	190.0	186.3	0.0
Lanes	0	3	0				0	1	0	0	1	0
Cap, veh/h	252	2999	92				0	421	120	186	218	0
Arrive On Green	0.20	0.20	0.20				0.00	0.30	0.30	0.10	0.10	0.00
Sat Flow, veh/h	417	4971	153				0	1394	398	473	723	0
Grp Volume(v), veh/h	834	765	758				0	0	189	284	0	0
Grp Sat Flow(s),veh/h/ln	1842	1863	1836				0	0	1792	1196	0	0
Q Serve(g_s), s	51.2	45.6	45.9				0.0	0.0	9.9	0.1	0.0	0.0
Cycle Q Clear(g_c), s	51.2	45.6	45.9				0.0	0.0	9.9	29.6	0.0	0.0
Prop In Lane	0.23		0.08				0.00		0.22	0.44		0.00
Lane Grp Cap(c), veh/h	1111	1124	1108				0	0	541	404	0	0
V/C Ratio(X)	0.75	0.68	0.68				0.00	0.00	0.35	0.70	0.00	0.00
Avail Cap(c_a), veh/h	1111	1124	1108				0	0	541	404	0	0
HCM Platoon Ratio	0.33	0.33	0.33				1.00	1.00	1.00	0.33	0.33	1.00
Upstream Filter(I)	0.73	0.73	0.73				0.00	0.00	1.00	0.90	0.00	0.00
Uniform Delay (d), s/veh	39.6	37.3	37.5				0.0	0.0	32.7	53.5	0.0	0.0
Incr Delay (d2), s/veh	3.5	2.4	2.5				0.0	0.0	1.8	8.9	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	26.8	23.9	23.8				0.0	0.0	4.8	10.0	0.0	0.0
Lane Grp Delay (d), s/veh	43.0	39.8	40.0				0.0	0.0	34.5	62.4	0.0	0.0
Lane Grp LOS	D	D	D						C	E		
Approach Vol, veh/h		2357						189			284	
Approach Delay, s/veh		41.0						34.5			62.4	
Approach LOS		D						C			E	

Timer					
Assigned Phs		6		4		3	8
Phs Duration (G+Y+Rc), s		78.0		42.0		0.0	42.0
Change Period (Y+Rc), s		5.6		5.8		3.0	5.8
Max Green Setting (Gmax), s		72.4		20.2		13.0	36.2
Max Q Clear Time (g_c+I1), s		53.2		11.9		0.0	31.6
Green Ext Time (p_c), s		9.9		1.1		0.0	0.7

Intersection Summary	
HCM 2010 Ctrl Delay	42.7
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	180	1940	70	0	0	0	0	140	320	0	0	0
Number	1	6	16				7	4	14			
Initial Q (Qb), veh	0	0	0				0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00			
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00			
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	186.3	190.0			
Lanes	0	3	0				0	1	0			
Cap, veh/h	55	2001	72				0	163	373			
Arrive On Green	0.62	0.62	0.62				0.00	0.32	0.32			
Sat Flow, veh/h	0	3252	118				0	504	1155			
Grp Volume(v), veh/h	189	1062	1054				0	0	484			
Grp Sat Flow(s),veh/h/ln	0	1695	1674				0	0	1659			
Q Serve(g_s), s	0.0	80.0	80.0				0.0	0.0	36.3			
Cycle Q Clear(g_c), s	80.0	80.0	80.0				0.0	0.0	36.3			
Prop In Lane	1.00		0.07				0.00		0.70			
Lane Grp Cap(c), veh/h	55	1043	1030				0	0	536			
V/C Ratio(X)	3.41	1.02	1.02				0.00	0.00	0.90			
Avail Cap(c_a), veh/h	55	1043	1030				0	0	536			
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	1.00				0.00	0.00	1.00			
Uniform Delay (d), s/veh	65.0	25.0	25.0				0.0	0.0	42.1			
Incr Delay (d2), s/veh	1129.8	32.6	33.9				0.0	0.0	21.1			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0			
%ile Back of Q (50%), veh/ln	19.3	41.6	41.5				0.0	0.0	18.5			
Lane Grp Delay (d), s/veh	1194.8	57.6	58.9				0.0	0.0	63.1			
Lane Grp LOS	F	F	F						E			
Approach Vol, veh/h		2305						484				
Approach Delay, s/veh		151.4						63.1				
Approach LOS		F						E				

Timer	
Assigned Phs	6
Phs Duration (G+Y+Rc), s	84.0
Change Period (Y+Rc), s	4.0
Max Green Setting (Gmax), s	80.0
Max Q Clear Time (g_c+I1), s	82.0
Green Ext Time (p_c), s	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	136.1
HCM 2010 LOS	F

Notes

HCM Signalized Intersection Capacity Analysis
3327: SW 4th Ave & SW 8 St

No Build
Timing Plan: 2020 PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	2100	180	0	0	0	0	0	0	1990	740	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.7	6.7							6.0	6.0	
Lane Util. Factor		0.91	1.00							0.86	0.86	
Frt		1.00	0.85							1.00	1.00	
Flt Protected		1.00	1.00							0.95	0.98	
Satd. Flow (prot)		4424	1425							2739	2818	
Flt Permitted		1.00	1.00							0.95	0.98	
Satd. Flow (perm)		4424	1425							2739	2818	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	2211	189	0	0	0	0	0	0	2095	779	0
RTOR Reduction (vph)	0	0	45	0	0	0	0	0	0	16	16	0
Lane Group Flow (vph)	0	2211	144	0	0	0	0	0	0	1409	1433	0
Parking (#/hr)		0										
Turn Type		NA	Perm							Perm	NA	
Protected Phases		6									8	
Permitted Phases			6							8		
Actuated Green, G (s)		54.3	54.3							63.0	63.0	
Effective Green, g (s)		54.3	54.3							63.0	63.0	
Actuated g/C Ratio		0.42	0.42							0.48	0.48	
Clearance Time (s)		6.7	6.7							6.0	6.0	
Vehicle Extension (s)		2.0	2.0							2.0	2.0	
Lane Grp Cap (vph)		1847	595							1327	1365	
v/s Ratio Prot		c0.50										
v/s Ratio Perm			0.10							c0.51	0.51	
v/c Ratio		1.20	0.24							1.06	1.05	
Uniform Delay, d1		37.9	24.5							33.5	33.5	
Progression Factor		1.20	1.38							0.66	0.66	
Incremental Delay, d2		92.3	0.6							29.8	24.7	
Delay (s)		137.7	34.3							51.9	46.8	
Level of Service		F	C							D	D	
Approach Delay (s)		129.6			0.0			0.0			49.3	
Approach LOS		F			A			A			D	

Intersection Summary			
HCM 2000 Control Delay	85.8	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.12		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	12.7
Intersection Capacity Utilization	99.2%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	300	2310	70	0	0	0	0	260	220	250	0	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	171.0	167.6	171.0				0.0	167.6	167.6	167.6	167.6	0.0
Lanes	0	3	0				0	1	1	1	1	0
Cap, veh/h	340	2832	0				0	493	419	181	493	0
Arrive On Green	0.63	0.63	0.00				0.00	0.29	0.29	0.29	0.00	0.00
Sat Flow, veh/h	536	4466	0				0	1676	1425	801	1676	0
Grp Volume(v), veh/h	972	1776	0				0	274	232	263	0	0
Grp Sat Flow(s),veh/h/ln	1650	1676	0				0	1676	1425	801	1676	0
Q Serve(g_s), s	67.5	52.9	0.0				0.0	17.7	17.6	20.1	0.0	0.0
Cycle Q Clear(g_c), s	67.5	52.9	0.0				0.0	17.7	17.6	37.8	0.0	0.0
Prop In Lane	0.33		0.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	1046	2126	0				0	493	419	181	493	0
V/C Ratio(X)	0.93	0.84	0.00				0.00	0.56	0.55	1.45	0.00	0.00
Avail Cap(c_a), veh/h	1066	2167	0				0	493	419	181	493	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00				0.00	1.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	20.9	18.3	0.0				0.0	38.2	38.2	57.3	0.0	0.0
Incr Delay (d2), s/veh	13.6	2.9	0.0				0.0	4.5	5.2	230.8	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	30.1	21.8	0.0				0.0	8.2	7.0	17.7	0.0	0.0
Lane Grp Delay (d), s/veh	34.5	21.2	0.0				0.0	42.7	43.4	288.0	0.0	0.0
Lane Grp LOS	C	C						D	D	F		
Approach Vol, veh/h		2748						506			263	
Approach Delay, s/veh		25.9						43.0			288.0	
Approach LOS		C						D			F	

Timer												
Assigned Phs		6						4			8	
Phs Duration (G+Y+Rc), s		85.9						42.5			42.5	
Change Period (Y+Rc), s		4.5						4.7			4.7	
Max Green Setting (Gmax), s		83.0						37.8			37.8	
Max Q Clear Time (g_c+I1), s		69.5						19.7			39.8	
Green Ext Time (p_c), s		12.0						2.9			0.0	

Intersection Summary												
HCM 2010 Ctrl Delay			47.9									
HCM 2010 LOS			D									

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	440	2080	460	0	0	0	0	950	110	190	370	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	171.0	167.6	171.0				0.0	167.6	171.0	171.0	167.6	0.0
Lanes	0	3	0				0	2	0	0	2	0
Cap, veh/h	388	1951	419				0	992	115	57	1107	0
Arrive On Green	0.19	0.19	0.19				0.00	0.34	0.34	0.11	0.11	0.00
Sat Flow, veh/h	684	3442	739				0	2950	342	4	1526	0
Grp Volume(v), veh/h	1112	1012	1012				0	568	548	295	294	0
Grp Sat Flow(s),veh/h/ln	1642	1676	1546				0	1676	1616	1621	1676	0
Q Serve(g_s), s	73.7	73.7	73.7				0.0	43.7	43.7	0.1	21.6	0.0
Cycle Q Clear(g_c), s	73.7	73.7	73.7				0.0	43.7	43.7	43.7	21.6	0.0
Prop In Lane	0.42		0.48				0.00		0.21	1.00		0.00
Lane Grp Cap(c), veh/h	931	950	876				0	564	543	55	564	0
V/C Ratio(X)	1.19	1.06	1.15				0.00	1.01	1.01	5.32	0.52	0.00
Avail Cap(c_a), veh/h	931	950	876				0	564	543	55	564	0
HCM Platoon Ratio	0.33	0.33	0.33				1.00	1.00	1.00	0.33	0.33	1.00
Upstream Filter(I)	0.15	0.15	0.15				0.00	1.00	1.00	0.43	0.43	0.00
Uniform Delay (d), s/veh	52.8	52.8	52.8				0.0	43.2	43.2	79.6	47.9	0.0
Incr Delay (d2), s/veh	89.3	33.3	71.9				0.0	39.9	40.8	1959.8	1.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	56.3	42.7	48.7				0.0	25.0	24.3	30.2	10.1	0.0
Lane Grp Delay (d), s/veh	142.1	86.2	124.7				0.0	83.0	83.9	2039.4	49.4	0.0
Lane Grp LOS	F	F	F					F	F	F	D	
Approach Vol, veh/h		3136						1116			589	
Approach Delay, s/veh		118.5						83.5			1044.4	
Approach LOS		F						F			F	

Timer					
Assigned Phs		6		4		3	8
Phs Duration (G+Y+Rc), s		80.0		50.0		0.0	50.0
Change Period (Y+Rc), s		6.3		6.3		3.0	6.3
Max Green Setting (Gmax), s		73.7		29.7		11.0	43.7
Max Q Clear Time (g_c+I1), s		75.7		45.7		0.0	45.7
Green Ext Time (p_c), s		0.0		0.0		0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	223.0
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	1970	450	0	0	0	0	0	0	490	980	0
Number	1	6	16							3	8	18
Initial Q (Qb), veh	0	0	0							0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00							1.00		1.00
Parking Bus Adj	1.00	1.00	1.00							1.00	1.00	1.00
Adj Sat Flow veh/h/ln	0.0	166.0	171.0							171.0	166.0	0.0
Lanes	0	3	0							0	2	0
Cap, veh/h	0	2298	503							55	528	0
Arrive On Green	0.00	0.19	0.19							0.12	0.12	0.00
Sat Flow, veh/h	0	3961	866							0	1511	0
Grp Volume(v), veh/h	0	1723	825							516	1032	0
Grp Sat Flow(s),veh/h/ln	0	1660	1507							0	1511	0
Q Serve(g_s), s	0.0	65.8	70.2							0.0	45.4	0.0
Cycle Q Clear(g_c), s	0.0	65.8	70.2							45.4	45.4	0.0
Prop In Lane	0.00		0.57							1.00		0.00
Lane Grp Cap(c), veh/h	0	1926	874							55	528	0
V/C Ratio(X)	0.00	0.89	0.94							9.32	1.96	0.00
Avail Cap(c_a), veh/h	0	1926	874							55	528	0
HCM Platoon Ratio	1.00	0.33	0.33							0.33	0.33	1.00
Upstream Filter(I)	0.00	0.09	0.09							0.52	0.52	0.00
Uniform Delay (d), s/veh	0.0	48.7	50.4							80.2	57.5	0.0
Incr Delay (d2), s/veh	0.0	0.7	2.8							3761.3	433.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0							0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.0	30.0	29.5							59.8	82.3	0.0
Lane Grp Delay (d), s/veh	0.0	49.4	53.2							3841.5	491.3	0.0
Lane Grp LOS		D	D							F	F	
Approach Vol, veh/h		2548									1548	
Approach Delay, s/veh		50.6									1608.1	
Approach LOS		D									F	

Timer	
Assigned Phs	6
Phs Duration (G+Y+Rc), s	80.0
Change Period (Y+Rc), s	4.6
Max Green Setting (Gmax), s	75.4
Max Q Clear Time (g_c+I1), s	72.2
Green Ext Time (p_c), s	3.1
Intersection Summary	
HCM 2010 Ctrl Delay	639.2
HCM 2010 LOS	F
Notes	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	990	1520	0	0	0	0	0	940	100	0	0	0
Number	1	6	16				7	4	14			
Initial Q (Qb), veh	0	0	0				0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00			
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00			
Adj Sat Flow veh/h/ln	171.0	166.0	0.0				0.0	166.0	171.0			
Lanes	0	3	0				0	3	0			
Cap, veh/h	56	2052	0				0	1104	117			
Arrive On Green	0.22	0.22	0.00				0.00	0.25	0.25			
Sat Flow, veh/h	0	3022	0				0	4429	469			
Grp Volume(v), veh/h	1042	1600	0				0	741	353			
Grp Sat Flow(s),veh/h/ln	0	1511	0				0	1660	1577			
Q Serve(g_s), s	0.0	64.1	0.0				0.0	27.7	27.9			
Cycle Q Clear(g_c), s	87.4	64.1	0.0				0.0	27.7	27.9			
Prop In Lane	1.00		0.00				0.00		0.30			
Lane Grp Cap(c), veh/h	56	2052	0				0	828	393			
V/C Ratio(X)	18.62	0.78	0.00				0.00	0.90	0.90			
Avail Cap(c_a), veh/h	56	2052	0				0	862	409			
HCM Platoon Ratio	0.33	0.33	1.00				1.00	1.00	1.00			
Upstream Filter(I)	0.10	0.10	0.00				0.00	1.00	1.00			
Uniform Delay (d), s/veh	93.6	40.9	0.0				0.0	46.7	46.7			
Incr Delay (d2), s/veh	7933.2	0.3	0.0				0.0	11.6	21.5			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0			
%ile Back of Q (50%), veh/ln	125.3	26.7	0.0				0.0	13.2	13.6			
Lane Grp Delay (d), s/veh	8026.8	41.2	0.0				0.0	58.3	68.2			
Lane Grp LOS	F	D						E	E			
Approach Vol, veh/h		2642						1094				
Approach Delay, s/veh		3190.7						61.5				
Approach LOS		F						E				

Timer	
Assigned Phs	6
Phs Duration (G+Y+Rc), s	92.0
Change Period (Y+Rc), s	4.6
Max Green Setting (Gmax), s	87.4
Max Q Clear Time (g_c+I1), s	89.4
Green Ext Time (p_c), s	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	2274.4
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	490	630	330	320	0	660	0	1120	210	380	1310	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.7	6.7		6.7		6.7		6.2	6.2	4.0	6.2	
Lane Util. Factor	0.97	0.95		1.00		1.00		0.95	1.00	0.97	0.95	
Frt	1.00	0.95		1.00		0.85		1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00		0.95		1.00		1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3060	2992		1577		1411		3154	1411	3060	3154	
Flt Permitted	0.95	1.00		0.10		1.00		1.00	1.00	0.95	1.00	
Satd. Flow (perm)	3060	2992		161		1411		3154	1411	3060	3154	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	516	663	347	337	0	695	0	1179	221	400	1379	0
RTOR Reduction (vph)	0	45	0	0	0	132	0	0	94	0	0	0
Lane Group Flow (vph)	516	965	0	337	0	563	0	1179	127	400	1379	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Split	NA		D.Pm		custom		NA	Perm	Prot	NA	
Protected Phases	8	8						6		5	2	
Permitted Phases				8		4			6			
Actuated Green, G (s)	41.3	41.3		41.3		33.3		40.8	40.8	11.0	55.8	
Effective Green, g (s)	41.3	41.3		41.3		33.3		40.8	40.8	11.0	55.8	
Actuated g/C Ratio	0.28	0.28		0.28		0.22		0.27	0.27	0.07	0.37	
Clearance Time (s)	6.7	6.7		6.7		6.7		6.2	6.2	4.0	6.2	
Vehicle Extension (s)	3.0	3.0		3.0		3.0		3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	842	823		44		313		857	383	224	1173	
v/s Ratio Prot	0.17	0.32						c0.37		c0.13	0.44	
v/s Ratio Perm				c2.10		c0.40			0.09			
v/c Ratio	0.61	1.17		7.66		1.80		1.38	0.33	1.79	1.18	
Uniform Delay, d1	47.4	54.4		54.4		58.4		54.6	43.7	69.5	47.1	
Progression Factor	1.00	1.00		1.00		1.00		1.00	1.00	1.39	0.52	
Incremental Delay, d2	1.3	90.4		3042.9		371.6		176.4	2.3	355.2	79.9	
Delay (s)	48.7	144.8		3097.3		429.9		231.0	46.0	452.1	104.4	
Level of Service	D	F		F		F		F	D	F	F	
Approach Delay (s)		112.3			1300.9			201.8			182.6	
Approach LOS		F			F			F			F	

Intersection Summary			
HCM 2000 Control Delay	369.8	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	3.56		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	23.6
Intersection Capacity Utilization	114.6%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	10	70	70	560	1780	320	260	1480	360
Number				7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				171.0	166.0	171.0	166.0	166.0	171.0	166.0	166.0	166.0
Lanes				0	2	0	2	3	0	1	2	1
Cap, veh/h				16	109	107	655	2805	496	302	1893	805
Arrive On Green				0.08	0.08	0.08	0.43	1.00	1.00	0.09	0.57	0.57
Sat Flow, veh/h				213	1436	1411	3067	4123	729	1581	3320	1411
Grp Volume(v), veh/h				85	0	74	589	1503	708	274	1558	379
Grp Sat Flow(s),veh/h/ln				1650	0	1411	1534	1660	1532	1581	1660	1411
Q Serve(g_s), s				5.7	0.0	5.8	20.2	0.0	0.0	8.3	43.0	17.9
Cycle Q Clear(g_c), s				5.7	0.0	5.8	20.2	0.0	0.0	8.3	43.0	17.9
Prop In Lane				0.13		1.00	1.00		0.48	1.00		1.00
Lane Grp Cap(c), veh/h				125	0	107	655	2259	1042	302	1893	805
V/C Ratio(X)				0.68	0.00	0.69	0.90	0.67	0.68	0.91	0.82	0.47
Avail Cap(c_a), veh/h				439	0	375	1003	2259	1042	376	1893	805
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.09	0.09	0.09	1.00	1.00	1.00
Uniform Delay (d), s/veh				51.0	0.0	51.0	31.3	0.0	0.0	16.4	19.7	14.3
Incr Delay (d2), s/veh				6.3	0.0	7.8	0.8	0.1	0.3	22.1	4.2	2.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				2.7	0.0	2.3	6.7	0.0	0.1	9.1	18.2	6.4
Lane Grp Delay (d), s/veh				57.3	0.0	58.8	32.0	0.1	0.3	38.4	23.9	16.3
Lane Grp LOS				E		E	C	A	A	D	C	B
Approach Vol, veh/h					159			2800			2211	
Approach Delay, s/veh					58.0			6.9			24.4	
Approach LOS					E			A			C	

Timer												
Assigned Phs					4		1	6		5	2	
Phs Duration (G+Y+Rc), s					15.3		27.2	83.2		14.7	70.7	
Change Period (Y+Rc), s					6.7		3.0	6.2		4.0	6.2	
Max Green Setting (Gmax), s					30.1		37.0	77.0		16.0	57.0	
Max Q Clear Time (g_c+I1), s					7.8		22.2	2.0		10.3	45.0	
Green Ext Time (p_c), s					0.8		2.0	69.1		0.4	11.8	

Intersection Summary		
HCM 2010 Ctrl Delay		16.0
HCM 2010 LOS		B

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	0	1390	300	440	850	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.2		4.2	4.2				
Lane Util. Factor					0.91		0.91	0.91				
Frt					0.97		1.00	1.00				
Flt Protected					1.00		0.95	1.00				
Satd. Flow (prot)					4412		1435	3014				
Flt Permitted					1.00		0.95	1.00				
Satd. Flow (perm)					4412		1435	3014				
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	0	1463	316	463	895	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	21	0	15	6	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	1758	0	402	935	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type					NA		Perm	NA				
Protected Phases					2			4				
Permitted Phases							4					
Actuated Green, G (s)					84.2		57.4	57.4				
Effective Green, g (s)					84.2		57.4	57.4				
Actuated g/C Ratio					0.56		0.38	0.38				
Clearance Time (s)					4.2		4.2	4.2				
Vehicle Extension (s)					3.0		3.0	3.0				
Lane Grp Cap (vph)					2476		549	1153				
v/s Ratio Prot					c0.40							
v/s Ratio Perm							0.28	0.31				
v/c Ratio					0.71		0.73	0.81				
Uniform Delay, d1					24.0		39.7	41.5				
Progression Factor					1.00		0.48	0.50				
Incremental Delay, d2					1.8		0.5	0.4				
Delay (s)					25.8		19.5	21.0				
Level of Service					C		B	C				
Approach Delay (s)		0.0			25.8			20.5			0.0	
Approach LOS		A			C			C			A	

Intersection Summary			
HCM 2000 Control Delay	23.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	8.4
Intersection Capacity Utilization	162.1%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	340	1500	0	0	0	0	0	1150	480
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					5.8						4.6	4.6
Lane Util. Factor					0.91						0.91	0.91
Frt					1.00						0.99	0.85
Flt Protected					0.99						1.00	1.00
Satd. Flow (prot)					4491						3003	1284
Flt Permitted					0.99						1.00	1.00
Satd. Flow (perm)					4491						3003	1284
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	358	1579	0	0	0	0	0	1211	505
RTOR Reduction (vph)	0	0	0	0	17	0	0	0	0	0	2	11
Lane Group Flow (vph)	0	0	0	0	1920	0	0	0	0	0	1260	443
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type				Perm	NA						NA	Perm
Protected Phases					2						8	
Permitted Phases				2								8
Actuated Green, G (s)					71.1						68.5	68.5
Effective Green, g (s)					71.1						68.5	68.5
Actuated g/C Ratio					0.47						0.46	0.46
Clearance Time (s)					5.8						4.6	4.6
Vehicle Extension (s)					3.0						3.0	3.0
Lane Grp Cap (vph)					2128						1371	586
v/s Ratio Prot											c0.42	
v/s Ratio Perm					0.43							0.35
v/c Ratio					0.90						0.92	0.76
Uniform Delay, d1					36.3						38.1	33.8
Progression Factor					0.65						1.00	1.00
Incremental Delay, d2					4.9						10.0	5.5
Delay (s)					28.7						48.1	39.4
Level of Service					C						D	D
Approach Delay (s)		0.0			28.7			0.0			45.8	
Approach LOS		A			C			A			D	

Intersection Summary			
HCM 2000 Control Delay	36.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	10.4
Intersection Capacity Utilization	89.5%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	170	1700	190	340	1330	0	0	270	150
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				171.0	166.0	171.0	166.0	166.0	0.0	0.0	166.0	171.0
Lanes				0	3	0	1	2	0	0	2	0
Cap, veh/h				182	1939	222	443	1514	0	0	518	280
Arrive On Green				0.16	0.16	0.16	0.24	0.61	0.00	0.00	0.26	0.26
Sat Flow, veh/h				380	4039	462	1581	3320	0	0	2030	1097
Grp Volume(v), veh/h				774	711	684	358	1400	0	0	231	211
Grp Sat Flow(s),veh/h/ln				1641	1660	1579	1581	1660	0	0	1660	1467
Q Serve(g_s), s				70.5	62.9	63.8	24.8	56.7	0.0	0.0	18.0	18.8
Cycle Q Clear(g_c), s				70.5	62.9	63.8	24.8	56.7	0.0	0.0	18.0	18.8
Prop In Lane				0.23		0.29	1.00		0.00	0.00		0.75
Lane Grp Cap(c), veh/h				788	797	758	443	1514	0	0	424	375
V/C Ratio(X)				0.98	0.89	0.90	0.81	0.92	0.00	0.00	0.54	0.56
Avail Cap(c_a), veh/h				788	797	758	463	1514	0	0	424	375
HCM Platoon Ratio				0.33	0.33	0.33	1.33	1.33	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.36	0.36	0.36	0.09	0.09	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				62.5	59.3	59.7	29.6	27.2	0.0	0.0	48.3	48.6
Incr Delay (d2), s/veh				15.6	6.0	6.9	1.0	1.3	0.0	0.0	5.0	6.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				34.9	29.8	28.9	9.5	22.4	0.0	0.0	8.3	7.8
Lane Grp Delay (d), s/veh				78.1	65.3	66.5	30.6	28.5	0.0	0.0	53.2	54.6
Lane Grp LOS				E	E	E	C	C			D	D
Approach Vol, veh/h					2168			1758			442	
Approach Delay, s/veh					70.2			28.9			53.9	
Approach LOS					E			C			D	

Timer												
Assigned Phs					2		7	4			8	
Phs Duration (G+Y+Rc), s					77.0		30.1	73.0			42.9	
Change Period (Y+Rc), s					5.0		3.0	4.6			4.6	
Max Green Setting (Gmax), s					72.0		29.0	68.4			36.4	
Max Q Clear Time (g_c+I1), s					72.5		26.8	58.7			20.8	
Green Ext Time (p_c), s					0.0		0.3	7.6			11.1	

Intersection Summary												
HCM 2010 Ctrl Delay			51.9									
HCM 2010 LOS			D									

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	510	1430	280	120	290	0	0	0	0
Number				5	2	12	7	4	14			
Initial Q (Qb), veh				0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00			
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow veh/h/ln				171.0	166.0	171.0	166.0	166.0	0.0			
Lanes				0	3	0	1	1	0			
Cap, veh/h				48	1605	311	48	484	0			
Arrive On Green				0.22	0.22	0.22	0.58	0.58	0.00			
Sat Flow, veh/h				0	2461	476	1581	1660	0			
Grp Volume(v), veh/h				537	917	883	126	305	0			
Grp Sat Flow(s),veh/h/ln				0	1511	1427	1581	1660	0			
Q Serve(g_s), s				0.0	89.3	91.6	0.0	18.2	0.0			
Cycle Q Clear(g_c), s				97.8	89.3	91.6	43.7	18.2	0.0			
Prop In Lane				1.00		0.33	1.00		0.00			
Lane Grp Cap(c), veh/h				48	985	930	48	484	0			
V/C Ratio(X)				11.19	0.93	0.95	2.62	0.63	0.00			
Avail Cap(c_a), veh/h				48	985	930	48	484	0			
HCM Platoon Ratio				0.33	0.33	0.33	2.00	2.00	1.00			
Upstream Filter(I)				0.13	0.13	0.13	0.67	0.67	0.00			
Uniform Delay (d), s/veh				107.8	55.5	56.4	53.2	26.0	0.0			
Incr Delay (d2), s/veh				4589.5	2.8	3.9	769.8	4.1	0.0			
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0			
%ile Back of Q (50%), veh/ln				63.2	38.0	37.1	12.0	7.1	0.0			
Lane Grp Delay (d), s/veh				4697.3	58.4	60.4	822.9	30.1	0.0			
Lane Grp LOS				F	E	E	F	C				
Approach Vol, veh/h					2337			431				
Approach Delay, s/veh					1125.1			261.9				
Approach LOS					F			F				

Timer	
Assigned Phs	2 4
Phs Duration (G+Y+Rc), s	102.0 48.0
Change Period (Y+Rc), s	4.2 4.3
Max Green Setting (Gmax), s	97.8 43.7
Max Q Clear Time (g_c+I1), s	99.8 45.7
Green Ext Time (p_c), s	0.0 0.0

Intersection Summary	
HCM 2010 Ctrl Delay	990.7
HCM 2010 LOS	F

Notes

Movement	WBL	WBT	SBT	SBR	SWL	SWR
Lane Configurations						
Volume (vph)	870	880	620	80	2480	340
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.5	6.5	7.0		7.0	7.0
Lane Util. Factor	0.91	0.91	0.95		0.97	0.91
Frt	1.00	1.00	0.98		1.00	0.85
Flt Protected	0.95	0.99	1.00		0.95	1.00
Satd. Flow (prot)	1449	3012	3131		3093	1297
Flt Permitted	0.95	0.99	1.00		0.95	1.00
Satd. Flow (perm)	1449	3012	3131		3093	1297
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	916	926	653	84	2611	358
RTOR Reduction (vph)	61	61	7	0	0	0
Lane Group Flow (vph)	534	1186	730	0	2647	322
Turn Type	Perm	NA	NA		NA	Perm
Protected Phases		2	9		8	
Permitted Phases	2					8
Actuated Green, G (s)	36.5	36.5	24.0		69.0	69.0
Effective Green, g (s)	36.5	36.5	24.0		69.0	69.0
Actuated g/C Ratio	0.24	0.24	0.16		0.46	0.46
Clearance Time (s)	6.5	6.5	7.0		7.0	7.0
Vehicle Extension (s)	1.0	1.0	3.0		3.0	3.0
Lane Grp Cap (vph)	352	732	500		1422	596
v/s Ratio Prot			c0.23		c0.86	
v/s Ratio Perm	0.37	0.39				0.25
v/c Ratio	1.52	1.62	1.46		1.86	0.54
Uniform Delay, d1	56.8	56.8	63.0		40.5	29.1
Progression Factor	0.71	0.74	1.00		1.00	1.00
Incremental Delay, d2	243.6	283.9	218.1		390.4	1.0
Delay (s)	284.1	326.0	281.1		430.9	30.1
Level of Service	F	F	F		F	C
Approach Delay (s)		312.5	281.1		387.4	
Approach LOS		F	F		F	

Intersection Summary			
HCM 2000 Control Delay	348.4	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.72		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	20.5
Intersection Capacity Utilization	158.3%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	150	1050	100	80	360	0	0	320	130
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	186.3	190.0	190.0	186.3	0.0	0.0	193.7	190.0
Lanes				0	3	0	0	1	0	0	1	0
Cap, veh/h				299	2233	218	94	387	0	0	547	223
Arrive On Green				0.50	0.50	0.49	0.84	0.84	0.00	0.00	0.42	0.42
Sat Flow, veh/h				595	4452	435	147	927	0	0	1310	533
Grp Volume(v), veh/h				487	450	431	463	0	0	0	0	474
Grp Sat Flow(s),veh/h/ln				1833	1863	1786	1074	0	0	0	0	1843
Q Serve(g_s), s				23.4	20.6	20.7	28.1	0.0	0.0	0.0	0.0	26.2
Cycle Q Clear(g_c), s				23.4	20.6	20.7	54.3	0.0	0.0	0.0	0.0	26.2
Prop In Lane				0.32		0.24	0.18		0.00	0.00		0.29
Lane Grp Cap(c), veh/h				919	934	896	481	0	0	0	0	770
V/C Ratio(X)				0.53	0.48	0.48	0.96	0.00	0.00	0.00	0.00	0.62
Avail Cap(c_a), veh/h				919	934	896	481	0	0	0	0	770
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.09	0.09	0.09	0.90	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				22.0	21.3	21.4	15.6	0.0	0.0	0.0	0.0	29.7
Incr Delay (d2), s/veh				0.2	0.2	0.2	29.4	0.0	0.0	0.0	0.0	1.3
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				10.6	9.5	9.2	12.2	0.0	0.0	0.0	0.0	12.4
Lane Grp Delay (d), s/veh				22.2	21.5	21.6	45.0	0.0	0.0	0.0	0.0	31.0
Lane Grp LOS				C	C	C	D					C
Approach Vol, veh/h					1368			463			474	
Approach Delay, s/veh					21.7			45.0			31.0	
Approach LOS					C			D			C	

Timer			
Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	70.0	60.0	60.0
Change Period (Y+Rc), s	5.8	5.7	5.7
Max Green Setting (Gmax), s	64.2	54.3	54.3
Max Q Clear Time (g_c+I1), s	25.4	56.3	28.2
Green Ext Time (p_c), s	5.2	0.0	3.3

Intersection Summary	
HCM 2010 Ctrl Delay	28.3
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	120	1150	110	190	660	0	0	480	140
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99
Adj Sat Flow veh/h/ln				190.0	184.5	190.0	190.0	184.5	0.0	0.0	177.1	190.0
Lanes				0	3	0	0	2	0	0	2	0
Cap, veh/h				168	1726	170	322	1380	0	0	1437	416
Arrive On Green				0.38	0.38	0.37	1.00	1.00	0.00	0.00	0.55	0.54
Sat Flow, veh/h				443	4542	448	505	1949	0	0	2631	762
Grp Volume(v), veh/h				518	478	457	448	447	0	0	339	313
Grp Sat Flow(s),veh/h/ln				1823	1845	1766	1187	1845	0	0	1771	1622
Q Serve(g_s), s				32.0	28.2	28.2	0.1	0.0	0.0	0.0	14.0	14.2
Cycle Q Clear(g_c), s				32.0	28.2	28.2	71.0	0.0	0.0	0.0	14.0	14.2
Prop In Lane				0.24		0.25	0.67		0.00	0.00		0.47
Lane Grp Cap(c), veh/h				693	701	671	60	1007	0	0	967	886
V/C Ratio(X)				0.75	0.68	0.68	7.44	0.44	0.00	0.00	0.35	0.35
Avail Cap(c_a), veh/h				693	701	671	60	1007	0	0	967	886
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	0.78	0.78	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				34.9	33.7	33.8	34.4	0.0	0.0	0.0	16.6	16.7
Incr Delay (d2), s/veh				7.3	5.3	5.5	2926.9	1.1	0.0	0.0	1.0	1.1
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				16.2	14.2	13.6	51.0	0.3	0.0	0.0	6.3	5.9
Lane Grp Delay (d), s/veh				42.2	39.0	39.4	2961.3	1.1	0.0	0.0	17.6	17.8
Lane Grp LOS				D	D	D	F	A			B	B
Approach Vol, veh/h					1453			895			652	
Approach Delay, s/veh					40.3			1481.2			17.7	
Approach LOS					D			F			B	

Timer					
Assigned Phs		2	7	4	8
Phs Duration (G+Y+Rc), s		54.0	0.0	76.0	76.0
Change Period (Y+Rc), s		5.6	5.0	6.0	6.0
Max Green Setting (Gmax), s		48.4	4.0	70.0	61.0
Max Q Clear Time (g_c+I1), s		34.0	0.0	73.0	16.2
Green Ext Time (p_c), s		5.9	0.0	0.0	10.6

Intersection Summary	
HCM 2010 Ctrl Delay	465.2
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	60	1570	0	0	0	0	0	50	20
Number				5	2	12				3	8	18
Initial Q (Qb), veh				0	0	0				0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00				1.00		1.00
Parking Bus Adj				1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	182.7	0.0				0.0	190.0	190.0
Lanes				0	3	0				0	1	0
Cap, veh/h				55	2558	0				0	219	87
Arrive On Green				0.25	0.25	0.00				0.00	0.17	0.17
Sat Flow, veh/h				0	3325	0				0	1296	513
Grp Volume(v), veh/h				63	1653	0				0	0	74
Grp Sat Flow(s),veh/h/ln				0	1663	0				0	0	1809
Q Serve(g_s), s				0.0	57.7	0.0				0.0	0.0	4.6
Cycle Q Clear(g_c), s				100.0	57.7	0.0				0.0	0.0	4.6
Prop In Lane				1.00		0.00				0.00		0.28
Lane Grp Cap(c), veh/h				55	2558	0				0	0	306
V/C Ratio(X)				1.14	0.65	0.00				0.00	0.00	0.24
Avail Cap(c_a), veh/h				55	2558	0				0	0	306
HCM Platoon Ratio				0.33	0.33	1.00				1.00	1.00	1.00
Upstream Filter(I)				0.46	0.46	0.00				0.00	0.00	1.00
Uniform Delay (d), s/veh				98.5	32.7	0.0				0.0	0.0	46.8
Incr Delay (d2), s/veh				123.6	0.6	0.0				0.0	0.0	1.9
Initial Q Delay(d3),s/veh				0.0	0.0	0.0				0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				3.9	26.2	0.0				0.0	0.0	2.3
Lane Grp Delay (d), s/veh				222.1	33.3	0.0				0.0	0.0	48.6
Lane Grp LOS				F	C							D
Approach Vol, veh/h					1716						74	
Approach Delay, s/veh					40.2						48.6	
Approach LOS					D						D	

Timer	
Assigned Phs	2
Phs Duration (G+Y+Rc), s	104.0
Change Period (Y+Rc), s	5.0
Max Green Setting (Gmax), s	99.0
Max Q Clear Time (g_c+I1), s	102.0
Green Ext Time (p_c), s	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	40.6
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	170	1280	180	180	840	0	0	1230	150
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	184.5	190.0	184.5	184.5	0.0	0.0	184.5	190.0
Lanes				0	3	0	1	2	0	0	2	0
Cap, veh/h				192	1542	223	237	2151	0	0	1527	185
Arrive On Green				0.12	0.12	0.12	0.16	1.00	0.00	0.00	0.47	0.47
Sat Flow, veh/h				530	4255	614	1757	3689	0	0	3228	392
Grp Volume(v), veh/h				614	567	534	189	884	0	0	737	716
Grp Sat Flow(s),veh/h/ln				1818	1845	1736	1757	1845	0	0	1845	1776
Q Serve(g_s), s				43.5	39.1	39.2	7.0	0.0	0.0	0.0	45.6	46.3
Cycle Q Clear(g_c), s				43.5	39.1	39.2	7.0	0.0	0.0	0.0	45.6	46.3
Prop In Lane				0.29		0.35	1.00		0.00	0.00		0.22
Lane Grp Cap(c), veh/h				659	668	629	237	2151	0	0	873	840
V/C Ratio(X)				0.93	0.85	0.85	0.80	0.41	0.00	0.00	0.84	0.85
Avail Cap(c_a), veh/h				659	668	629	295	2151	0	0	873	840
HCM Platoon Ratio				0.33	0.33	0.33	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.88	0.88	0.88	0.09	0.09	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				55.6	53.7	53.8	24.9	0.0	0.0	0.0	30.1	30.2
Incr Delay (d2), s/veh				20.0	11.4	12.1	0.9	0.1	0.0	0.0	9.8	10.7
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				25.2	21.8	20.6	5.9	0.0	0.0	0.0	23.5	23.0
Lane Grp Delay (d), s/veh				75.7	65.1	65.9	25.8	0.1	0.0	0.0	39.9	40.9
Lane Grp LOS				E	E	E	C	A			D	D
Approach Vol, veh/h					1715			1073			1453	
Approach Delay, s/veh					69.1			4.6			40.4	
Approach LOS					E			A			D	

Timer												
Assigned Phs					2		7	4			8	
Phs Duration (G+Y+Rc), s					50.4		13.3	79.6			66.3	
Change Period (Y+Rc), s					4.3		4.2	4.8			4.8	
Max Green Setting (Gmax), s					46.1		13.4	74.8			57.2	
Max Q Clear Time (g_c+I1), s					45.5		9.0	2.0			48.3	
Green Ext Time (p_c), s					0.2		0.2	3.0			2.5	

Intersection Summary												
HCM 2010 Ctrl Delay			43.0									
HCM 2010 LOS			D									

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	70	1610	40	70	70	0	0	180	70
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	186.3	190.0	190.0	186.3	0.0	0.0	186.3	190.0
Lanes				0	3	0	0	1	0	0	1	0
Cap, veh/h				144	3508	90	124	110	0	0	311	122
Arrive On Green				0.22	0.22	0.22	0.41	0.41	0.00	0.00	0.24	0.24
Sat Flow, veh/h				213	5208	133	320	450	0	0	1275	499
Grp Volume(v), veh/h				642	588	581	148	0	0	0	0	263
Grp Sat Flow(s),veh/h/ln				1852	1863	1839	770	0	0	0	0	1775
Q Serve(g_s), s				35.8	32.2	32.2	9.1	0.0	0.0	0.0	0.0	15.5
Cycle Q Clear(g_c), s				35.8	32.2	32.2	24.6	0.0	0.0	0.0	0.0	15.5
Prop In Lane				0.12		0.07	0.50		0.00	0.00		0.28
Lane Grp Cap(c), veh/h				1248	1255	1239	234	0	0	0	0	433
V/C Ratio(X)				0.51	0.47	0.47	0.63	0.00	0.00	0.00	0.00	0.61
Avail Cap(c_a), veh/h				1248	1255	1239	381	0	0	0	0	620
HCM Platoon Ratio				0.33	0.33	0.33	1.67	1.67	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.16	0.16	0.16	0.88	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				28.8	27.4	27.5	36.9	0.0	0.0	0.0	0.0	39.6
Incr Delay (d2), s/veh				0.2	0.2	0.2	1.9	0.0	0.0	0.0	0.0	1.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				18.3	16.5	16.3	4.1	0.0	0.0	0.0	0.0	7.2
Lane Grp Delay (d), s/veh				29.1	27.6	27.7	38.7	0.0	0.0	0.0	0.0	40.6
Lane Grp LOS				C	C	C	D					D
Approach Vol, veh/h					1811			148			263	
Approach Delay, s/veh					28.2			38.7			40.6	
Approach LOS					C			D			D	

Timer												
Assigned Phs					2			4			8	
Phs Duration (G+Y+Rc), s					84.0			33.6			33.6	
Change Period (Y+Rc), s					5.8			5.9			5.9	
Max Green Setting (Gmax), s					78.2			40.1			40.1	
Max Q Clear Time (g_c+I1), s					37.8			26.6			17.5	
Green Ext Time (p_c), s					8.0			1.1			1.2	

Intersection Summary												
HCM 2010 Ctrl Delay			30.3									
HCM 2010 LOS			C									

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	250	1180	110	110	980	0	0	1070	80
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	186.3	190.0	186.3	186.3	0.0	0.0	186.3	190.0
Lanes				0	3	0	1	2	0	0	2	0
Cap, veh/h				329	1671	160	254	1859	0	0	1286	96
Arrive On Green				0.39	0.39	0.38	0.18	1.00	0.00	0.00	0.38	0.37
Sat Flow, veh/h				835	4236	405	1774	3725	0	0	3425	255
Grp Volume(v), veh/h				574	534	514	116	1032	0	0	612	598
Grp Sat Flow(s),veh/h/ln				1821	1863	1791	1774	1863	0	0	1863	1818
Q Serve(g_s), s				29.3	25.6	25.6	3.8	0.1	0.0	0.0	32.1	32.2
Cycle Q Clear(g_c), s				29.3	25.6	25.6	3.8	0.1	0.0	0.0	32.1	32.2
Prop In Lane				0.46		0.23	1.00		0.00	0.00		0.14
Lane Grp Cap(c), veh/h				718	735	707	254	1859	0	0	699	683
V/C Ratio(X)				0.80	0.73	0.73	0.46	0.56	0.00	0.00	0.87	0.88
Avail Cap(c_a), veh/h				1148	1174	1129	254	1859	0	0	699	683
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	0.09	0.09	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				28.2	27.0	27.1	20.4	0.0	0.0	0.0	30.5	30.6
Incr Delay (d2), s/veh				9.0	6.2	6.4	0.5	0.0	0.0	0.0	14.3	14.8
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				15.0	13.0	12.6	1.5	0.0	0.0	0.0	17.6	17.3
Lane Grp Delay (d), s/veh				37.2	33.2	33.6	20.9	0.1	0.0	0.0	44.9	45.4
Lane Grp LOS				D	C	C	C	A			D	D
Approach Vol, veh/h					1621			1148			1210	
Approach Delay, s/veh					34.7			2.2			45.1	
Approach LOS					C			A			D	

Timer												
Assigned Phs					2		7	4			8	
Phs Duration (G+Y+Rc), s					47.2		13.0	58.0			45.0	
Change Period (Y+Rc), s					6.7		3.0	6.5			6.5	
Max Green Setting (Gmax), s					65.3		10.0	51.5			38.5	
Max Q Clear Time (g_c+I1), s					31.3		5.8	2.1			34.2	
Green Ext Time (p_c), s					9.2		0.1	17.4			3.5	

Intersection Summary		
HCM 2010 Ctrl Delay		28.5
HCM 2010 LOS		C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Volume (vph)	0	0	0	600	750	0	220	320	0	0	380	470
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	10	12	11	10	12	12	13	12
Total Lost time (s)				6.7	6.7		3.0	6.5			6.5	
Lane Util. Factor				0.91	0.91		1.00	0.95			0.95	
Frt				1.00	1.00		1.00	1.00			0.92	
Flt Protected				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (prot)				1610	3124		1711	3303			3354	
Flt Permitted				0.95	0.99		0.14	1.00			1.00	
Satd. Flow (perm)				1610	3124		250	3303			3354	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	632	789	0	232	337	0	0	400	495
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	86	0
Lane Group Flow (vph)	0	0	0	360	1061	0	232	337	0	0	810	0
Turn Type				Perm	NA		pm+pt	NA			NA	
Protected Phases					2		7	4			8	
Permitted Phases				2			4					
Actuated Green, G (s)				53.3	53.3		63.5	63.5			44.5	
Effective Green, g (s)				53.3	53.3		63.5	63.5			44.5	
Actuated g/C Ratio				0.41	0.41		0.49	0.49			0.34	
Clearance Time (s)				6.7	6.7		3.0	6.5			6.5	
Vehicle Extension (s)				2.5	2.5		3.0	2.0			2.5	
Lane Grp Cap (vph)				660	1280		301	1613			1148	
v/s Ratio Prot							c0.09	0.10			0.24	
v/s Ratio Perm				0.22	0.34		c0.28					
v/c Ratio				0.55	0.83		0.77	0.21			0.71	
Uniform Delay, d1				29.1	34.3		24.3	18.9			37.1	
Progression Factor				0.33	0.34		1.00	1.00			1.00	
Incremental Delay, d2				2.4	4.8		11.5	0.3			3.6	
Delay (s)				11.9	16.4		35.9	19.2			40.7	
Level of Service				B	B		D	B			D	
Approach Delay (s)		0.0			15.3			26.0			40.7	
Approach LOS		A			B			C			D	

Intersection Summary			
HCM 2000 Control Delay	25.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	16.2
Intersection Capacity Utilization	77.6%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	50	0	20	260	140	300	0	1810	0	0	2510	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	9	12	9	11	11	11	12	10	12	12	10	12
Total Lost time (s)	3.9		3.9	3.9	3.9	3.9		3.6			4.0	
Lane Util. Factor	1.00		1.00	0.97	1.00	1.00		0.91			0.86	
Frt	1.00		0.85	1.00	1.00	0.85		1.00			1.00	
Flt Protected	0.95		1.00	0.95	1.00	1.00		1.00			1.00	
Satd. Flow (prot)	1593		1425	3319	1801	1531		4746			5967	
Flt Permitted	0.66		1.00	0.95	1.00	1.00		1.00			1.00	
Satd. Flow (perm)	1112		1425	3319	1801	1531		4746			5967	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	53	0	21	274	147	316	0	1905	0	0	2642	42
RTOR Reduction (vph)	0	0	19	0	0	49	0	0	0	0	2	0
Lane Group Flow (vph)	53	0	2	274	147	267	0	1905	0	0	2682	0
Turn Type	custom		custom	Split	NA	Perm		NA			NA	
Protected Phases			8	4	4			6			2	
Permitted Phases	8					4						
Actuated Green, G (s)	9.1		9.1	32.1	32.1	32.1		64.4			64.0	
Effective Green, g (s)	10.1		10.1	33.1	33.1	33.1		65.4			65.0	
Actuated g/C Ratio	0.08		0.08	0.28	0.28	0.28		0.55			0.54	
Clearance Time (s)	4.9		4.9	4.9	4.9	4.9		4.6			5.0	
Vehicle Extension (s)	2.5		2.5	2.5	2.5	2.5		2.5			2.5	
Lane Grp Cap (vph)	93		119	915	496	422		2586			3232	
v/s Ratio Prot			0.00	0.08	0.08			0.40			c0.45	
v/s Ratio Perm	c0.05					c0.17						
v/c Ratio	0.57		0.01	0.30	0.30	0.63		0.74			0.83	
Uniform Delay, d1	52.9		50.4	34.3	34.3	38.1		20.8			22.9	
Progression Factor	1.00		1.00	1.00	1.00	1.00		0.16			1.00	
Incremental Delay, d2	22.9		0.2	0.8	1.5	7.0		0.2			2.6	
Delay (s)	75.8		50.6	35.1	35.8	45.1		3.5			25.5	
Level of Service	E		D	D	D	D		A			C	
Approach Delay (s)		68.6			39.6			3.5			25.5	
Approach LOS		E			D			A			C	

Intersection Summary			
HCM 2000 Control Delay	20.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	11.8
Intersection Capacity Utilization	66.9%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	1570	80	0	1450	80	230	1980	430	260	2200	120
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	0.0	186.3	190.0	0.0	186.3	190.0	186.3	186.3	190.0	186.3	186.3	186.3
Lanes	0	2	0	0	2	0	1	3	0	1	2	1
Cap, veh/h	0	1474	74	0	1467	80	202	1720	359	202	1428	607
Arrive On Green	0.00	0.42	0.41	0.00	0.42	0.41	0.08	0.38	0.38	0.11	0.51	0.51
Sat Flow, veh/h	0	3516	178	0	3500	192	1774	4487	936	1774	3725	1583
Grp Volume(v), veh/h	0	871	866	0	809	801	242	1716	821	274	2316	126
Grp Sat Flow(s),veh/h/ln	0	1863	1831	0	1863	1829	1774	1863	1698	1774	1863	1583
Q Serve(g_s), s	0.0	50.3	50.3	0.0	50.3	50.3	9.5	46.0	46.0	9.5	46.0	5.2
Cycle Q Clear(g_c), s	0.0	50.3	50.3	0.0	50.3	50.3	9.5	46.0	46.0	9.5	46.0	5.2
Prop In Lane	0.00		0.10	0.00		0.10	1.00		0.55	1.00		1.00
Lane Grp Cap(c), veh/h	0	781	768	0	781	767	202	1428	651	202	1428	607
V/C Ratio(X)	0.00	1.12	1.13	0.00	1.04	1.04	1.20	1.20	1.26	1.36	1.62	0.21
Avail Cap(c_a), veh/h	0	781	768	0	781	767	202	1428	651	202	1428	607
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.54	0.54	0.54
Uniform Delay (d), s/veh	0.0	34.9	34.9	0.0	34.9	34.9	33.6	37.0	37.3	32.1	29.4	19.4
Incr Delay (d2), s/veh	0.0	69.0	73.6	0.0	42.0	44.7	126.5	97.6	130.1	176.9	281.5	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.0	38.4	38.7	0.0	32.5	32.5	13.4	40.8	43.1	16.1	75.7	2.0
Lane Grp Delay (d), s/veh	0.0	103.8	108.5	0.0	76.8	79.6	160.2	134.6	167.4	209.0	310.9	19.8
Lane Grp LOS		F	F		F	F	F	F	F	F	F	B
Approach Vol, veh/h		1737			1610			2779			2716	
Approach Delay, s/veh		106.2			78.2			146.5			287.2	
Approach LOS		F			E			F			F	

Timer								
Assigned Phs		6		2		7	4		3	8	
Phs Duration (G+Y+Rc), s		56.0		56.0		13.0	51.0		13.0	51.0	
Change Period (Y+Rc), s		6.7		6.7		3.0	6.0		3.0	6.0	
Max Green Setting (Gmax), s		49.3		49.3		10.0	45.0		10.0	45.0	
Max Q Clear Time (g_c+I1), s		52.3		52.3		11.5	48.0		11.5	48.0	
Green Ext Time (p_c), s		0.0		0.0		0.0	0.0		0.0	0.0	

Intersection Summary	
HCM 2010 Ctrl Delay	169.4
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	70	1960	50	0	0	0	0	60	90	50	70	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	186.3	190.0	190.0	186.3	0.0
Lanes	0	3	0				0	1	0	0	1	0
Cap, veh/h	132	3917	104				0	109	165	91	111	0
Arrive On Green	0.74	0.75	0.74				0.00	0.16	0.16	0.16	0.16	0.00
Sat Flow, veh/h	176	5240	139				0	671	1013	299	680	0
Grp Volume(v), veh/h	777	710	703				0	0	158	127	0	0
Grp Sat Flow(s),veh/h/ln	1854	1863	1838				0	0	1684	979	0	0
Q Serve(g_s), s	22.0	18.7	18.9				0.0	0.0	10.5	6.4	0.0	0.0
Cycle Q Clear(g_c), s	22.0	18.7	18.9				0.0	0.0	10.5	16.9	0.0	0.0
Prop In Lane	0.10		0.08				0.00		0.60	0.42		0.00
Lane Grp Cap(c), veh/h	1386	1393	1374				0	0	274	202	0	0
V/C Ratio(X)	0.56	0.51	0.51				0.00	0.00	0.58	0.63	0.00	0.00
Avail Cap(c_a), veh/h	1386	1393	1374				0	0	405	320	0	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	6.6	6.2	6.2				0.0	0.0	46.7	50.3	0.0	0.0
Incr Delay (d2), s/veh	1.6	1.3	1.4				0.0	0.0	1.9	3.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	9.5	8.0	8.0				0.0	0.0	4.7	4.1	0.0	0.0
Lane Grp Delay (d), s/veh	8.3	7.5	7.6				0.0	0.0	48.6	53.5	0.0	0.0
Lane Grp LOS	A	A	A						D	D		
Approach Vol, veh/h		2190						158			127	
Approach Delay, s/veh		7.8						48.6			53.5	
Approach LOS		A						D			D	

Timer												
Assigned Phs		6						4			8	
Phs Duration (G+Y+Rc), s		95.0						25.7			25.7	
Change Period (Y+Rc), s		5.8						6.0			6.0	
Max Green Setting (Gmax), s		89.2						29.0			29.0	
Max Q Clear Time (g_c+I1), s		24.0						12.5			18.9	
Green Ext Time (p_c), s		17.8						1.0			0.8	

Intersection Summary												
HCM 2010 Ctrl Delay			12.8									
HCM 2010 LOS			B									

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	130	2050	100	0	0	0	0	1040	220	180	1280	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	186.3	190.0	186.3	186.3	0.0
Lanes	0	3	0				0	2	0	1	2	0
Cap, veh/h	136	2276	113				0	1107	233	151	1695	0
Arrive On Green	0.15	0.15	0.15				0.00	0.37	0.36	0.11	0.91	0.00
Sat Flow, veh/h	297	4984	249				0	2985	629	1774	3725	0
Grp Volume(v), veh/h	852	779	768				0	681	646	189	1347	0
Grp Sat Flow(s),veh/h/ln	1848	1863	1819				0	1863	1752	1774	1863	0
Q Serve(g_s), s	59.5	53.7	54.3				0.0	47.3	47.9	7.0	15.3	0.0
Cycle Q Clear(g_c), s	59.5	53.7	54.3				0.0	47.3	47.9	7.0	15.3	0.0
Prop In Lane	0.16		0.14				0.00		0.36	1.00		0.00
Lane Grp Cap(c), veh/h	844	851	831				0	690	649	151	1695	0
V/C Ratio(X)	1.01	0.92	0.93				0.00	0.99	0.99	1.26	0.79	0.00
Avail Cap(c_a), veh/h	844	851	831				0	690	649	151	1695	0
HCM Platoon Ratio	0.33	0.33	0.33				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	0.80	0.80	0.80				0.00	1.00	1.00	0.09	0.09	0.00
Uniform Delay (d), s/veh	55.3	52.9	53.1				0.0	40.7	41.0	31.0	3.9	0.0
Incr Delay (d2), s/veh	30.2	13.6	14.8				0.0	31.1	34.0	119.9	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	37.0	30.4	30.4				0.0	28.3	27.3	9.8	2.2	0.0
Lane Grp Delay (d), s/veh	85.5	66.4	68.0				0.0	71.8	75.0	151.0	4.2	0.0
Lane Grp LOS	F	E	E					E	E	F	A	
Approach Vol, veh/h		2400						1327			1536	
Approach Delay, s/veh		73.7						73.4			22.3	
Approach LOS		E						E			C	

Timer					
Assigned Phs		6		4	3	8
Phs Duration (G+Y+Rc), s		66.0		53.3	11.0	64.3
Change Period (Y+Rc), s		6.5		6.0	4.0	6.0
Max Green Setting (Gmax), s		59.5		47.0	7.0	58.3
Max Q Clear Time (g_c+I1), s		61.5		49.9	9.0	17.3
Green Ext Time (p_c), s		0.0		0.0	0.0	16.8

Intersection Summary	
HCM 2010 Ctrl Delay	58.6
HCM 2010 LOS	E

Notes

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	80	2370	0	0	50	0
Number	1	6			3	18
Initial Q (Qb), veh	0	0			0	0
Ped-Bike Adj(A_pbT)	1.00				1.00	1.00
Parking Bus Adj	1.00	1.00			1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3			186.3	0.0
Lanes	0	3			1	0
Cap, veh/h	70	3268			0	0
Arrive On Green	0.32	0.32			0.00	0.00
Sat Flow, veh/h	0	3390			0	
Grp Volume(v), veh/h	84	2495			0.0	
Grp Sat Flow(s),veh/h/ln	0	1695				
Q Serve(g_s), s	0.0	68.3				
Cycle Q Clear(g_c), s	99.3	68.3				
Prop In Lane	1.00					
Lane Grp Cap(c), veh/h	70	3268				
V/C Ratio(X)	1.20	0.76				
Avail Cap(c_a), veh/h	70	3268				
HCM Platoon Ratio	0.33	0.33				
Upstream Filter(I)	0.09	0.09				
Uniform Delay (d), s/veh	84.8	24.5				
Incr Delay (d2), s/veh	102.9	0.2				
Initial Q Delay(d3),s/veh	0.0	0.0				
%ile Back of Q (50%), veh/ln	2.0	27.1				
Lane Grp Delay (d), s/veh	187.7	24.7				
Lane Grp LOS	F	C				
Approach Vol, veh/h		2579				
Approach Delay, s/veh		30.0				
Approach LOS		C				

Timer	
Assigned Phs	6
Phs Duration (G+Y+Rc), s	103.0
Change Period (Y+Rc), s	4.7
Max Green Setting (Gmax), s	98.3
Max Q Clear Time (g_c+I1), s	101.3
Green Ext Time (p_c), s	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	30.0
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	80	2250	40	0	0	0	0	90	120	60	110	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	193.7	190.0	190.0	193.7	0.0
Lanes	0	3	0				0	1	0	0	1	0
Cap, veh/h	124	3711	68				0	185	245	113	194	0
Arrive On Green	0.23	0.23	0.23				0.00	0.24	0.24	0.49	0.49	0.00
Sat Flow, veh/h	176	5290	97				0	757	1004	310	796	0
Grp Volume(v), veh/h	884	807	803				0	0	221	179	0	0
Grp Sat Flow(s),veh/h/ln	1854	1863	1846				0	0	1760	1107	0	0
Q Serve(g_s), s	56.6	50.5	50.8				0.0	0.0	14.2	8.0	0.0	0.0
Cycle Q Clear(g_c), s	56.6	50.5	50.8				0.0	0.0	14.2	22.1	0.0	0.0
Prop In Lane	0.09		0.05				0.00		0.57	0.35		0.00
Lane Grp Cap(c), veh/h	1301	1307	1295				0	0	429	307	0	0
V/C Ratio(X)	0.68	0.62	0.62				0.00	0.00	0.51	0.58	0.00	0.00
Avail Cap(c_a), veh/h	1301	1307	1295				0	0	429	307	0	0
HCM Platoon Ratio	0.33	0.33	0.33				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	0.78	0.78	0.78				0.00	0.00	1.00	0.55	0.00	0.00
Uniform Delay (d), s/veh	36.6	34.3	34.4				0.0	0.0	42.8	31.9	0.0	0.0
Incr Delay (d2), s/veh	2.3	1.7	1.8				0.0	0.0	4.4	4.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	29.3	26.2	26.1				0.0	0.0	7.0	5.1	0.0	0.0
Lane Grp Delay (d), s/veh	38.9	36.0	36.2				0.0	0.0	47.1	36.3	0.0	0.0
Lane Grp LOS	D	D	D						D	D		
Approach Vol, veh/h		2494						221			179	
Approach Delay, s/veh		37.1						47.1			36.3	
Approach LOS		D						D			D	

Timer												
Assigned Phs		6						4			8	
Phs Duration (G+Y+Rc), s		95.0						35.0			35.0	
Change Period (Y+Rc), s		4.8						4.3			4.3	
Max Green Setting (Gmax), s		90.2						30.7			30.7	
Max Q Clear Time (g_c+I1), s		58.6						16.2			24.1	
Green Ext Time (p_c), s		13.6						1.1			0.7	

Intersection Summary			
HCM 2010 Ctrl Delay		37.8	
HCM 2010 LOS		D	

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	250	2190	100	0	0	0	0	880	360	300	1240	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	186.3	190.0	186.3	186.3	0.0
Lanes	0	3	0				0	2	0	1	2	0
Cap, veh/h	235	2211	103				0	838	340	274	1783	0
Arrive On Green	0.46	0.46	0.45				0.00	0.33	0.32	0.25	0.96	0.00
Sat Flow, veh/h	510	4791	223				0	2521	1023	1774	3725	0
Grp Volume(v), veh/h	947	866	860				0	682	623	316	1305	0
Grp Sat Flow(s),veh/h/ln	1837	1863	1823				0	1863	1682	1774	1863	0
Q Serve(g_s), s	60.0	60.0	60.0				0.0	43.2	43.2	16.0	6.6	0.0
Cycle Q Clear(g_c), s	60.0	60.0	60.0				0.0	43.2	43.2	16.0	6.6	0.0
Prop In Lane	0.28		0.12				0.00		0.61	1.00		0.00
Lane Grp Cap(c), veh/h	848	860	842				0	619	559	274	1783	0
V/C Ratio(X)	1.12	1.01	1.02				0.00	1.10	1.11	1.15	0.73	0.00
Avail Cap(c_a), veh/h	848	860	842				0	619	559	274	1783	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	0.17	0.17	0.00
Uniform Delay (d), s/veh	35.0	35.0	35.1				0.0	43.4	43.7	33.3	1.6	0.0
Incr Delay (d2), s/veh	68.3	32.4	36.7				0.0	67.3	73.5	77.2	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	43.4	35.7	35.9				0.0	32.0	29.9	14.5	1.0	0.0
Lane Grp Delay (d), s/veh	103.3	67.4	71.7				0.0	110.7	117.2	110.4	1.9	0.0
Lane Grp LOS	F	F	F					F	F	F	A	
Approach Vol, veh/h		2673						1305			1621	
Approach Delay, s/veh		81.5						113.8			23.0	
Approach LOS		F						F			C	

Timer												
Assigned Phs		6						4		3	8	
Phs Duration (G+Y+Rc), s		64.0						47.0		19.0	66.0	
Change Period (Y+Rc), s		5.0						4.8		3.0	4.8	
Max Green Setting (Gmax), s		59.0						42.2		16.0	61.2	
Max Q Clear Time (g_c+I1), s		62.0						45.2		18.0	8.6	
Green Ext Time (p_c), s		0.0						0.0		0.0	24.2	

Intersection Summary			
HCM 2010 Ctrl Delay		72.1	
HCM 2010 LOS		E	

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	250	2630	140	0	0	0	0	580	130	180	430	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	186.3	190.0	190.0	186.3	0.0
Lanes	0	3	0				0	2	0	0	2	0
Cap, veh/h	235	2638	142				0	1164	260	219	1015	0
Arrive On Green	0.55	0.55	0.54				0.00	0.39	0.39	0.13	0.13	0.00
Sat Flow, veh/h	430	4831	260				0	2949	660	414	1695	0
Grp Volume(v), veh/h	1127	1026	1026				0	385	363	321	321	0
Grp Sat Flow(s),veh/h/ln	1841	1863	1817				0	1863	1746	1123	1863	0
Q Serve(g_s), s	71.0	71.0	71.0				0.0	20.5	20.7	0.1	20.7	0.0
Cycle Q Clear(g_c), s	71.0	71.0	71.0				0.0	20.5	20.7	51.3	20.7	0.0
Prop In Lane	0.23		0.14				0.00		0.38	1.00		0.00
Lane Grp Cap(c), veh/h	1006	1017	992				0	735	689	55	735	0
V/C Ratio(X)	1.12	1.01	1.03				0.00	0.52	0.53	5.80	0.44	0.00
Avail Cap(c_a), veh/h	1006	1017	992				0	735	689	55	735	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	0.33	0.33	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	0.93	0.93	0.00
Uniform Delay (d), s/veh	29.5	29.5	29.6				0.0	30.0	30.2	82.3	43.2	0.0
Incr Delay (d2), s/veh	67.6	30.2	37.6				0.0	2.7	2.9	2194.0	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	50.7	40.7	41.8				0.0	10.2	9.6	33.8	10.6	0.0
Lane Grp Delay (d), s/veh	97.1	59.7	67.1				0.0	32.7	33.1	2276.3	43.6	0.0
Lane Grp LOS	F	F	F					C	C	F	D	
Approach Vol, veh/h		3178						748			642	
Approach Delay, s/veh		75.4						32.9			1159.9	
Approach LOS		E						C			F	

Timer												
Assigned Phs		6						4		3	8	
Phs Duration (G+Y+Rc), s		75.0						55.0		0.0	55.0	
Change Period (Y+Rc), s		5.0						4.7		4.0	4.7	
Max Green Setting (Gmax), s		70.0						36.3		10.0	50.3	
Max Q Clear Time (g_c+I1), s		73.0						22.7		0.0	53.3	
Green Ext Time (p_c), s		0.0						6.4		0.0	0.0	

Intersection Summary	
HCM 2010 Ctrl Delay	220.8
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	2890	50	0	0	0	0	0	40	120	80	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	186.3	190.0	186.3	186.3	0.0
Lanes	0	3	0				0	1	0	1	1	0
Cap, veh/h	0	4129	71				0	0	276	262	325	0
Arrive On Green	0.00	0.25	0.25				0.00	0.00	0.17	0.17	0.17	0.00
Sat Flow, veh/h	0	5477	95				0	0	1583	1359	1863	0
Grp Volume(v), veh/h	0	2063	1032				0	0	42	126	84	0
Grp Sat Flow(s),veh/h/ln	0	1863	1846				0	0	1583	1359	1863	0
Q Serve(g_s), s	0.0	66.2	66.9				0.0	0.0	2.9	11.3	5.1	0.0
Cycle Q Clear(g_c), s	0.0	66.2	66.9				0.0	0.0	2.9	14.2	5.1	0.0
Prop In Lane	0.00		0.05				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	0	2808	1392				0	0	276	262	325	0
V/C Ratio(X)	0.00	0.73	0.74				0.00	0.00	0.15	0.48	0.26	0.00
Avail Cap(c_a), veh/h	0	2808	1392				0	0	276	262	325	0
HCM Platoon Ratio	0.33	0.33	0.33				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.09	0.09				0.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	36.9	37.2				0.0	0.0	45.5	51.5	46.4	0.0
Incr Delay (d2), s/veh	0.0	0.2	0.3				0.0	0.0	1.2	1.4	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.0	33.4	33.6				0.0	0.0	1.3	4.1	2.5	0.0
Lane Grp Delay (d), s/veh	0.0	37.0	37.5				0.0	0.0	46.7	52.9	46.8	0.0
Lane Grp LOS		D	D						D	D	D	
Approach Vol, veh/h		3095						42			210	
Approach Delay, s/veh		37.2						46.7			50.4	
Approach LOS		D						D			D	

Timer												
Assigned Phs		6						4			8	
Phs Duration (G+Y+Rc), s		103.0						27.0			27.0	
Change Period (Y+Rc), s		5.0						4.3			4.3	
Max Green Setting (Gmax), s		98.0						22.7			22.7	
Max Q Clear Time (g_c+I1), s		68.9						4.9			16.2	
Green Ext Time (p_c), s		23.3						0.9			0.5	

Intersection Summary												
HCM 2010 Ctrl Delay			38.1									
HCM 2010 LOS			D									

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	200	2380	80	0	0	0	0	230	70	230	200	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	186.3	190.0	190.0	186.3	0.0
Lanes	0	3	0				0	1	0	0	1	0
Cap, veh/h	197	2503	86				0	561	171	241	198	0
Arrive On Green	0.17	0.17	0.17				0.00	0.41	0.41	0.68	0.68	0.00
Sat Flow, veh/h	392	4976	171				0	1370	419	484	483	0
Grp Volume(v), veh/h	993	905	903				0	0	316	453	0	0
Grp Sat Flow(s),veh/h/ln	1843	1863	1833				0	0	1789	967	0	0
Q Serve(g_s), s	65.4	62.7	63.8				0.0	0.0	16.5	0.1	0.0	0.0
Cycle Q Clear(g_c), s	65.4	62.7	63.8				0.0	0.0	16.5	53.2	0.0	0.0
Prop In Lane	0.21		0.09				0.00		0.23	0.53		0.00
Lane Grp Cap(c), veh/h	927	937	922				0	0	732	438	0	0
V/C Ratio(X)	1.07	0.97	0.98				0.00	0.00	0.43	1.03	0.00	0.00
Avail Cap(c_a), veh/h	927	937	922				0	0	732	438	0	0
HCM Platoon Ratio	0.33	0.33	0.33				1.00	1.00	1.00	1.67	1.67	1.00
Upstream Filter(I)	0.40	0.40	0.40				0.00	0.00	1.00	0.78	0.00	0.00
Uniform Delay (d), s/veh	54.2	53.1	53.5				0.0	0.0	27.6	29.0	0.0	0.0
Incr Delay (d2), s/veh	41.0	12.2	14.5				0.0	0.0	1.9	47.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	43.4	35.0	35.6				0.0	0.0	7.8	20.1	0.0	0.0
Lane Grp Delay (d), s/veh	95.2	65.3	68.0				0.0	0.0	29.4	76.0	0.0	0.0
Lane Grp LOS	F	E	E						C	F		
Approach Vol, veh/h		2800						316			453	
Approach Delay, s/veh		76.7						29.4			76.0	
Approach LOS		E						C			E	

Timer												
Assigned Phs		6						4		3	8	
Phs Duration (G+Y+Rc), s		71.0						59.0		0.0	59.0	
Change Period (Y+Rc), s		5.6						5.8		3.0	5.8	
Max Green Setting (Gmax), s		65.4						37.2		13.0	53.2	
Max Q Clear Time (g_c+I1), s		67.4						18.5		0.0	55.2	
Green Ext Time (p_c), s		0.0						2.8		0.0	0.0	

Intersection Summary	
HCM 2010 Ctrl Delay	72.5
HCM 2010 LOS	E

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	160	2460	20	0	0	0	0	110	290	0	0	0
Number	1	6	16				7	4	14			
Initial Q (Qb), veh	0	0	0				0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00			
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00			
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	186.3	190.0			
Lanes	0	3	0				0	1	0			
Cap, veh/h	48	2082	17				0	149	391			
Arrive On Green	0.62	0.62	0.62				0.00	0.33	0.33			
Sat Flow, veh/h	0	3358	27				0	455	1197			
Grp Volume(v), veh/h	168	1305	1305				0	0	421			
Grp Sat Flow(s),veh/h/ln	0	1695	1690				0	0	1652			
Q Serve(g_s), s	0.0	93.0	93.0				0.0	0.0	34.6			
Cycle Q Clear(g_c), s	93.0	93.0	93.0				0.0	0.0	34.6			
Prop In Lane	1.00		0.02				0.00		0.72			
Lane Grp Cap(c), veh/h	48	1051	1048				0	0	540			
V/C Ratio(X)	3.50	1.24	1.24				0.00	0.00	0.78			
Avail Cap(c_a), veh/h	48	1051	1048				0	0	540			
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	1.00				0.00	0.00	1.00			
Uniform Delay (d), s/veh	75.0	28.5	28.5				0.0	0.0	45.6			
Incr Delay (d2), s/veh	1175.3	117.1	118.3				0.0	0.0	10.7			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0			
%ile Back of Q (50%), veh/ln	17.6	72.4	72.6				0.0	0.0	16.3			
Lane Grp Delay (d), s/veh	1250.3	145.6	146.8				0.0	0.0	56.3			
Lane Grp LOS	F	F	F						E			
Approach Vol, veh/h		2778						421				
Approach Delay, s/veh		213.0						56.3				
Approach LOS		F						E				

Timer	
Assigned Phs	6
Phs Duration (G+Y+Rc), s	97.0
Change Period (Y+Rc), s	4.0
Max Green Setting (Gmax), s	93.0
Max Q Clear Time (g_c+I1), s	95.0
Green Ext Time (p_c), s	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	192.4
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	2880	150	0	0	0	0	0	0	3520	720	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.7	6.7							6.0	6.0	
Lane Util. Factor		0.91	1.00							0.86	0.86	
Frt		1.00	0.85							1.00	1.00	
Flt Protected		1.00	1.00							0.95	0.97	
Satd. Flow (prot)		4424	1425							2739	2797	
Flt Permitted		1.00	1.00							0.95	0.97	
Satd. Flow (perm)		4424	1425							2739	2797	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	3032	158	0	0	0	0	0	0	3705	758	0
RTOR Reduction (vph)	0	0	24	0	0	0	0	0	0	14	14	0
Lane Group Flow (vph)	0	3032	134	0	0	0	0	0	0	2469	1968	0
Parking (#/hr)		0										
Turn Type		NA	Perm							Perm	NA	
Protected Phases		6									8	
Permitted Phases			6							8		
Actuated Green, G (s)		62.3	62.3							75.0	75.0	
Effective Green, g (s)		62.3	62.3							75.0	75.0	
Actuated g/C Ratio		0.42	0.42							0.50	0.50	
Clearance Time (s)		6.7	6.7							6.0	6.0	
Vehicle Extension (s)		2.0	2.0							2.0	2.0	
Lane Grp Cap (vph)		1837	591							1369	1398	
v/s Ratio Prot		c0.69										
v/s Ratio Perm			0.09							c0.90	0.70	
v/c Ratio		1.65	0.23							1.80	1.66dl	
Uniform Delay, d1		43.9	28.3							37.5	37.5	
Progression Factor		0.66	0.38							0.66	0.66	
Incremental Delay, d2		294.2	0.5							361.7	183.7	
Delay (s)		323.2	11.2							386.6	208.6	
Level of Service		F	B							F	F	
Approach Delay (s)		307.7			0.0			0.0			307.6	
Approach LOS		F			A			A			F	

Intersection Summary			
HCM 2000 Control Delay	307.6	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.73		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	12.7
Intersection Capacity Utilization	146.8%	ICU Level of Service	H
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	190	3780	0	0	0	0	0	300	300	180	520	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	171.0	167.6	171.0				0.0	167.6	167.6	167.6	167.6	0.0
Lanes	0	3	0				0	1	1	1	1	0
Cap, veh/h	149	3180	0				0	462	392	124	462	0
Arrive On Green	0.66	0.66	0.00				0.00	0.28	0.28	0.55	0.55	0.00
Sat Flow, veh/h	225	4793	0				0	1676	1425	712	1676	0
Grp Volume(v), veh/h	1482	2697	0				0	316	316	189	547	0
Grp Sat Flow(s),veh/h/ln	1665	1676	0				0	1676	1425	712	1676	0
Q Serve(g_s), s	99.5	99.5	0.0				0.0	25.2	31.0	16.1	41.3	0.0
Cycle Q Clear(g_c), s	99.5	99.5	0.0				0.0	25.2	31.0	41.3	41.3	0.0
Prop In Lane	0.13		0.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	1105	2224	0				0	462	392	124	462	0
V/C Ratio(X)	1.34	1.21	0.00				0.00	0.68	0.81	1.52	1.19	0.00
Avail Cap(c_a), veh/h	1105	2224	0				0	462	392	124	462	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	1.00	0.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	25.3	25.2	0.0				0.0	48.5	50.6	49.4	33.7	0.0
Incr Delay (d2), s/veh	159.9	100.1	0.0				0.0	8.0	16.0	271.1	103.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	88.9	71.1	0.0				0.0	12.0	13.2	14.0	28.3	0.0
Lane Grp Delay (d), s/veh	185.1	125.4	0.0				0.0	56.5	66.7	320.6	137.1	0.0
Lane Grp LOS	F	F						E	E	F	F	
Approach Vol, veh/h		4179						632			736	
Approach Delay, s/veh		146.5						61.6			184.2	
Approach LOS		F						E			F	

Timer												
Assigned Phs		6						4			8	
Phs Duration (G+Y+Rc), s		104.0						46.0			46.0	
Change Period (Y+Rc), s		4.5						4.7			4.7	
Max Green Setting (Gmax), s		99.5						41.3			41.3	
Max Q Clear Time (g_c+I1), s		101.5						33.0			43.3	
Green Ext Time (p_c), s		0.0						4.2			0.0	

Intersection Summary												
HCM 2010 Ctrl Delay			141.9									
HCM 2010 LOS			F									

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	700	3470	440	0	0	0	0	1160	110	170	270	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	171.0	166.0	171.0				0.0	166.0	171.0	171.0	166.0	0.0
Lanes	0	3	0				0	2	0	0	2	0
Cap, veh/h	407	2164	273				0	990	94	49	1079	0
Arrive On Green	0.19	0.19	0.19				0.00	0.33	0.33	0.11	0.11	0.00
Sat Flow, veh/h	696	3701	466				0	2987	283	3	1511	0
Grp Volume(v), veh/h	1721	1566	1566				0	677	660	232	231	0
Grp Sat Flow(s),veh/h/ln	1625	1660	1578				0	1660	1610	1598	1660	0
Q Serve(g_s), s	87.7	87.7	87.7				0.0	49.7	49.7	0.1	19.5	0.0
Cycle Q Clear(g_c), s	87.7	87.7	87.7				0.0	49.7	49.7	49.7	19.5	0.0
Prop In Lane	0.43		0.30				0.00		0.18	1.00		0.00
Lane Grp Cap(c), veh/h	950	971	923				0	550	534	48	550	0
V/C Ratio(X)	1.81	1.61	1.70				0.00	1.23	1.24	4.82	0.42	0.00
Avail Cap(c_a), veh/h	950	971	923				0	550	534	48	550	0
HCM Platoon Ratio	0.33	0.33	0.33				1.00	1.00	1.00	0.33	0.33	1.00
Upstream Filter(I)	0.09	0.09	0.09				0.00	1.00	1.00	0.82	0.82	0.00
Uniform Delay (d), s/veh	60.5	60.5	60.5				0.0	50.1	50.2	91.6	53.4	0.0
Incr Delay (d2), s/veh	365.3	276.5	314.3				0.0	119.3	121.8	1758.5	1.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	135.6	114.5	118.6				0.0	39.6	38.8	23.4	9.2	0.0
Lane Grp Delay (d), s/veh	425.8	337.0	374.9				0.0	169.4	172.0	1850.1	55.3	0.0
Lane Grp LOS	F	F	F					F	F	F	E	
Approach Vol, veh/h		4853						1337			463	
Approach Delay, s/veh		380.7						170.7			952.7	
Approach LOS		F						F			F	

Timer					
Assigned Phs		6		4		3	8
Phs Duration (G+Y+Rc), s		94.0		56.0		0.0	56.0
Change Period (Y+Rc), s		6.3		6.3		3.0	6.3
Max Green Setting (Gmax), s		87.7		38.7		8.0	49.7
Max Q Clear Time (g_c+I1), s		89.7		51.7		0.0	51.7
Green Ext Time (p_c), s		0.0		0.0		0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	378.3
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	3290	840	0	0	0	0	0	0	630	720	0
Number	1	6	16							3	8	18
Initial Q (Qb), veh	0	0	0							0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00							1.00		1.00
Parking Bus Adj	1.00	1.00	1.00							1.00	1.00	1.00
Adj Sat Flow veh/h/ln	0.0	166.0	171.0							171.0	166.0	0.0
Lanes	0	3	0							0	2	0
Cap, veh/h	0	2457	575							48	467	0
Arrive On Green	0.00	0.21	0.21							0.10	0.10	0.00
Sat Flow, veh/h	0	3905	914							0	1511	0
Grp Volume(v), veh/h	0	2898	1449							663	758	0
Grp Sat Flow(s),veh/h/ln	0	1660	1499							0	1511	0
Q Serve(g_s), s	0.0	94.4	94.4							0.0	46.4	0.0
Cycle Q Clear(g_c), s	0.0	94.4	94.4							46.4	46.4	0.0
Prop In Lane	0.00		0.61							1.00		0.00
Lane Grp Cap(c), veh/h	0	2090	943							48	467	0
V/C Ratio(X)	0.00	1.39	1.54							13.81	1.62	0.00
Avail Cap(c_a), veh/h	0	2090	943							48	467	0
HCM Platoon Ratio	1.00	0.33	0.33							0.33	0.33	1.00
Upstream Filter(I)	0.00	0.09	0.09							0.27	0.27	0.00
Uniform Delay (d), s/veh	0.0	59.4	59.4							90.5	67.3	0.0
Incr Delay (d2), s/veh	0.0	174.4	241.8							5776.7	282.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0							0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.0	93.6	102.1							79.0	55.9	0.0
Lane Grp Delay (d), s/veh	0.0	233.8	301.2							5867.2	350.0	0.0
Lane Grp LOS		F	F							F	F	
Approach Vol, veh/h		4347									1421	
Approach Delay, s/veh		256.3									2924.2	
Approach LOS		F									F	

Timer	
Assigned Phs	6
Phs Duration (G+Y+Rc), s	99.0
Change Period (Y+Rc), s	4.6
Max Green Setting (Gmax), s	94.4
Max Q Clear Time (g_c+I1), s	96.4
Green Ext Time (p_c), s	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	913.5
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	560	3340	0	0	0	0	0	860	140	0	0	0
Number	1	6	16				7	4	14			
Initial Q (Qb), veh	0	0	0				0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00			
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00			
Adj Sat Flow veh/h/ln	171.0	166.0	0.0				0.0	166.0	171.0			
Lanes	0	3	0				0	3	0			
Cap, veh/h	48	2163	0				0	932	151			
Arrive On Green	0.24	0.24	0.00				0.00	0.22	0.22			
Sat Flow, veh/h	0	3022	0				0	4185	677			
Grp Volume(v), veh/h	589	3516	0				0	717	335			
Grp Sat Flow(s),veh/h/ln	0	1511	0				0	1660	1541			
Q Serve(g_s), s	0.0	107.4	0.0				0.0	32.1	32.4			
Cycle Q Clear(g_c), s	107.4	107.4	0.0				0.0	32.1	32.4			
Prop In Lane	1.00		0.00				0.00		0.44			
Lane Grp Cap(c), veh/h	48	2163	0				0	739	343			
V/C Ratio(X)	12.27	1.63	0.00				0.00	0.97	0.98			
Avail Cap(c_a), veh/h	48	2163	0				0	739	343			
HCM Platoon Ratio	0.33	0.33	1.00				1.00	1.00	1.00			
Upstream Filter(I)	0.09	0.09	0.00				0.00	1.00	1.00			
Uniform Delay (d), s/veh	111.0	57.3	0.0				0.0	57.8	57.9			
Incr Delay (d2), s/veh	5075.5	281.5	0.0				0.0	25.8	41.9			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0			
%ile Back of Q (50%), veh/ln	69.6	129.1	0.0				0.0	16.6	17.0			
Lane Grp Delay (d), s/veh	5186.5	338.8	0.0				0.0	83.6	99.8			
Lane Grp LOS	F	F						F	F			
Approach Vol, veh/h		4105						1052				
Approach Delay, s/veh		1034.4						88.8				
Approach LOS		F						F				

Timer	
Assigned Phs	6
Phs Duration (G+Y+Rc), s	112.0
Change Period (Y+Rc), s	4.6
Max Green Setting (Gmax), s	107.4
Max Q Clear Time (g_c+I1), s	109.4
Green Ext Time (p_c), s	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	841.5
HCM 2010 LOS	F

Notes

HCM Signalized Intersection Capacity Analysis
2243: SR 5 & SW 8 St

No Build
Timing Plan: 2040 AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1020	1220	440	320	0	850	0	1100	300	450	1050	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.7	6.7		6.7		6.7		6.2	6.2	4.0	6.2	
Lane Util. Factor	0.97	0.95		1.00		1.00		0.95	1.00	0.97	0.95	
Frt	1.00	0.96		1.00		0.85		1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00		0.95		1.00		1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3060	3029		1577		1411		3154	1411	3060	3154	
Flt Permitted	0.95	1.00		0.10		1.00		1.00	1.00	0.95	1.00	
Satd. Flow (perm)	3060	3029		173		1411		3154	1411	3060	3154	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	1074	1284	463	337	0	895	0	1158	316	474	1105	0
RTOR Reduction (vph)	0	26	0	0	0	102	0	0	147	0	0	0
Lane Group Flow (vph)	1074	1721	0	337	0	793	0	1158	169	474	1105	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Split	NA		D.Pm		custom		NA	Perm	Prot	NA	
Protected Phases	8	8						6		5	2	
Permitted Phases				8		4			6			
Actuated Green, G (s)	38.3	38.3		38.3		28.3		39.8	39.8	10.0	53.8	
Effective Green, g (s)	38.3	38.3		38.3		28.3		39.8	39.8	10.0	53.8	
Actuated g/C Ratio	0.27	0.27		0.27		0.20		0.28	0.28	0.07	0.38	
Clearance Time (s)	6.7	6.7		6.7		6.7		6.2	6.2	4.0	6.2	
Vehicle Extension (s)	3.0	3.0		3.0		3.0		3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	837	828		47		285		896	401	218	1212	
v/s Ratio Prot	0.35	0.57						c0.37		c0.15	0.35	
v/s Ratio Perm				c1.94		c0.56			0.12			
v/c Ratio	1.28	2.08		7.17		2.78		1.29	0.42	2.17	0.91	
Uniform Delay, d1	50.9	50.9		50.9		55.9		50.1	40.7	65.0	40.8	
Progression Factor	1.00	1.00		1.00		1.00		1.00	1.00	1.10	0.51	
Incremental Delay, d2	136.5	489.4		2820.4		811.6		139.9	3.2	536.4	6.9	
Delay (s)	187.4	540.2		2871.3		867.5		190.0	44.0	608.2	27.7	
Level of Service	F	F		F		F		F	D	F	C	
Approach Delay (s)		405.9			1415.6			158.7			202.0	
Approach LOS		F			F			F			F	

Intersection Summary			
HCM 2000 Control Delay	484.4	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	3.65		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	23.6
Intersection Capacity Utilization	140.9%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	110	410	170	910	1630	0	30	1900	620
Number				7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				171.0	166.0	171.0	166.0	166.0	171.0	166.0	166.0	166.0
Lanes				0	2	0	2	3	0	1	2	1
Cap, veh/h				97	373	164	758	3353	0	173	1481	629
Arrive On Green				0.20	0.20	0.20	0.08	0.22	0.00	0.02	0.45	0.45
Sat Flow, veh/h				482	1856	814	3067	4981	0	1581	3320	1411
Grp Volume(v), veh/h				394	0	333	958	1716	0	32	2000	653
Grp Sat Flow(s),veh/h/ln				1636	0	1517	1534	1660	0	1581	1660	1411
Q Serve(g_s), s				30.1	0.0	30.1	37.0	45.3	0.0	1.7	66.8	66.8
Cycle Q Clear(g_c), s				30.1	0.0	30.1	37.0	45.3	0.0	1.7	66.8	66.8
Prop In Lane				0.29		0.54	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h				329	0	305	758	3353	0	173	1481	629
V/C Ratio(X)				1.20	0.00	1.09	1.26	0.51	0.00	0.19	1.35	1.04
Avail Cap(c_a), veh/h				329	0	305	758	3353	0	321	1481	629
HCM Platoon Ratio				1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.09	0.09	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh				59.9	0.0	59.9	68.8	36.7	0.0	22.3	41.5	41.5
Incr Delay (d2), s/veh				114.4	0.0	79.2	120.0	0.1	0.0	0.5	162.4	46.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				23.3	0.0	18.6	28.1	20.5	0.0	0.7	61.6	32.0
Lane Grp Delay (d), s/veh				174.3	0.0	139.0	188.8	36.7	0.0	22.8	203.9	87.5
Lane Grp LOS				F		F	F	D		C	F	F
Approach Vol, veh/h					727			2674			2685	
Approach Delay, s/veh					158.1			91.2			173.4	
Approach LOS					F			F			F	

Timer												
Assigned Phs					4		1	6		5	2	
Phs Duration (G+Y+Rc), s					36.8		40.0	107.1		5.9	73.0	
Change Period (Y+Rc), s					6.7		3.0	6.2		3.0	6.2	
Max Green Setting (Gmax), s					30.1		37.0	87.0		17.0	66.8	
Max Q Clear Time (g_c+I1), s					32.1		39.0	47.3		3.7	68.8	
Green Ext Time (p_c), s					0.0		0.0	38.4		0.0	0.0	

Intersection Summary	
HCM 2010 Ctrl Delay	135.5
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	0	2800	650	890	1340	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.2		4.2	4.2				
Lane Util. Factor					0.91		0.91	0.91				
Frt					0.97		1.00	1.00				
Flt Protected					1.00		0.95	0.99				
Satd. Flow (prot)					4404		1435	3005				
Flt Permitted					1.00		0.95	0.99				
Satd. Flow (perm)					4404		1435	3005				
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	0	2947	684	937	1411	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	3	0	6	6	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	3628	0	753	1583	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type					NA		Perm	NA				
Protected Phases					2			4				
Permitted Phases							4					
Actuated Green, G (s)					85.8		55.8	55.8				
Effective Green, g (s)					85.8		55.8	55.8				
Actuated g/C Ratio					0.57		0.37	0.37				
Clearance Time (s)					4.2		4.2	4.2				
Vehicle Extension (s)					3.0		3.0	3.0				
Lane Grp Cap (vph)					2519		533	1117				
v/s Ratio Prot					c0.82							
v/s Ratio Perm							0.52	0.53				
v/c Ratio					1.44		1.41	1.42				
Uniform Delay, d1					32.1		47.1	47.1				
Progression Factor					0.71		0.71	0.71				
Incremental Delay, d2					199.9		187.1	188.4				
Delay (s)					222.7		220.6	222.0				
Level of Service					F		F	F				
Approach Delay (s)		0.0			222.7			221.5			0.0	
Approach LOS		A			F			F			A	

Intersection Summary			
HCM 2000 Control Delay	222.3	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.43		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	8.4
Intersection Capacity Utilization	219.7%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	620	3460	0	0	0	0	0	1250	460
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					5.8						4.6	4.6
Lane Util. Factor					0.91						0.91	0.91
Frt					1.00						0.99	0.85
Flt Protected					0.99						1.00	1.00
Satd. Flow (prot)					4498						3006	1284
Flt Permitted					0.99						1.00	1.00
Satd. Flow (perm)					4498						3006	1284
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	653	3642	0	0	0	0	0	1316	484
RTOR Reduction (vph)	0	0	0	0	5	0	0	0	0	0	0	14
Lane Group Flow (vph)	0	0	0	0	4290	0	0	0	0	0	1364	422
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type				Perm	NA						NA	Perm
Protected Phases					2						8	
Permitted Phases				2								8
Actuated Green, G (s)					93.2						46.4	46.4
Effective Green, g (s)					93.2						46.4	46.4
Actuated g/C Ratio					0.62						0.31	0.31
Clearance Time (s)					5.8						4.6	4.6
Vehicle Extension (s)					3.0						3.0	3.0
Lane Grp Cap (vph)					2794						929	397
v/s Ratio Prot											c0.45	
v/s Ratio Perm					0.95							0.33
v/c Ratio					1.54						1.47	1.06
Uniform Delay, d1					28.4						51.8	51.8
Progression Factor					0.66						1.00	1.00
Incremental Delay, d2					241.2						216.6	63.0
Delay (s)					260.0						268.4	114.8
Level of Service					F						F	F
Approach Delay (s)		0.0			260.0			0.0			231.2	
Approach LOS		A			F			A			F	

Intersection Summary			
HCM 2000 Control Delay	251.5	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.51		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	10.4
Intersection Capacity Utilization	140.7%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	190	3480	180	380	1130	0	0	460	320
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				171.0	166.0	171.0	166.0	166.0	0.0	0.0	166.0	171.0
Lanes				0	3	0	1	2	0	0	2	0
Cap, veh/h				124	2411	126	269	1315	0	0	431	299
Arrive On Green				0.18	0.18	0.18	0.28	0.79	0.00	0.00	0.24	0.24
Sat Flow, veh/h				229	4464	234	1581	3320	0	0	1828	1269
Grp Volume(v), veh/h				1437	1308	1308	400	1189	0	0	440	381
Grp Sat Flow(s),veh/h/ln				1649	1660	1619	1581	1660	0	0	1660	1436
Q Serve(g_s), s				81.0	81.0	81.0	21.0	39.4	0.0	0.0	35.4	35.4
Cycle Q Clear(g_c), s				81.0	81.0	81.0	21.0	39.4	0.0	0.0	35.4	35.4
Prop In Lane				0.14		0.14	1.00		0.00	0.00		0.88
Lane Grp Cap(c), veh/h				890	897	874	269	1315	0	0	392	339
V/C Ratio(X)				1.61	1.46	1.50	1.49	0.90	0.00	0.00	1.12	1.13
Avail Cap(c_a), veh/h				890	897	874	269	1315	0	0	392	339
HCM Platoon Ratio				0.33	0.33	0.33	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.09	0.09	0.09	0.09	0.09	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				61.6	61.6	61.6	35.8	13.5	0.0	0.0	57.3	57.3
Incr Delay (d2), s/veh				276.7	206.9	223.6	220.1	1.1	0.0	0.0	82.8	87.3
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				104.8	88.1	90.0	26.5	10.0	0.0	0.0	24.4	21.5
Lane Grp Delay (d), s/veh				338.4	268.5	285.3	255.9	14.7	0.0	0.0	140.1	144.6
Lane Grp LOS				F	F	F	F	B			F	F
Approach Vol, veh/h					4052			1589			821	
Approach Delay, s/veh					298.7			75.4			142.2	
Approach LOS					F			E			F	

Timer												
Assigned Phs					2		7	4			8	
Phs Duration (G+Y+Rc), s					86.0		24.0	64.0			40.0	
Change Period (Y+Rc), s					5.0		3.0	4.6			4.6	
Max Green Setting (Gmax), s					81.0		21.0	59.4			35.4	
Max Q Clear Time (g_c+I1), s					83.0		23.0	41.4			37.4	
Green Ext Time (p_c), s					0.0		0.0	13.0			0.0	

Intersection Summary		
HCM 2010 Ctrl Delay		223.9
HCM 2010 LOS		F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	970	2510	530	170	520	0	0	0	0
Number				5	2	12	7	4	14			
Initial Q (Qb), veh				0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00			
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow veh/h/ln				171.0	167.6	171.0	167.6	167.6	0.0			
Lanes				0	3	0	1	1	0			
Cap, veh/h				48	1703	347	48	421	0			
Arrive On Green				0.23	0.23	0.23	0.50	0.50	0.00			
Sat Flow, veh/h				0	2462	501	1597	1676	0			
Grp Volume(v), veh/h				1021	1600	1600	179	547	0			
Grp Sat Flow(s),veh/h/ln				0	1526	1437	1597	1676	0			
Q Serve(g_s), s				0.0	103.8	103.8	0.0	37.7	0.0			
Cycle Q Clear(g_c), s				103.8	103.8	103.8	37.7	37.7	0.0			
Prop In Lane				1.00		0.35	1.00		0.00			
Lane Grp Cap(c), veh/h				48	1056	995	48	421	0			
V/C Ratio(X)				21.27	1.52	1.61	3.73	1.30	0.00			
Avail Cap(c_a), veh/h				48	1056	995	48	421	0			
HCM Platoon Ratio				0.33	0.33	0.33	2.00	2.00	1.00			
Upstream Filter(I)				0.09	0.09	0.09	0.82	0.82	0.00			
Uniform Delay (d), s/veh				109.8	57.9	57.9	56.2	37.3	0.0			
Incr Delay (d2), s/veh				9125.4	232.5	274.4	1268.7	148.0	0.0			
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0			
%ile Back of Q (50%), veh/ln				123.7	111.9	117.0	18.7	31.5	0.0			
Lane Grp Delay (d), s/veh				9235.2	290.3	332.3	1324.9	185.3	0.0			
Lane Grp LOS				F	F	F	F	F				
Approach Vol, veh/h					4221			726				
Approach Delay, s/veh					2469.9			466.3				
Approach LOS					F			F				

Timer	
Assigned Phs	2	4
Phs Duration (G+Y+Rc), s	108.0	42.0
Change Period (Y+Rc), s	4.2	4.3
Max Green Setting (Gmax), s	103.8	37.7
Max Q Clear Time (g_c+I1), s	105.8	39.7
Green Ext Time (p_c), s	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	2175.8
HCM 2010 LOS	F

Notes

Movement	WBL	WBT	SBT	SBR	SWL	SWR
Lane Configurations						
Volume (vph)	670	1890	500	150	2000	580
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.5	6.5	7.0		7.0	7.0
Lane Util. Factor	0.91	0.91	0.95		0.97	0.91
Frt	1.00	1.00	0.97		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1449	3046	3075		3089	1297
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	1449	3046	3075		3089	1297
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	705	1989	526	158	2105	611
RTOR Reduction (vph)	53	53	19	0	0	0
Lane Group Flow (vph)	581	2007	665	0	2166	550
Turn Type	Perm	NA	NA		NA	Perm
Protected Phases		2	9		8	
Permitted Phases	2					8
Actuated Green, G (s)	51.5	51.5	23.0		55.0	55.0
Effective Green, g (s)	51.5	51.5	23.0		55.0	55.0
Actuated g/C Ratio	0.34	0.34	0.15		0.37	0.37
Clearance Time (s)	6.5	6.5	7.0		7.0	7.0
Vehicle Extension (s)	1.0	1.0	3.0		3.0	3.0
Lane Grp Cap (vph)	497	1045	471		1132	475
v/s Ratio Prot			c0.22		c0.70	
v/s Ratio Perm	0.40	0.66				0.42
v/c Ratio	1.17	1.92	1.41		1.91	1.16
Uniform Delay, d1	49.2	49.2	63.5		47.5	47.5
Progression Factor	0.71	0.74	1.00		1.00	1.00
Incremental Delay, d2	78.7	414.8	198.0		414.3	92.4
Delay (s)	113.7	451.1	261.5		461.8	139.9
Level of Service	F	F	F		F	F
Approach Delay (s)		371.7	261.5		396.7	
Approach LOS		F	F		F	

Intersection Summary			
HCM 2000 Control Delay	370.4	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.83		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	20.5
Intersection Capacity Utilization	165.4%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	110	2250	110	120	240	0	0	220	90
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	186.3	190.0	190.0	186.3	0.0	0.0	193.7	190.0
Lanes				0	3	0	0	1	0	0	1	0
Cap, veh/h				136	2952	148	130	222	0	0	428	175
Arrive On Green				0.58	0.58	0.58	0.66	0.66	0.00	0.00	0.33	0.33
Sat Flow, veh/h				233	5047	253	274	679	0	0	1307	535
Grp Volume(v), veh/h				923	842	834	379	0	0	0	0	327
Grp Sat Flow(s),veh/h/ln				1851	1863	1818	953	0	0	0	0	1843
Q Serve(g_s), s				49.6	41.1	42.3	21.9	0.0	0.0	0.0	0.0	17.4
Cycle Q Clear(g_c), s				49.6	41.1	42.3	39.3	0.0	0.0	0.0	0.0	17.4
Prop In Lane				0.13		0.14	0.33		0.00	0.00		0.29
Lane Grp Cap(c), veh/h				1083	1090	1064	352	0	0	0	0	604
V/C Ratio(X)				0.85	0.77	0.78	1.08	0.00	0.00	0.00	0.00	0.54
Avail Cap(c_a), veh/h				1083	1090	1064	352	0	0	0	0	604
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.09	0.09	0.09	0.91	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				20.6	18.9	19.2	27.4	0.0	0.0	0.0	0.0	33.0
Incr Delay (d2), s/veh				0.9	0.5	0.6	67.7	0.0	0.0	0.0	0.0	0.8
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				22.1	18.4	18.5	16.8	0.0	0.0	0.0	0.0	8.2
Lane Grp Delay (d), s/veh				21.5	19.4	19.7	95.1	0.0	0.0	0.0	0.0	33.8
Lane Grp LOS				C	B	B	F					C
Approach Vol, veh/h					2600			379			327	
Approach Delay, s/veh					20.2			95.1			33.8	
Approach LOS					C			F			C	

Timer			
Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	75.0	45.0	45.0
Change Period (Y+Rc), s	5.8	5.7	5.7
Max Green Setting (Gmax), s	69.2	39.3	39.3
Max Q Clear Time (g_c+I1), s	51.6	41.3	19.4
Green Ext Time (p_c), s	10.8	0.0	2.2

Intersection Summary	
HCM 2010 Ctrl Delay	30.2
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	220	2330	160	240	660	0	0	680	150
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99
Adj Sat Flow veh/h/ln				190.0	186.3	190.0	190.0	186.3	0.0	0.0	178.8	190.0
Lanes				0	3	0	0	2	0	0	2	0
Cap, veh/h				177	1998	139	264	1260	0	0	1414	312
Arrive On Green				0.42	0.42	0.41	0.98	1.00	0.00	0.00	0.50	0.49
Sat Flow, veh/h				422	4757	330	409	1695	0	0	2828	624
Grp Volume(v), veh/h				1012	922	919	474	474	0	0	453	421
Grp Sat Flow(s),veh/h/ln				1842	1863	1805	1067	1863	0	0	1788	1664
Q Serve(g_s), s				50.4	50.4	50.4	0.1	0.0	0.0	0.0	20.3	20.4
Cycle Q Clear(g_c), s				50.4	50.4	50.4	60.0	0.0	0.0	0.0	20.3	20.4
Prop In Lane				0.23		0.18	1.00		0.00	0.00		0.37
Lane Grp Cap(c), veh/h				773	782	758	60	931	0	0	894	832
V/C Ratio(X)				1.31	1.18	1.21	7.90	0.51	0.00	0.00	0.51	0.51
Avail Cap(c_a), veh/h				773	782	758	60	931	0	0	894	832
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	0.90	0.90	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				34.8	34.8	34.9	30.5	0.0	0.0	0.0	20.1	20.2
Incr Delay (d2), s/veh				148.0	93.3	107.8	3135.5	1.8	0.0	0.0	2.0	2.2
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				55.0	43.7	45.4	52.3	0.5	0.0	0.0	9.3	8.9
Lane Grp Delay (d), s/veh				182.8	128.1	142.7	3166.0	1.8	0.0	0.0	22.1	22.4
Lane Grp LOS				F	F	F	F	A			C	C
Approach Vol, veh/h					2853			948			874	
Approach Delay, s/veh					152.2			1583.9			22.3	
Approach LOS					F			F			C	

Timer					
Assigned Phs		2	7	4	8
Phs Duration (G+Y+Rc), s		55.0	0.0	65.0	65.0
Change Period (Y+Rc), s		5.6	5.0	6.0	6.0
Max Green Setting (Gmax), s		49.4	13.0	59.0	41.0
Max Q Clear Time (g_c+I1), s		52.4	0.0	62.0	22.4
Green Ext Time (p_c), s		0.0	0.0	0.0	11.1

Intersection Summary	
HCM 2010 Ctrl Delay	418.2
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	90	2410	0	0	0	0	0	60	40
Number				5	2	12				3	8	18
Initial Q (Qb), veh				0	0	0				0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00				1.00		1.00
Parking Bus Adj				1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	186.3	0.0				0.0	193.7	190.0
Lanes				0	3	0				0	1	0
Cap, veh/h				60	2543	0				0	199	133
Arrive On Green				0.25	0.25	0.00				0.00	0.18	0.18
Sat Flow, veh/h				0	3390	0				0	1086	724
Grp Volume(v), veh/h				95	2537	0				0	0	105
Grp Sat Flow(s),veh/h/ln				0	1695	0				0	0	1810
Q Serve(g_s), s				0.0	89.7	0.0				0.0	0.0	6.0
Cycle Q Clear(g_c), s				90.0	89.7	0.0				0.0	0.0	6.0
Prop In Lane				1.00		0.00				0.00		0.40
Lane Grp Cap(c), veh/h				60	2543	0				0	0	332
V/C Ratio(X)				1.58	1.00	0.00				0.00	0.00	0.32
Avail Cap(c_a), veh/h				60	2543	0				0	0	332
HCM Platoon Ratio				0.33	0.33	1.00				1.00	1.00	1.00
Upstream Filter(I)				0.09	0.09	0.00				0.00	0.00	1.00
Uniform Delay (d), s/veh				90.2	45.1	0.0				0.0	0.0	42.5
Incr Delay (d2), s/veh				269.6	4.9	0.0				0.0	0.0	2.5
Initial Q Delay(d3),s/veh				0.0	0.0	0.0				0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				6.4	42.8	0.0				0.0	0.0	3.0
Lane Grp Delay (d), s/veh				359.8	49.9	0.0				0.0	0.0	45.0
Lane Grp LOS				F	D							D
Approach Vol, veh/h					2632						105	
Approach Delay, s/veh					61.1						45.0	
Approach LOS					E						D	

Timer	
Assigned Phs	2	8
Phs Duration (G+Y+Rc), s	94.0	26.0
Change Period (Y+Rc), s	5.0	4.0
Max Green Setting (Gmax), s	89.0	22.0
Max Q Clear Time (g_c+I1), s	92.0	8.0
Green Ext Time (p_c), s	0.0	0.3

Intersection Summary	
HCM 2010 Ctrl Delay	60.5
HCM 2010 LOS	E

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	270	2090	140	140	750	0	0	1170	150
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	186.3	190.0	186.3	186.3	0.0	0.0	186.3	190.0
Lanes				0	3	0	1	2	0	0	2	0
Cap, veh/h				199	1648	112	224	2179	0	0	1625	208
Arrive On Green				0.12	0.12	0.11	0.10	1.00	0.00	0.00	0.50	0.50
Sat Flow, veh/h				559	4632	315	1774	3725	0	0	3239	414
Grp Volume(v), veh/h				933	854	844	147	789	0	0	706	684
Grp Sat Flow(s),veh/h/ln				1835	1863	1807	1774	1863	0	0	1863	1790
Q Serve(g_s), s				42.7	42.7	42.7	4.8	0.0	0.0	0.0	36.5	37.0
Cycle Q Clear(g_c), s				42.7	42.7	42.7	4.8	0.0	0.0	0.0	36.5	37.0
Prop In Lane				0.30		0.17	1.00		0.00	0.00		0.23
Lane Grp Cap(c), veh/h				653	663	643	224	2179	0	0	934	898
V/C Ratio(X)				1.43	1.29	1.31	0.66	0.36	0.00	0.00	0.76	0.76
Avail Cap(c_a), veh/h				653	663	643	224	2179	0	0	934	898
HCM Platoon Ratio				0.33	0.33	0.33	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.63	0.63	0.63	0.09	0.09	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				53.0	53.0	53.0	20.6	0.0	0.0	0.0	24.0	24.1
Incr Delay (d2), s/veh				198.7	136.8	147.9	0.5	0.0	0.0	0.0	5.7	6.1
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				57.4	46.9	47.5	2.0	0.0	0.0	0.0	18.2	17.7
Lane Grp Delay (d), s/veh				251.6	189.7	200.9	21.1	0.0	0.0	0.0	29.7	30.2
Lane Grp LOS				F	F	F	C	A			C	C
Approach Vol, veh/h					2631			936			1390	
Approach Delay, s/veh					215.3			3.4			29.9	
Approach LOS					F			A			C	

Timer												
Assigned Phs					2		7	4			8	
Phs Duration (G+Y+Rc), s					46.0		9.0	74.0			65.0	
Change Period (Y+Rc), s					4.3		4.2	4.8			4.8	
Max Green Setting (Gmax), s					41.7		4.8	69.2			60.2	
Max Q Clear Time (g_c+I1), s					44.7		6.8	2.0			39.0	
Green Ext Time (p_c), s					0.0		0.0	2.7			2.6	

Intersection Summary		
HCM 2010 Ctrl Delay		123.3
HCM 2010 LOS		F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	120	2210	50	90	80	0	0	130	60
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	186.3	190.0	190.0	186.3	0.0	0.0	186.3	190.0
Lanes				0	3	0	0	1	0	0	1	0
Cap, veh/h				176	3460	81	159	125	0	0	288	132
Arrive On Green				0.22	0.22	0.22	0.08	0.08	0.00	0.00	0.24	0.23
Sat Flow, veh/h				262	5170	121	446	526	0	0	1209	556
Grp Volume(v), veh/h				888	811	806	179	0	0	0	0	200
Grp Sat Flow(s),veh/h/ln				1850	1863	1841	972	0	0	0	0	1765
Q Serve(g_s), s				46.6	41.5	41.8	10.7	0.0	0.0	0.0	0.0	10.2
Cycle Q Clear(g_c), s				46.6	41.5	41.8	20.9	0.0	0.0	0.0	0.0	10.2
Prop In Lane				0.14		0.07	0.53		0.00	0.00		0.31
Lane Grp Cap(c), veh/h				1238	1247	1232	284	0	0	0	0	420
V/C Ratio(X)				0.72	0.65	0.65	0.63	0.00	0.00	0.00	0.00	0.48
Avail Cap(c_a), veh/h				1238	1247	1232	489	0	0	0	0	675
HCM Platoon Ratio				0.33	0.33	0.33	0.33	0.33	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.09	0.09	0.09	0.95	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				31.7	29.7	29.8	48.9	0.0	0.0	0.0	0.0	34.5
Incr Delay (d2), s/veh				0.3	0.2	0.2	1.6	0.0	0.0	0.0	0.0	0.6
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				23.5	21.1	21.1	5.2	0.0	0.0	0.0	0.0	4.6
Lane Grp Delay (d), s/veh				32.0	29.9	30.1	50.6	0.0	0.0	0.0	0.0	35.1
Lane Grp LOS				C	C	C	D					D
Approach Vol, veh/h					2505			179			200	
Approach Delay, s/veh					30.7			50.6			35.1	
Approach LOS					C			D			D	

Timer			
Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	75.0	29.9	29.9
Change Period (Y+Rc), s	5.8	5.9	5.9
Max Green Setting (Gmax), s	69.2	39.1	39.1
Max Q Clear Time (g_c+I1), s	48.6	22.9	12.2
Green Ext Time (p_c), s	11.2	1.0	1.2

Intersection Summary	
HCM 2010 Ctrl Delay	32.2
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	350	1740	240	120	920	0	0	1010	100
Number				5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln				190.0	186.3	190.0	186.3	186.3	0.0	0.0	186.3	190.0
Lanes				0	3	0	1	2	0	0	2	0
Cap, veh/h				396	2114	295	202	1457	0	0	940	93
Arrive On Green				0.51	0.51	0.51	0.16	0.78	0.00	0.00	0.28	0.27
Sat Flow, veh/h				770	4106	573	1774	3725	0	0	3338	329
Grp Volume(v), veh/h				872	802	779	126	968	0	0	593	575
Grp Sat Flow(s),veh/h/ln				1824	1863	1762	1774	1863	0	0	1863	1805
Q Serve(g_s), s				52.8	43.7	45.8	5.7	14.0	0.0	0.0	33.5	33.5
Cycle Q Clear(g_c), s				52.8	43.7	45.8	5.7	14.0	0.0	0.0	33.5	33.5
Prop In Lane				0.42		0.32	1.00		0.00	0.00		0.18
Lane Grp Cap(c), veh/h				939	959	907	202	1457	0	0	525	508
V/C Ratio(X)				0.93	0.84	0.86	0.62	0.66	0.00	0.00	1.13	1.13
Avail Cap(c_a), veh/h				956	976	923	202	1457	0	0	525	508
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	0.09	0.09	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				26.8	24.6	25.2	27.9	9.4	0.0	0.0	42.7	42.8
Incr Delay (d2), s/veh				16.5	8.6	10.4	1.3	0.1	0.0	0.0	80.1	81.2
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln				27.8	22.1	22.3	2.4	3.5	0.0	0.0	27.6	27.0
Lane Grp Delay (d), s/veh				43.3	33.2	35.6	29.2	9.5	0.0	0.0	122.8	124.0
Lane Grp LOS				D	C	D	C	A			F	F
Approach Vol, veh/h					2453			1094			1168	
Approach Delay, s/veh					37.6			11.8			123.4	
Approach LOS					D			B			F	

Timer				
Assigned Phs	2	7	4	8
Phs Duration (G+Y+Rc), s	66.9	13.0	52.0	39.0
Change Period (Y+Rc), s	6.7	3.0	6.5	6.5
Max Green Setting (Gmax), s	61.3	10.0	42.5	32.5
Max Q Clear Time (g_c+I1), s	54.8	7.7	16.0	35.5
Green Ext Time (p_c), s	5.4	0.1	12.8	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	52.8
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Volume (vph)	0	0	0	1060	950	120	210	280	0	0	400	380
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	10	12	11	10	12	12	13	12
Total Lost time (s)				6.7	6.7		6.5	6.5			4.0	
Lane Util. Factor				0.91	0.91		1.00	0.95			0.95	
Frt				1.00	0.99		1.00	1.00			0.93	
Flt Protected				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (prot)				1610	3081		1711	3303			3390	
Flt Permitted				0.95	0.99		0.22	1.00			1.00	
Satd. Flow (perm)				1610	3081		399	3303			3390	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	1116	1000	126	221	295	0	0	421	400
RTOR Reduction (vph)	0	0	0	0	5	0	0	0	0	0	38	0
Lane Group Flow (vph)	0	0	0	636	1601	0	221	295	0	0	783	0
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					2			4			8	
Permitted Phases				2			4					
Actuated Green, G (s)				57.3	57.3		49.5	49.5			52.0	
Effective Green, g (s)				57.3	57.3		49.5	49.5			52.0	
Actuated g/C Ratio				0.48	0.48		0.41	0.41			0.43	
Clearance Time (s)				6.7	6.7		6.5	6.5			4.0	
Vehicle Extension (s)				2.5	2.5		2.0	2.0			2.5	
Lane Grp Cap (vph)				768	1471		164	1362			1469	
v/s Ratio Prot								0.09			0.23	
v/s Ratio Perm				0.39	0.52		c0.55					
v/c Ratio				0.83	1.09		1.35	0.22			0.53	
Uniform Delay, d1				27.1	31.4		35.2	22.7			25.1	
Progression Factor				0.34	0.39		1.00	1.00			1.00	
Incremental Delay, d2				4.6	45.4		191.2	0.4			1.4	
Delay (s)				13.8	57.6		226.5	23.1			26.4	
Level of Service				B	E		F	C			C	
Approach Delay (s)		0.0			45.1			110.2			26.4	
Approach LOS		A			D			F			C	

Intersection Summary			
HCM 2000 Control Delay	50.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.21		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	13.2
Intersection Capacity Utilization	89.8%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	150	0	50	320	530	400	0	1610	0	0	1670	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	9	12	9	11	11	11	12	10	12	12	10	12
Total Lost time (s)	3.9		3.9	3.9	3.9	3.9		3.6			4.0	
Lane Util. Factor	1.00		1.00	0.97	1.00	1.00		0.91			0.86	
Frt	1.00		0.85	1.00	1.00	0.85		1.00			1.00	
Flt Protected	0.95		1.00	0.95	1.00	1.00		1.00			1.00	
Satd. Flow (prot)	1593		1425	3319	1801	1531		4746			5965	
Flt Permitted	0.14		1.00	0.95	1.00	1.00		1.00			1.00	
Satd. Flow (perm)	230		1425	3319	1801	1531		4746			5965	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	158	0	53	337	558	421	0	1695	0	0	1758	32
RTOR Reduction (vph)	0	0	48	0	0	132	0	0	0	0	2	0
Lane Group Flow (vph)	158	0	5	337	558	289	0	1695	0	0	1788	0
Turn Type	D.Pm		custom	Split	NA	Perm		NA			NA	
Protected Phases			8	4	4			6			2	
Permitted Phases	4					4						
Actuated Green, G (s)	28.1		12.1	28.1	28.1	28.1		75.4			75.0	
Effective Green, g (s)	29.1		13.1	29.1	29.1	29.1		76.4			76.0	
Actuated g/C Ratio	0.22		0.10	0.22	0.22	0.22		0.59			0.58	
Clearance Time (s)	4.9		4.9	4.9	4.9	4.9		4.6			5.0	
Vehicle Extension (s)	2.5		2.5	2.5	2.5	2.5		2.5			2.5	
Lane Grp Cap (vph)	51		143	742	403	342		2789			3487	
v/s Ratio Prot			c0.00	0.10	0.31			c0.36			0.30	
v/s Ratio Perm	c0.69					0.19						
v/c Ratio	3.10		0.04	0.45	1.38	0.85		0.61			0.51	
Uniform Delay, d1	50.5		52.8	43.6	50.5	48.3		17.2			16.0	
Progression Factor	1.00		1.00	1.00	1.00	1.00		0.05			1.00	
Incremental Delay, d2	993.6		0.5	2.0	187.9	21.9		0.1			0.5	
Delay (s)	1044.1		53.2	45.6	238.3	70.2		0.9			16.6	
Level of Service	F		D	D	F	E		A			B	
Approach Delay (s)		795.2			135.2			0.9			16.6	
Approach LOS		F			F			A			B	

Intersection Summary			
HCM 2000 Control Delay	75.2	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.15		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	11.8
Intersection Capacity Utilization	77.3%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	1310	70	0	1670	50	230	1690	320	370	1670	180
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	0.0	186.3	190.0	0.0	186.3	190.0	186.3	186.3	190.0	186.3	186.3	186.3
Lanes	0	2	0	0	2	0	1	3	0	1	2	1
Cap, veh/h	0	1329	71	0	1365	41	256	1832	342	255	1490	633
Arrive On Green	0.00	0.38	0.37	0.00	0.38	0.37	0.11	0.40	0.39	0.22	0.80	0.80
Sat Flow, veh/h	0	3505	188	0	3598	108	1774	4581	856	1774	3725	1583
Grp Volume(v), veh/h	0	731	722	0	907	904	242	1442	674	389	1758	189
Grp Sat Flow(s),veh/h/ln	0	1863	1830	0	1863	1844	1774	1863	1712	1774	1863	1583
Q Serve(g_s), s	0.0	49.3	49.3	0.0	49.3	49.3	13.3	49.3	50.6	14.5	52.0	4.1
Cycle Q Clear(g_c), s	0.0	49.3	49.3	0.0	49.3	49.3	13.3	49.3	50.6	14.5	52.0	4.1
Prop In Lane	0.00		0.10	0.00		0.06	1.00		0.50	1.00		1.00
Lane Grp Cap(c), veh/h	0	706	694	0	706	699	256	1490	685	255	1490	633
V/C Ratio(X)	0.00	1.04	1.04	0.00	1.28	1.29	0.95	0.97	0.98	1.52	1.18	0.30
Avail Cap(c_a), veh/h	0	706	694	0	706	699	256	1490	685	255	1490	633
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.86	0.86	0.86
Uniform Delay (d), s/veh	0.0	40.3	40.4	0.0	40.3	40.4	40.0	38.2	38.8	34.2	13.0	8.2
Incr Delay (d2), s/veh	0.0	43.3	45.0	0.0	138.2	142.5	41.1	16.8	30.7	251.7	87.2	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.0	31.9	31.6	0.0	50.5	50.8	11.1	26.5	27.8	25.9	30.5	1.5
Lane Grp Delay (d), s/veh	0.0	83.7	85.4	0.0	178.6	182.9	81.2	55.0	69.5	285.9	100.2	9.2
Lane Grp LOS		F	F		F	F	F	D	E	F	F	A
Approach Vol, veh/h		1453			1811			2358			2336	
Approach Delay, s/veh		84.5			180.7			61.8			123.8	
Approach LOS		F			F			E			F	

Timer								
Assigned Phs		6			2		7	4		3	8	
Phs Duration (G+Y+Rc), s		55.0			55.0		18.0	57.0		18.0	57.0	
Change Period (Y+Rc), s		6.7			6.7		3.0	6.0		3.0	6.0	
Max Green Setting (Gmax), s		48.3			48.3		15.0	51.0		15.0	51.0	
Max Q Clear Time (g_c+I1), s		51.3			51.3		15.3	52.6		16.5	54.0	
Green Ext Time (p_c), s		0.0			0.0		0.0	0.0		0.0	0.0	

Intersection Summary		
HCM 2010 Ctrl Delay		111.2
HCM 2010 LOS		F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	70	1990	40	0	0	0	0	130	60	80	120	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	186.3	190.0	190.0	186.3	0.0
Lanes	0	3	0				0	1	0	0	1	0
Cap, veh/h	119	3603	74				0	272	125	119	162	0
Arrive On Green	0.67	0.68	0.67				0.00	0.23	0.23	0.23	0.23	0.00
Sat Flow, veh/h	175	5276	109				0	1209	556	338	719	0
Grp Volume(v), veh/h	784	716	711				0	0	200	210	0	0
Grp Sat Flow(s),veh/h/ln	1854	1863	1844				0	0	1765	1057	0	0
Q Serve(g_s), s	27.3	23.3	23.4				0.0	0.0	11.6	12.3	0.0	0.0
Cycle Q Clear(g_c), s	27.3	23.3	23.4				0.0	0.0	11.6	23.9	0.0	0.0
Prop In Lane	0.09		0.06				0.00		0.31	0.40		0.00
Lane Grp Cap(c), veh/h	1266	1272	1259				0	0	397	281	0	0
V/C Ratio(X)	0.62	0.56	0.56				0.00	0.00	0.50	0.75	0.00	0.00
Avail Cap(c_a), veh/h	1266	1272	1259				0	0	436	314	0	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	10.3	9.6	9.6				0.0	0.0	39.8	46.5	0.0	0.0
Incr Delay (d2), s/veh	2.3	1.8	1.8				0.0	0.0	1.0	8.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	12.4	10.6	10.5				0.0	0.0	5.3	6.9	0.0	0.0
Lane Grp Delay (d), s/veh	12.5	11.4	11.5				0.0	0.0	40.8	55.0	0.0	0.0
Lane Grp LOS	B	B	B						D	E		
Approach Vol, veh/h		2211						200			210	
Approach Delay, s/veh		11.8						40.8			55.0	
Approach LOS		B						D			E	

Timer												
Assigned Phs		6						4			8	
Phs Duration (G+Y+Rc), s		85.0						32.4			32.4	
Change Period (Y+Rc), s		5.8						6.0			6.0	
Max Green Setting (Gmax), s		79.2						29.0			29.0	
Max Q Clear Time (g_c+I1), s		29.3						13.6			25.9	
Green Ext Time (p_c), s		17.3						1.4			0.5	

Intersection Summary			
HCM 2010 Ctrl Delay			17.5
HCM 2010 LOS			B

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	180	2080	80	0	0	0	0	780	180	80	1390	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	186.3	190.0	186.3	186.3	0.0
Lanes	0	3	0				0	2	0	1	2	0
Cap, veh/h	214	2649	104				0	845	195	144	1372	0
Arrive On Green	0.18	0.18	0.18				0.00	0.29	0.28	0.09	0.74	0.00
Sat Flow, veh/h	399	4941	194				0	2932	675	1774	3725	0
Grp Volume(v), veh/h	873	799	791				0	522	488	84	1463	0
Grp Sat Flow(s),veh/h/ln	1843	1863	1828				0	1863	1744	1774	1863	0
Q Serve(g_s), s	55.6	49.4	50.0				0.0	33.3	33.3	3.9	44.3	0.0
Cycle Q Clear(g_c), s	55.6	49.4	50.0				0.0	33.3	33.3	3.9	44.3	0.0
Prop In Lane	0.22		0.11				0.00		0.39	1.00		0.00
Lane Grp Cap(c), veh/h	988	999	980				0	537	503	144	1372	0
V/C Ratio(X)	0.88	0.80	0.81				0.00	0.97	0.97	0.58	1.07	0.00
Avail Cap(c_a), veh/h	988	999	980				0	537	503	180	1372	0
HCM Platoon Ratio	0.33	0.33	0.33				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	0.72	0.72	0.72				0.00	1.00	1.00	0.09	0.09	0.00
Uniform Delay (d), s/veh	45.8	43.3	43.5				0.0	42.3	42.5	30.9	15.9	0.0
Incr Delay (d2), s/veh	8.5	4.9	5.2				0.0	32.3	33.6	0.3	31.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	30.2	26.4	26.2				0.0	20.6	19.5	2.5	18.6	0.0
Lane Grp Delay (d), s/veh	54.4	48.2	48.7				0.0	74.6	76.1	31.3	47.5	0.0
Lane Grp LOS	D	D	D					E	E	C	F	
Approach Vol, veh/h		2462						1010			1547	
Approach Delay, s/veh		50.6						75.3			46.6	
Approach LOS		D						E			D	

Timer					
Assigned Phs		6		4	3	8
Phs Duration (G+Y+Rc), s		71.0		39.7	9.6	49.3
Change Period (Y+Rc), s		6.5		6.0	4.0	6.0
Max Green Setting (Gmax), s		64.5		31.0	8.0	43.3
Max Q Clear Time (g_c+I1), s		57.6		35.3	5.9	46.3
Green Ext Time (p_c), s		5.1		0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	54.3
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	100	2240	0	0	80	0
Number	1	6			3	18
Initial Q (Qb), veh	0	0			0	0
Ped-Bike Adj(A_pbT)	1.00				1.00	1.00
Parking Bus Adj	1.00	1.00			1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3			186.3	0.0
Lanes	0	3			1	0
Cap, veh/h	77	3256			0	0
Arrive On Green	0.32	0.32			0.00	0.00
Sat Flow, veh/h	0	3390			0	
Grp Volume(v), veh/h	105	2358			0.0	
Grp Sat Flow(s),veh/h/ln	0	1695				
Q Serve(g_s), s	0.0	57.8				
Cycle Q Clear(g_c), s	90.0	57.8				
Prop In Lane	1.00					
Lane Grp Cap(c), veh/h	77	3256				
V/C Ratio(X)	1.37	0.72				
Avail Cap(c_a), veh/h	77	3256				
HCM Platoon Ratio	0.33	0.33				
Upstream Filter(I)	0.26	0.26				
Uniform Delay (d), s/veh	77.0	21.0				
Incr Delay (d2), s/veh	185.3	0.4				
Initial Q Delay(d3),s/veh	0.0	0.0				
%ile Back of Q (50%), veh/ln	4.0	22.9				
Lane Grp Delay (d), s/veh	262.3	21.4				
Lane Grp LOS	F	C				
Approach Vol, veh/h		2463				
Approach Delay, s/veh		31.6				
Approach LOS		C				

Timer	
Assigned Phs	6
Phs Duration (G+Y+Rc), s	93.7
Change Period (Y+Rc), s	4.7
Max Green Setting (Gmax), s	89.0
Max Q Clear Time (g_c+I1), s	92.0
Green Ext Time (p_c), s	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	31.6
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	130	2170	40	0	0	0	0	90	90	170	110	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	193.7	190.0	190.0	193.7	0.0
Lanes	0	3	0				0	1	0	0	1	0
Cap, veh/h	191	3398	64				0	252	252	221	117	0
Arrive On Green	0.22	0.22	0.21				0.00	0.28	0.28	0.09	0.09	0.00
Sat Flow, veh/h	290	5169	98				0	890	890	609	414	0
Grp Volume(v), veh/h	872	797	793				0	0	190	295	0	0
Grp Sat Flow(s),veh/h/ln	1848	1863	1846				0	0	1780	1023	0	0
Q Serve(g_s), s	52.5	46.8	47.1				0.0	0.0	10.3	23.7	0.0	0.0
Cycle Q Clear(g_c), s	52.5	46.8	47.1				0.0	0.0	10.3	34.0	0.0	0.0
Prop In Lane	0.16		0.05				0.00		0.50	0.61		0.00
Lane Grp Cap(c), veh/h	1215	1225	1213				0	0	504	338	0	0
V/C Ratio(X)	0.72	0.65	0.65				0.00	0.00	0.38	0.87	0.00	0.00
Avail Cap(c_a), veh/h	1215	1225	1213				0	0	504	338	0	0
HCM Platoon Ratio	0.33	0.33	0.33				1.00	1.00	1.00	0.33	0.33	1.00
Upstream Filter(I)	0.79	0.79	0.79				0.00	0.00	1.00	0.77	0.00	0.00
Uniform Delay (d), s/veh	36.7	34.4	34.5				0.0	0.0	34.7	59.3	0.0	0.0
Incr Delay (d2), s/veh	2.9	2.1	2.2				0.0	0.0	2.1	20.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	27.9	24.8	24.7				0.0	0.0	5.0	11.5	0.0	0.0
Lane Grp Delay (d), s/veh	39.6	36.6	36.7				0.0	0.0	36.9	79.9	0.0	0.0
Lane Grp LOS	D	D	D						D	E		
Approach Vol, veh/h		2463						190			295	
Approach Delay, s/veh		37.7						36.9			79.9	
Approach LOS		D						D			E	

Timer			
Assigned Phs	6	4	8
Phs Duration (G+Y+Rc), s	82.7	37.3	37.3
Change Period (Y+Rc), s	4.8	4.3	4.3
Max Green Setting (Gmax), s	77.9	33.0	33.0
Max Q Clear Time (g_c+I1), s	54.5	12.3	36.0
Green Ext Time (p_c), s	11.7	1.5	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	41.9
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	170	2250	140	0	0	0	0	760	200	280	1130	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	186.3	190.0	186.3	186.3	0.0
Lanes	0	3	0				0	2	0	1	2	0
Cap, veh/h	176	2473	156				0	834	220	257	1590	0
Arrive On Green	0.51	0.51	0.50				0.00	0.29	0.28	0.22	0.85	0.00
Sat Flow, veh/h	345	4864	307				0	2843	750	1774	3725	0
Grp Volume(v), veh/h	956	873	865				0	524	487	295	1189	0
Grp Sat Flow(s),veh/h/ln	1845	1863	1809				0	1863	1730	1774	1863	0
Q Serve(g_s), s	61.0	52.0	54.1				0.0	33.2	33.2	13.0	15.5	0.0
Cycle Q Clear(g_c), s	61.0	52.0	54.1				0.0	33.2	33.2	13.0	15.5	0.0
Prop In Lane	0.19		0.17				0.00		0.43	1.00		0.00
Lane Grp Cap(c), veh/h	938	947	919				0	546	508	257	1590	0
V/C Ratio(X)	1.02	0.92	0.94				0.00	0.96	0.96	1.15	0.75	0.00
Avail Cap(c_a), veh/h	938	947	919				0	546	508	257	1590	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	0.46	0.46	0.00
Uniform Delay (d), s/veh	29.5	27.3	27.9				0.0	41.7	41.9	27.6	6.2	0.0
Incr Delay (d2), s/veh	34.3	15.5	18.4				0.0	28.4	29.8	86.5	0.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	36.3	27.6	28.5				0.0	20.0	18.8	13.6	3.0	0.0
Lane Grp Delay (d), s/veh	63.8	42.8	46.3				0.0	70.1	71.7	114.0	7.1	0.0
Lane Grp LOS	F	D	D					E	E	F	A	
Approach Vol, veh/h		2694						1011			1484	
Approach Delay, s/veh		51.4						70.9			28.4	
Approach LOS		D						E			C	

Timer												
Assigned Phs		6						4		3	8	
Phs Duration (G+Y+Rc), s		65.0						39.0		16.0	55.0	
Change Period (Y+Rc), s		5.0						4.8		3.0	4.8	
Max Green Setting (Gmax), s		60.0						34.2		13.0	50.2	
Max Q Clear Time (g_c+I1), s		63.0						35.2		15.0	17.5	
Green Ext Time (p_c), s		0.0						0.0		0.0	14.9	

Intersection Summary	
HCM 2010 Ctrl Delay	48.6
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	230	2170	120	0	0	0	0	590	140	240	670	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	186.3	190.0	190.0	186.3	0.0
Lanes	0	3	0				0	2	0	0	2	0
Cap, veh/h	189	1910	107				0	1562	369	335	1306	0
Arrive On Green	0.40	0.40	0.39				0.00	0.54	0.53	1.00	1.00	0.00
Sat Flow, veh/h	473	4776	268				0	2915	689	516	1721	0
Grp Volume(v), veh/h	940	859	852				0	396	372	479	479	0
Grp Sat Flow(s),veh/h/ln	1839	1863	1815				0	1863	1741	1091	1863	0
Q Serve(g_s), s	48.0	48.0	48.0				0.0	15.1	15.2	0.1	0.0	0.0
Cycle Q Clear(g_c), s	48.0	48.0	48.0				0.0	15.1	15.2	64.3	0.0	0.0
Prop In Lane	0.26		0.15				0.00		0.40	0.96		0.00
Lane Grp Cap(c), veh/h	736	745	726				0	998	933	60	998	0
V/C Ratio(X)	1.28	1.15	1.17				0.00	0.40	0.40	7.97	0.48	0.00
Avail Cap(c_a), veh/h	736	745	726				0	998	933	60	998	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	0.81	0.81	0.00
Uniform Delay (d), s/veh	36.0	36.0	36.1				0.0	16.4	16.6	32.0	0.0	0.0
Incr Delay (d2), s/veh	135.7	84.0	92.2				0.0	1.2	1.3	3163.5	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	49.8	39.7	40.4				0.0	7.2	6.8	54.8	0.1	0.0
Lane Grp Delay (d), s/veh	171.7	120.0	128.3				0.0	17.6	17.8	3195.4	0.3	0.0
Lane Grp LOS	F	F	F					B	B	F	A	
Approach Vol, veh/h		2652						768			958	
Approach Delay, s/veh		141.0						17.7			1597.9	
Approach LOS		F						B			F	

Timer				
Assigned Phs	6	4	3	8
Phs Duration (G+Y+Rc), s	52.0	68.0	0.0	68.0
Change Period (Y+Rc), s	5.0	4.7	4.0	4.7
Max Green Setting (Gmax), s	47.0	45.3	14.0	63.3
Max Q Clear Time (g_c+I1), s	50.0	17.2	0.0	66.3
Green Ext Time (p_c), s	0.0	12.5	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	438.2
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	2470	80	0	0	0	0	0	60	90	80	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	186.3	190.0	186.3	186.3	0.0
Lanes	0	3	0				0	1	0	1	1	0
Cap, veh/h	0	3859	124				0	0	326	291	383	0
Arrive On Green	0.00	0.24	0.24				0.00	0.00	0.21	0.21	0.21	0.00
Sat Flow, veh/h	0	5385	173				0	0	1583	1334	1863	0
Grp Volume(v), veh/h	0	1792	892				0	0	63	95	84	0
Grp Sat Flow(s),veh/h/ln	0	1863	1832				0	0	1583	1334	1863	0
Q Serve(g_s), s	0.0	52.4	53.1				0.0	0.0	3.9	7.6	4.5	0.0
Cycle Q Clear(g_c), s	0.0	52.4	53.1				0.0	0.0	3.9	11.6	4.5	0.0
Prop In Lane	0.00		0.09				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	0	2670	1313				0	0	326	291	383	0
V/C Ratio(X)	0.00	0.67	0.68				0.00	0.00	0.19	0.33	0.22	0.00
Avail Cap(c_a), veh/h	0	2670	1313				0	0	326	291	383	0
HCM Platoon Ratio	0.33	0.33	0.33				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.09	0.09				0.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	33.0	33.3				0.0	0.0	39.4	44.2	39.6	0.0
Incr Delay (d2), s/veh	0.0	0.1	0.3				0.0	0.0	1.3	0.6	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.0	26.5	26.4				0.0	0.0	1.7	2.7	2.2	0.0
Lane Grp Delay (d), s/veh	0.0	33.1	33.5				0.0	0.0	40.7	44.8	39.9	0.0
Lane Grp LOS		C	C						D	D	D	
Approach Vol, veh/h		2684						63			179	
Approach Delay, s/veh		33.2						40.7			42.5	
Approach LOS		C						D			D	

Timer	
Assigned Phs	6
Phs Duration (G+Y+Rc), s	91.0
Change Period (Y+Rc), s	5.0
Max Green Setting (Gmax), s	86.0
Max Q Clear Time (g_c+I1), s	55.1
Green Ext Time (p_c), s	20.8

Intersection Summary	
HCM 2010 Ctrl Delay	34.0
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	230	2480	80	0	0	0	0	160	50	150	180	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	186.3	190.0	190.0	186.3	0.0
Lanes	0	3	0				0	1	0	0	1	0
Cap, veh/h	258	2985	98				0	410	129	176	196	0
Arrive On Green	0.20	0.20	0.20				0.00	0.30	0.30	0.59	0.60	0.00
Sat Flow, veh/h	428	4948	163				0	1359	429	440	649	0
Grp Volume(v), veh/h	1041	948	948				0	0	221	347	0	0
Grp Sat Flow(s),veh/h/ln	1841	1863	1834				0	0	1787	1089	0	0
Q Serve(g_s), s	66.8	58.8	59.9				0.0	0.0	11.8	0.1	0.0	0.0
Cycle Q Clear(g_c), s	66.8	58.8	59.9				0.0	0.0	11.8	36.2	0.0	0.0
Prop In Lane	0.23		0.09				0.00		0.24	0.46		0.00
Lane Grp Cap(c), veh/h	1111	1124	1107				0	0	539	372	0	0
V/C Ratio(X)	0.94	0.84	0.86				0.00	0.00	0.41	0.93	0.00	0.00
Avail Cap(c_a), veh/h	1111	1124	1107				0	0	539	372	0	0
HCM Platoon Ratio	0.33	0.33	0.33				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	0.54	0.54	0.54				0.00	0.00	1.00	0.84	0.00	0.00
Uniform Delay (d), s/veh	45.8	42.6	43.0				0.0	0.0	33.4	28.3	0.0	0.0
Incr Delay (d2), s/veh	9.7	4.4	4.8				0.0	0.0	2.3	28.8	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	36.6	31.2	31.4				0.0	0.0	5.7	12.4	0.0	0.0
Lane Grp Delay (d), s/veh	55.5	47.0	47.9				0.0	0.0	35.7	57.1	0.0	0.0
Lane Grp LOS	E	D	D						D	E		
Approach Vol, veh/h		2937						221			347	
Approach Delay, s/veh		50.3						35.7			57.1	
Approach LOS		D						D			E	

Timer					
Assigned Phs		6		4		3	8
Phs Duration (G+Y+Rc), s		78.0		42.0		0.0	42.0
Change Period (Y+Rc), s		5.6		5.8		3.0	5.8
Max Green Setting (Gmax), s		72.4		20.2		13.0	36.2
Max Q Clear Time (g_c+I1), s		68.8		13.8		0.0	38.2
Green Ext Time (p_c), s		3.2		1.2		0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	50.0
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	220	2590	90	0	0	0	0	170	380	0	0	0
Number	1	6	16				7	4	14			
Initial Q (Qb), veh	0	0	0				0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00			
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00			
Adj Sat Flow veh/h/ln	190.0	186.3	190.0				0.0	186.3	190.0			
Lanes	0	3	0				0	1	0			
Cap, veh/h	48	1976	68				0	175	390			
Arrive On Green	0.61	0.61	0.61				0.00	0.34	0.34			
Sat Flow, veh/h	0	3257	113				0	513	1147			
Grp Volume(v), veh/h	232	1411	1411				0	0	579			
Grp Sat Flow(s),veh/h/ln	0	1695	1675				0	0	1660			
Q Serve(g_s), s	0.0	91.0	91.0				0.0	0.0	51.0			
Cycle Q Clear(g_c), s	91.0	91.0	91.0				0.0	0.0	51.0			
Prop In Lane	1.00		0.07				0.00		0.69			
Lane Grp Cap(c), veh/h	48	1028	1016				0	0	565			
V/C Ratio(X)	4.83	1.37	1.39				0.00	0.00	1.03			
Avail Cap(c_a), veh/h	48	1028	1016				0	0	565			
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	1.00				0.00	0.00	1.00			
Uniform Delay (d), s/veh	75.0	29.5	29.5				0.0	0.0	49.5			
Incr Delay (d2), s/veh	1771.0	173.4	180.7				0.0	0.0	44.6			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0			
%ile Back of Q (50%), veh/ln	25.5	87.3	88.3				0.0	0.0	28.8			
Lane Grp Delay (d), s/veh	1846.0	202.9	210.2				0.0	0.0	94.1			
Lane Grp LOS	F	F	F						F			
Approach Vol, veh/h		3053						579				
Approach Delay, s/veh		331.2						94.1				
Approach LOS		F						F				

Timer	
Assigned Phs	6
Phs Duration (G+Y+Rc), s	95.0
Change Period (Y+Rc), s	4.0
Max Green Setting (Gmax), s	91.0
Max Q Clear Time (g_c+I1), s	93.0
Green Ext Time (p_c), s	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	293.4
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	3000	260	0	0	0	0	0	0	2370	880	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.7	6.7							6.0	6.0	
Lane Util. Factor		0.91	1.00							0.86	0.86	
Frt		1.00	0.85							1.00	1.00	
Flt Protected		1.00	1.00							0.95	0.98	
Satd. Flow (prot)		4424	1425							2739	2818	
Flt Permitted		1.00	1.00							0.95	0.98	
Satd. Flow (perm)		4424	1425							2739	2818	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	3158	274	0	0	0	0	0	0	2495	926	0
RTOR Reduction (vph)	0	0	27	0	0	0	0	0	0	16	16	0
Lane Group Flow (vph)	0	3158	247	0	0	0	0	0	0	1681	1708	0
Parking (#/hr)		0										
Turn Type		NA	Perm							Perm	NA	
Protected Phases		6									8	
Permitted Phases			6							8		
Actuated Green, G (s)		75.3	75.3							62.0	62.0	
Effective Green, g (s)		75.3	75.3							62.0	62.0	
Actuated g/C Ratio		0.50	0.50							0.41	0.41	
Clearance Time (s)		6.7	6.7							6.0	6.0	
Vehicle Extension (s)		2.0	2.0							2.0	2.0	
Lane Grp Cap (vph)		2220	715							1132	1164	
v/s Ratio Prot		c0.71										
v/s Ratio Perm			0.17							c0.61	0.61	
v/c Ratio		1.42	0.35							1.49	1.47	
Uniform Delay, d1		37.4	22.5							44.0	44.0	
Progression Factor		0.55	0.32							0.57	0.57	
Incremental Delay, d2		191.2	0.5							218.7	210.8	
Delay (s)		211.9	7.7							243.7	235.8	
Level of Service		F	A							F	F	
Approach Delay (s)		195.6			0.0			0.0			239.7	
Approach LOS		F			A			A			F	

Intersection Summary			
HCM 2000 Control Delay	217.6	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.45		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	12.7
Intersection Capacity Utilization	126.8%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	430	3200	110	0	0	0	0	310	260	300	0	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	171.0	167.6	171.0				0.0	167.6	167.6	167.6	167.6	0.0
Lanes	0	3	0				0	1	1	1	1	0
Cap, veh/h	322	2596	0				0	596	506	195	596	0
Arrive On Green	0.58	0.58	0.00				0.00	0.36	0.36	0.36	0.00	0.00
Sat Flow, veh/h	551	4451	0				0	1676	1425	734	1676	0
Grp Volume(v), veh/h	1355	2466	0				0	326	274	316	0	0
Grp Sat Flow(s),veh/h/ln	1649	1676	0				0	1676	1425	734	1676	0
Q Serve(g_s), s	87.5	87.5	0.0				0.0	23.3	23.0	30.0	0.0	0.0
Cycle Q Clear(g_c), s	87.5	87.5	0.0				0.0	23.3	23.0	53.3	0.0	0.0
Prop In Lane	0.33		0.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	962	1956	0				0	596	506	195	596	0
V/C Ratio(X)	1.41	1.26	0.00				0.00	0.55	0.54	1.62	0.00	0.00
Avail Cap(c_a), veh/h	962	1956	0				0	596	506	195	596	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00				0.00	1.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	31.3	31.2	0.0				0.0	38.7	38.6	63.7	0.0	0.0
Incr Delay (d2), s/veh	190.1	121.7	0.0				0.0	3.6	4.1	303.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	86.6	69.5	0.0				0.0	10.6	9.0	24.1	0.0	0.0
Lane Grp Delay (d), s/veh	221.4	152.9	0.0				0.0	42.3	42.7	366.9	0.0	0.0
Lane Grp LOS	F	F						D	D	F		
Approach Vol, veh/h		3821						600			316	
Approach Delay, s/veh		177.2						42.5			366.9	
Approach LOS		F						D			F	

Timer			
Assigned Phs	6	4	8
Phs Duration (G+Y+Rc), s	92.0	58.0	58.0
Change Period (Y+Rc), s	4.5	4.7	4.7
Max Green Setting (Gmax), s	87.5	53.3	53.3
Max Q Clear Time (g_c+I1), s	89.5	25.3	55.3
Green Ext Time (p_c), s	0.0	3.8	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	172.8
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	550	2930	670	0	0	0	0	1130	130	230	440	0
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	171.0	167.6	171.0				0.0	167.6	171.0	171.0	167.6	0.0
Lanes	0	3	0				0	2	0	0	2	0
Cap, veh/h	335	1894	420				0	1097	126	49	1223	0
Arrive On Green	0.18	0.18	0.18				0.00	0.37	0.37	0.74	0.74	0.00
Sat Flow, veh/h	615	3477	771				0	2954	339	3	1526	0
Grp Volume(v), veh/h	1549	1410	1410				0	673	653	353	352	0
Grp Sat Flow(s),veh/h/ln	1646	1676	1540				0	1676	1617	1621	1676	0
Q Serve(g_s), s	81.7	81.7	81.7				0.0	55.7	55.7	0.1	14.0	0.0
Cycle Q Clear(g_c), s	81.7	81.7	81.7				0.0	55.7	55.7	55.7	14.0	0.0
Prop In Lane	0.37		0.50				0.00		0.21	1.00		0.00
Lane Grp Cap(c), veh/h	896	913	839				0	623	600	48	623	0
V/C Ratio(X)	1.73	1.54	1.68				0.00	1.08	1.09	7.34	0.57	0.00
Avail Cap(c_a), veh/h	896	913	839				0	623	600	48	623	0
HCM Platoon Ratio	0.33	0.33	0.33				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	0.09	0.09	0.09				0.00	1.00	1.00	0.09	0.09	0.00
Uniform Delay (d), s/veh	61.5	61.5	61.5				0.0	47.2	47.2	47.2	13.9	0.0
Incr Delay (d2), s/veh	328.0	245.1	306.4				0.0	60.2	62.6	2858.6	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	118.6	99.8	106.0				0.0	34.4	33.6	38.1	4.3	0.0
Lane Grp Delay (d), s/veh	389.6	306.7	367.9				0.0	107.4	109.7	2905.7	14.3	0.0
Lane Grp LOS	F	F	F					F	F	F	B	
Approach Vol, veh/h		4368						1326			705	
Approach Delay, s/veh		355.8						108.5			1460.0	
Approach LOS		F						F			F	

Timer					
Assigned Phs		6		4	3	8
Phs Duration (G+Y+Rc), s		88.0		62.0	0.0	62.0
Change Period (Y+Rc), s		6.3		6.3	3.0	6.3
Max Green Setting (Gmax), s		81.7		39.7	13.0	55.7
Max Q Clear Time (g_c+I1), s		83.7		57.7	0.0	57.7
Green Ext Time (p_c), s		0.0		0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	426.2
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	2860	650	0	0	0	0	0	0	580	1170	0
Number	1	6	16							3	8	18
Initial Q (Qb), veh	0	0	0							0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00							1.00		1.00
Parking Bus Adj	1.00	1.00	1.00							1.00	1.00	1.00
Adj Sat Flow veh/h/ln	0.0	166.0	171.0							171.0	166.0	0.0
Lanes	0	3	0							0	2	0
Cap, veh/h	0	2193	461							48	588	0
Arrive On Green	0.00	0.18	0.18							0.13	0.13	0.00
Sat Flow, veh/h	0	3993	840							0	1511	0
Grp Volume(v), veh/h	0	2463	1232							611	1232	0
Grp Sat Flow(s),veh/h/ln	0	1660	1512							0	1511	0
Q Serve(g_s), s	0.0	82.4	82.4							0.0	58.4	0.0
Cycle Q Clear(g_c), s	0.0	82.4	82.4							58.4	58.4	0.0
Prop In Lane	0.00		0.56							1.00		0.00
Lane Grp Cap(c), veh/h	0	1824	831							48	588	0
V/C Ratio(X)	0.00	1.35	1.48							12.73	2.09	0.00
Avail Cap(c_a), veh/h	0	1824	831							48	588	0
HCM Platoon Ratio	1.00	0.33	0.33							0.33	0.33	1.00
Upstream Filter(I)	0.00	0.09	0.09							0.09	0.09	0.00
Uniform Delay (d), s/veh	0.0	61.4	61.4							94.6	65.4	0.0
Incr Delay (d2), s/veh	0.0	158.1	217.9							5281.8	493.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0							0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.0	77.5	84.3							72.4	104.7	0.0
Lane Grp Delay (d), s/veh	0.0	219.5	279.3							5376.3	558.4	0.0
Lane Grp LOS		F	F							F	F	
Approach Vol, veh/h		3695									1843	
Approach Delay, s/veh		239.4									2155.7	
Approach LOS		F									F	

Timer	
Assigned Phs	6
Phs Duration (G+Y+Rc), s	87.0
Change Period (Y+Rc), s	4.6
Max Green Setting (Gmax), s	82.4
Max Q Clear Time (g_c+I1), s	84.4
Green Ext Time (p_c), s	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	877.1
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	1440	2200	0	0	0	0	0	1050	120	0	0	0
Number	1	6	16				7	4	14			
Initial Q (Qb), veh	0	0	0				0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00			
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00			
Adj Sat Flow veh/h/ln	171.0	166.0	0.0				0.0	166.0	171.0			
Lanes	0	3	0				0	3	0			
Cap, veh/h	48	2143	0				0	1007	115			
Arrive On Green	0.23	0.23	0.00				0.00	0.23	0.23			
Sat Flow, veh/h	0	3022	0				0	4392	500			
Grp Volume(v), veh/h	1516	2316	0				0	835	396			
Grp Sat Flow(s),veh/h/ln	0	1511	0				0	1660	1572			
Q Serve(g_s), s	0.0	106.4	0.0				0.0	34.4	34.4			
Cycle Q Clear(g_c), s	106.4	106.4	0.0				0.0	34.4	34.4			
Prop In Lane	1.00		0.00				0.00		0.32			
Lane Grp Cap(c), veh/h	48	2143	0				0	761	360			
V/C Ratio(X)	31.58	1.08	0.00				0.00	1.10	1.10			
Avail Cap(c_a), veh/h	48	2143	0				0	761	360			
HCM Platoon Ratio	0.33	0.33	1.00				1.00	1.00	1.00			
Upstream Filter(I)	0.09	0.09	0.00				0.00	1.00	1.00			
Uniform Delay (d), s/veh	110.6	57.4	0.0				0.0	57.8	57.8			
Incr Delay (d2), s/veh	13766.0	37.2	0.0				0.0	62.3	76.4			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0			
%ile Back of Q (50%), veh/ln	185.5	55.2	0.0				0.0	21.5	21.8			
Lane Grp Delay (d), s/veh	13876.6	94.7	0.0				0.0	120.1	134.2			
Lane Grp LOS	F	F						F	F			
Approach Vol, veh/h		3832						1231				
Approach Delay, s/veh		5547.0						124.6				
Approach LOS		F						F				

Timer	
Assigned Phs	6
Phs Duration (G+Y+Rc), s	111.0
Change Period (Y+Rc), s	4.6
Max Green Setting (Gmax), s	106.4
Max Q Clear Time (g_c+I1), s	108.4
Green Ext Time (p_c), s	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	4228.6
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	720	920	480	380	0	780	0	1340	260	450	1570	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.7	6.7		6.7		6.7		6.2	6.2	4.0	6.2	
Lane Util. Factor	0.97	0.95		1.00		1.00		0.95	1.00	0.97	0.95	
Frt	1.00	0.95		1.00		0.85		1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00		0.95		1.00		1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3060	2992		1577		1411		3154	1411	3060	3154	
Flt Permitted	0.95	1.00		0.10		1.00		1.00	1.00	0.95	1.00	
Satd. Flow (perm)	3060	2992		161		1411		3154	1411	3060	3154	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	758	968	505	400	0	821	0	1411	274	474	1653	0
RTOR Reduction (vph)	0	45	0	0	0	110	0	0	98	0	0	0
Lane Group Flow (vph)	758	1428	0	400	0	711	0	1411	176	474	1653	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Split	NA		D.Pm		custom		NA	Perm	Prot	NA	
Protected Phases	8	8						6		5	2	
Permitted Phases				8		4			6			
Actuated Green, G (s)	41.3	41.3		41.3		33.3		40.8	40.8	11.0	55.8	
Effective Green, g (s)	41.3	41.3		41.3		33.3		40.8	40.8	11.0	55.8	
Actuated g/C Ratio	0.28	0.28		0.28		0.22		0.27	0.27	0.07	0.37	
Clearance Time (s)	6.7	6.7		6.7		6.7		6.2	6.2	4.0	6.2	
Vehicle Extension (s)	3.0	3.0		3.0		3.0		3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	842	823		44		313		857	383	224	1173	
v/s Ratio Prot	0.25	0.48						c0.45		c0.15	0.52	
v/s Ratio Perm				c2.49		c0.50			0.13			
v/c Ratio	0.90	1.74		9.09		2.27		1.65	0.46	2.12	1.41	
Uniform Delay, d1	52.4	54.4		54.4		58.4		54.6	45.4	69.5	47.1	
Progression Factor	0.66	0.65		1.00		1.00		1.00	1.00	0.53	0.94	
Incremental Delay, d2	1.4	331.3		3686.3		582.7		296.2	4.0	503.6	184.6	
Delay (s)	36.0	366.6		3740.7		641.1		350.8	49.4	540.4	229.1	
Level of Service	D	F		F		F		F	D	F	F	
Approach Delay (s)		254.3			1656.5			301.7			298.5	
Approach LOS		F			F			F			F	

Intersection Summary			
HCM 2000 Control Delay	513.9	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	4.26		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	23.6
Intersection Capacity Utilization	141.6%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Appendix D

PART 3: VISSIM REPORT

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1. Background and Purpose

1.1 Objective

The purpose of this technical memorandum is to document the results of VISSIM microsimulation traffic analysis of future improvement alternatives for SR 90/SW 7th Street and SW 8th Street between I-95 and SR 5/Brickell Avenue in Miami, Florida. The effort was part of preliminary planning for the SR 90 corridor. Figure 1-1 shows a map of the study area

Figure 1-1: SR 90/SW 7th Street and SW 8th Street between I-95 and SR 5/Brickell Avenue

Source: Google Maps

The study team performed VISSIM analysis to assess interchange alternatives for SR 90 and I-95. In addition to assessing the no build alternative, two alternatives were evaluated, Alternative 3 and Alternative 4, which are shown in Figure 1-2- and Figure 1-3, respectively.

Figure 1-2: SR 90 and I-95 Interchange Alternative 3

Figure 1-3: SR 90 and I-95 Interchange Alternative 4

It is important to note that as it is shown in the exhibit, Alternative 3 reverses traffic flow along SW 7th Street and SW 8th Street from how traffic currently flows. Using Interchange Alternative 3 as a base, two additional scenarios were developed and evaluated. In total, five scenarios were evaluated using VISSIM:

- No Build.
- Interchange Alternative 3 with traffic flow on SW 7th Street and SW 8th Street reversed from existing conditions.
- Interchange Alternative 3 with two lanes open to traffic on SW 7th Street and SW 8th Street. The third lane on each street is dedicated to transit vehicles.
- Interchange Alternative 3 with two way traffic on SW 7th Street and SW 8th Street.
- Interchange Alternative 4.

For each of the five scenarios, 2020 and 2040 future conditions were evaluated for the AM and PM peak hours. Specifically, 13 intersections were evaluated:

1. SW 8th Street and 5th Avenue
2. SW 8th Street and 4th Avenue
3. SW 8th Street and 3rd Avenue
4. SW 8th Street and 2nd Avenue
5. SW 8th Street and 1st Avenue
6. SW 8th Street and Miami Avenue
7. SW 8th Street and SR 5/Brickell Avenue
8. SW 7th Street and SR 5/Brickell Avenue
9. SW 7th Street and Miami Avenue
10. SW 7th Street and 1st Avenue
11. SW 7th Street and 2nd Avenue
12. SW 7th Street and 3rd Avenue
13. SW 7th Street and 4th Avenue

The next section discusses how the VISSIM models were coded and what assumptions were made in order to simulate the models and obtain the results.

2. VISSIM Model Development

2.1 Considered Scenarios

Initially, a base VISSIM model was developed by coding in the existing geometry (number of lanes, lane widths, link lengths, driver behavior, etc.) over an aerial of the study area.

VISSIM allows driver behavior properties to be modified for specific links. Sections of I-95 were coded with the default "freeway" behavior type. Surface streets (SW 7th Street, SW 8th Street, etc.) were coded with a behavior type that was a slightly modified version of the default "urban" behavior type. Table 2-1 shows the driving behavior parameters that were changed for the surface streets.

Table 2-1: Modified Driving Behavior Parameters

Driving Behavior Parameter	Explanation	Default Value	New Value
Average standstill distance	The average desired distance between two cars.	6.56 ft	4 ft
Max deceleration for cooperative braking	It specifies whether the trailing vehicle brakes cooperatively, so as to allow a preceding vehicle for changing lanes into its own lane. When the trailing vehicle detects that it would have to brake more heavily than what this value indicates if the preceding vehicle is set for lane changing, the cooperative braking stops or is not initiated.	-9.84 ft/s^2	-14 ft/s^2
Additive part of safety distance	Value used for the computation of the desired safety distance	2	3
Multiplicative part of safety distance	Value used for the computation of the desired safety distance	3	4

The modified values made drivers more aggressive to match driver behavior in the city. Other attributes that were coded into the base network include:

- Speed distributions – Speed distributions were created based on the posted speed limits plus/minus five mph. For example, if the speed limit was 35 mph, the speed distribution to be assigned to vehicles on that street would be 30 mph to 40 mph.
- Reduced speed areas – Reduced speed areas are sections of roadway where vehicles must slow down to make turning movements. Right turning reduced speed areas used speed distributions of 9 mph plus/minus one mph. Left turning reduced speed areas used speed distributions of 15 mph plus/minus one mph.
- Conflict areas – Conflict areas were coded where links or connectors overlap and vehicles would cross paths. The conflict areas were defined to give certain movements priority over

other movements. For example, a conflict area would be coded for a channelized right turn to yield to oncoming traffic.

- Intersection control – Traffic signals, signal controllers, and vehicle detectors were coded for signalized intersections in the study area.

After the base VISSIM model was set up, the 2020/2040 AM and PM networks for the No Build scenario were completed. The following information was entered for each peak period:

- Vehicle inputs – Vehicle inputs were coded so that traffic entered the VISSIM network at the start of links.
- Vehicle compositions – Vehicle compositions are composed of multiple vehicle types. It allows the user to define the percentage of heavy vehicles. Vehicle compositions were defined for each location where traffic entered the VISSIM network. The following vehicle compositions were defined:
    - I-95 traffic – 3% heavy vehicles and 97% passenger vehicles.
    - 8th Street traffic – 2% heavy vehicles and 98% passenger vehicles.
    - 7th Street traffic – 3% heavy vehicles and 97% passenger vehicles.
    - Other side street traffic – 2% heavy vehicles and 98% passenger vehicles.
- Signal timings specific to the peak hour. The signal timings were determined from the Synchro analysis.
- Static vehicle routes – Static vehicle routes are used to route traffic through the network. In most cases, static vehicle routes are coded as traditional intersection turning movements. Sometimes, routes can be combined to avoid unrealistic weaving on short links. For this evaluation, vehicle routes were combined for the intersections of:
    - SW 8th Street/Brickell Avenue and SW 7th Street/Brickell Avenue.
    - SW 7th Street/4th Avenue, SW 7th Street/3rd Avenue, SW 8th Street/4th Avenue, and SW 8th Street/3rd Avenue.

Table 2-2 shows an example of a combined route at the SW 8th Street and SW 7th Street intersections with Brickell Avenue. The picture shows the route for vehicles turning right from SW 8th Street onto Brickell Avenue and continuing north through the SW 7th Street intersection. The traffic volume continuing north was calculated based on the proportion of northbound through movements at SW 7th Street and Brickell Avenue. The same methodology was used for other combined routes.

Table 2-2: Example of Combined Route at SW 8th Street and SW 7th Street Intersections with Brickell Avenue

After the No Build files were set up, the other scenario files were coded in the same manner as described in this section. Finally, all scenario files were simulated to obtain results, which are discussed in the next section.

3. Results

In order to obtain evaluation results, each VISSIM model was simulated five times in order to obtain average values. Each simulation was seeded, or initialized, for 15 minutes and simulated for an hour.
The following pages summarize the results of the VISSIM analysis.

- Intersection Delay per Vehicle – Average delay in seconds per vehicle of vehicles at the intersection.
- Intersection Level of Service – Level of service for the intersection based on average delay per vehicle at the intersection.
- Network-wide Average Delay per Vehicle – Average delay in seconds per vehicle of all vehicles in the network.
- Network-wide Latent Demand – Number of vehicles that were denied entry into the network due to excessive delays and queues along the network links.

Table 3-1: Delay and Level of Service 2020 No-Build

Intersection	AM Peak		PM Peak	
	Delay (s/veh)	Level of Service	Delay (s/veh)	Level of Service
1 - SW 8th Street and 3rd Avenue	14.61	B	106.86	F
2 - SW 8th Street and 4th Avenue	63.47	E	68.85	E
3 - SW 7th Street and 4th Avenue	87.08	F	113.93	F
4 - SW 7th Street and 3rd Avenue	22.24	C	51.39	D
5 - SW 7th Street and 2nd Avenue	27.52	C	49.94	D
6 - SW 8th Street and 5th Avenue	90.45	F	59.86	E
7 - SW 8th Street and 2nd Avenue	34.7	C	96.77	F
8 - SW 8th Street and 1st Avenue	37.85	D	123.03	F
9 - SW 7th Street and 1st Avenue	184.92	F	257.61	F
10 - SW 7th Street and Miami Avenue	152.1	F	179.68	F
11 - SW 8th Street and Miami Avenue	95.81	F	179.71	F
12 - SW 8th Street and Brickell Avenue	74.85	E	116.28	F
13 - SW 7th Street and Brickell Avenue	45.66	D	81.82	F
Network-wide Parameter	AM Peak		PM Peak	
Average Delay Time per Vehicle (s/veh)	202.69		734.38	
Latent Demand (Vehicles Denied Entry)	4026		13359	

Table 3-2: Delay and Level of Service 2040 No-Build

Intersection	AM Peak		PM Peak	
	Delay (s/veh)	Level of Service	Delay (s/veh)	Level of Service
1 - SW 8th Street and 3rd Avenue	41.6	D	75.18	E
2 - SW 8th Street and 4th Avenue	75.22	E	67.51	E
3 - SW 7th Street and 4th Avenue	107.44	F	106.57	F
4 - SW 7th Street and 3rd Avenue	18.81	B	69.57	E
5 - SW 7th Street and 2nd Avenue	62.72	E	107.66	F
6 - SW 8th Street and 5th Avenue	107.42	F	77.78	E
7 - SW 8th Street and 2nd Avenue	72.08	E	70.48	E
8 - SW 8th Street and 1st Avenue	60.26	E	50.97	D
9 - SW 7th Street and 1st Avenue	240.01	F	175.65	F
10 - SW 7th Street and Miami Avenue	244.08	F	82.3	F
11 - SW 8th Street and Miami Avenue	130.94	F	97.11	F
12 - SW 8th Street and Brickell Avenue	111.84	F	90.72	F
13 - SW 7th Street and Brickell Avenue	82.02	F	79.36	E
Network-wide Parameter	AM Peak		PM Peak	
Average Delay Time per Vehicle (s/veh)	302.69		444.91	
Latent Demand (Vehicles Denied Entry)	10054		14501	

Table 3-3: Delay and Level of Service 2020 Build Scenario 1 (2 Lanes and Transit Alternative 3)

Intersection	AM Peak		PM Peak	
	Delay (s/veh)	Level of Service	Delay (s/veh)	Level of Service
1 - SW 8th Street and 3rd Avenue	27.28	C	85.57	F
2 - SW 8th Street and 4th Avenue	11.64	B	18.34	B
3 - SW 7th Street and 4th Avenue	63.69	E	119.13	F
4 - SW 7th Street and 3rd Avenue	25.68	C	79.84	E
5 - SW 7th Street and 2nd Avenue	22.14	C	93.99	F
6 - SW 8th Street and 5th Avenue	22.12	C	22.9	C
7 - SW 8th Street and 2nd Avenue	35.29	D	107.51	F
8 - SW 8th Street and 1st Avenue	24.1	C	92.18	F
9 - SW 7th Street and 1st Avenue	68.77	E	154.22	F
10 - SW 7th Street and Miami Avenue	40.61	D	95.76	F
11 - SW 8th Street and Miami Avenue	28.56	C	133.33	F
12 - SW 8th Street and Brickell Avenue	175	F	219.83	F
13 - SW 7th Street and Brickell Avenue	151.45	F	193.81	F
Network-wide Parameter	AM Peak		PM Peak	
Average Delay Time per Vehicle (s/veh)	130.02		429.78	
Latent Demand (Vehicles Denied Entry)	2288		9591	

Table 3-4: 2040 Build Scenario 1 (2 Lanes and Transit Alternative 3)

Intersection	AM Peak		PM Peak	
	Delay (s/veh)	Level of Service	Delay (s/veh)	Level of Service
1 - SW 8th Street and 3rd Avenue	58.22	E	149.24	F
2 - SW 8th Street and 4th Avenue	9.08	A	8.56	A
3 - SW 7th Street and 4th Avenue	219.63	F	136.4	F
4 - SW 7th Street and 3rd Avenue	34.43	C	78.19	E
5 - SW 7th Street and 2nd Avenue	30.24	C	124.85	F
6 - SW 8th Street and 5th Avenue	29.5	C	39.57	D
7 - SW 8th Street and 2nd Avenue	81.44	F	249.64	F
8 - SW 8th Street and 1st Avenue	50.68	D	168.56	F
9 - SW 7th Street and 1st Avenue	65.57	E	168.15	F
10 - SW 7th Street and Miami Avenue	36.59	D	87.21	F
11 - SW 8th Street and Miami Avenue	77.36	E	267.22	F
12 - SW 8th Street and Brickell Avenue	180.67	F	280.15	F
13 - SW 7th Street and Brickell Avenue	151.61	F	247.84	F
Network-wide Parameter	AM Peak		PM Peak	
Average Delay Time per Vehicle (s/veh)	176.91		635.85	
Latent Demand (Vehicles Denied Entry)	6697		18620	

Table 3-5: Delay and Level of Service 2020 Build Scenario 2 (2 Way Alternative 3)

Intersection	AM Peak		PM Peak	
	Delay (s/veh)	Level of Service	Delay (s/veh)	Level of Service
1 - SW 8th Street and 3rd Avenue	61.93	E	114.65	F
2 - SW 8th Street and 4th Avenue	96.21	F	95.31	F
3 - SW 7th Street and 4th Avenue	129.76	F	145.5	F
4 - SW 7th Street and 3rd Avenue	39.96	D	79.96	E
5 - SW 7th Street and 2nd Avenue	31.53	C	98.9	F
6 - SW 8th Street and 5th Avenue	62.27	E	74.02	E
7 - SW 8th Street and 2nd Avenue	77.69	E	138.68	F
8 - SW 8th Street and 1st Avenue	49.69	D	82.06	F
9 - SW 7th Street and 1st Avenue	67.19	E	70.34	E
10 - SW 7th Street and Miami Avenue	29.37	C	34	C
11 - SW 8th Street and Miami Avenue	66.57	E	125.69	F
12 - SW 8th Street and Brickell Avenue	96.11	F	126.28	F
13 - SW 7th Street and Brickell Avenue	48.59	D	83.78	F
Network-wide Parameter	AM Peak		PM Peak	
Average Delay Time per Vehicle (s/veh)	181.71		335.97	
Latent Demand (Vehicles Denied Entry)	3152		6020	

Table 3-6: Delay and Level of Service 2040 Build Scenario 2 (2 Way Alternative 3)

Intersection	AM Peak		PM Peak	
	Delay (s/veh)	Level of Service	Delay (s/veh)	Level of Service
1 - SW 8th Street and 3rd Avenue	72.95	E	111.96	F
2 - SW 8th Street and 4th Avenue	95.75	F	117.67	F
3 - SW 7th Street and 4th Avenue	129.95	F	173.84	F
4 - SW 7th Street and 3rd Avenue	41.99	D	68.34	E
5 - SW 7th Street and 2nd Avenue	44.87	D	115.35	F
6 - SW 8th Street and 5th Avenue	84.63	F	72.87	E
7 - SW 8th Street and 2nd Avenue	99.74	F	135.61	F
8 - SW 8th Street and 1st Avenue	67.27	E	65.94	E
9 - SW 7th Street and 1st Avenue	75.04	E	58.9	E
10 - SW 7th Street and Miami Avenue	38.21	D	32.78	C
11 - SW 8th Street and Miami Avenue	95.88	F	111.52	F
12 - SW 8th Street and Brickell Avenue	97.43	F	106.6	F
13 - SW 7th Street and Brickell Avenue	56.57	E	86.26	F
Network-wide Parameter	AM Peak		PM Peak	
Average Delay Time per Vehicle (s/veh)	269.75		346.62	
Latent Demand (Vehicles Denied Entry)	9014		11922	

Table 3-7: Delay and Level of Service 2020 Build Scenario 3 (3 Lanes Reversed, Alternative 3)

Intersection	AM Peak		PM Peak	
	Delay (s/veh)	Level of Service	Delay (s/veh)	Level of Service
1 - SW 8th Street and 3rd Avenue	110.21	F	118.37	F
2 - SW 8th Street and 4th Avenue	32.71	C	19.69	B
3 - SW 7th Street and 4th Avenue	206.74	F	153.76	F
4 - SW 7th Street and 3rd Avenue	139.28	F	92.21	F
5 - SW 7th Street and 2nd Avenue	113.18	F	122.34	F
6 - SW 8th Street and 5th Avenue	24.42	C	31.76	C
7 - SW 8th Street and 2nd Avenue	112.06	F	163.04	F
8 - SW 8th Street and 1st Avenue	70.93	E	178.22	F
9 - SW 7th Street and 1st Avenue	289.49	F	244.82	F
10 - SW 7th Street and Miami Avenue	219.62	F	173.5	F
11 - SW 8th Street and Miami Avenue	84.03	F	235.79	F
12 - SW 8th Street and Brickell Avenue	84.74	F	141.01	F
13 - SW 7th Street and Brickell Avenue	92.39	F	132.87	F
Network-wide Parameter	AM Peak		PM Peak	
Average Delay Time per Vehicle (s/veh)	364.93		600.95	
Latent Demand (Vehicles Denied Entry)	8565		13177	

Table 3-8: Delay and Level of Service 2040 Build Scenario 3 (3 Lanes Reversed, Alternative 3)

Intersection	AM Peak		PM Peak	
	Delay (s/veh)	Level of Service	Delay (s/veh)	Level of Service
1 - SW 8th Street and 3rd Avenue	61.7	E	130.6	F
2 - SW 8th Street and 4th Avenue	17.69	B	21.44	C
3 - SW 7th Street and 4th Avenue	257.09	F	142.2	F
4 - SW 7th Street and 3rd Avenue	54.73	D	89.57	F
5 - SW 7th Street and 2nd Avenue	76.21	E	128.92	F
6 - SW 8th Street and 5th Avenue	31.18	C	33.45	C
7 - SW 8th Street and 2nd Avenue	114.19	F	170.67	F
8 - SW 8th Street and 1st Avenue	77.68	E	121.54	F
9 - SW 7th Street and 1st Avenue	266.44	F	228.46	F
10 - SW 7th Street and Miami Avenue	204.09	F	171.7	F
11 - SW 8th Street and Miami Avenue	111.97	F	157.65	F
12 - SW 8th Street and Brickell Avenue	74.8	E	86.76	F
13 - SW 7th Street and Brickell Avenue	81.37	F	106.47	F
Network-wide Parameter	AM Peak		PM Peak	
Average Delay Time per Vehicle (s/veh)	343.07		517.83	
Latent Demand (Vehicles Denied Entry)	13502		17348	

Table 3-9: Delay and Level of Service 2020 Build Scenario 4 (3 Lanes Alternative 4)

Intersection	AM Peak		PM Peak	
	Delay (s/veh)	Level of Service	Delay (s/veh)	Level of Service
1 - SW 8th Street and 3rd Avenue	70.43	E	40.76	D
2 - SW 8th Street and 4th Avenue	48.76	D	21.15	C
3 - SW 7th Street and 4th Avenue	43.16	D	45.26	D
4 - SW 7th Street and 3rd Avenue	19.1	B	19.27	B
5 - SW 7th Street and 2nd Avenue	33.55	C	80.36	F
6 - SW 8th Street and 5th Avenue	43.07	D	27.09	C
7 - SW 8th Street and 2nd Avenue	54.8	D	51.39	D
8 - SW 8th Street and 1st Avenue	62.61	E	21.09	C
9 - SW 7th Street and 1st Avenue	207.72	F	95.05	F
10 - SW 7th Street and Miami Avenue	208.71	F	58.5	E
11 - SW 8th Street and Miami Avenue	139.89	F	86	F
12 - SW 8th Street and Brickell Avenue	86.02	F	103.29	F
13 - SW 7th Street and Brickell Avenue	54.09	D	61.84	E
Network-wide Parameter	AM Peak		PM Peak	
Average Delay Time per Vehicle (s/veh)	261.2		225.21	
Latent Demand (Vehicles Denied Entry)	4946		4594	

Table 3-10: Delay and Level of Service 2040 Build Scenario 4 (3 Lanes Alternative 4)

Intersection	AM Peak		PM Peak	
	Delay (s/veh)	Level of Service	Delay (s/veh)	Level of Service
1 - SW 8th Street and 3rd Avenue	121.26	F	58.22	E
2 - SW 8th Street and 4th Avenue	130.88	F	53.21	D
3 - SW 7th Street and 4th Avenue	151.2	F	43.4	D
4 - SW 7th Street and 3rd Avenue	60	E	19.47	B
5 - SW 7th Street and 2nd Avenue	54.08	D	88.87	F
6 - SW 8th Street and 5th Avenue	120.53	F	54.98	D
7 - SW 8th Street and 2nd Avenue	100.79	F	67.32	E
8 - SW 8th Street and 1st Avenue	112.09	F	57.75	E
9 - SW 7th Street and 1st Avenue	301.41	F	130.6	F
10 - SW 7th Street and Miami Avenue	334.17	F	66.18	E
11 - SW 8th Street and Miami Avenue	194.29	F	109.92	F
12 - SW 8th Street and Brickell Avenue	134.93	F	108.23	F
13 - SW 7th Street and Brickell Avenue	94.68	F	67.94	E
Network-wide Parameter	AM Peak		PM Peak	
Average Delay Time per Vehicle (s/veh)	385.25		239.9	
Latent Demand (Vehicles Denied Entry)	10630		9077	

The preliminary results show that interchange Alternative 4 appears to be superior to the Alternative 3 options. In general, the Alternative 4 evaluations processed more vehicles (less amount of vehicles denied entry) and had lower average delay per vehicle compared to the Alternative 3 options. Still, many intersections have failing traffic operations (LOS E or F) for every evaluation scenario due to extremely high traffic volumes. The high traffic volumes cause excessive delays and vehicle queuing throughout the network.

Table 3-11: Demand and Processed Volumes 2020 No-Build

Intersection	AM Peak		PM Peak	
	Demand Volume	Processed Vehicles	Demand Volume	Processed Vehicles
1 - SW 8th Street and 3rd Avenue	4070	2073	3410	456
2 - SW 8th Street and 4th Avenue	5650	3135	5010	730
3 - SW 7th Street and 4th Avenue	4150	2148	4470	543
4 - SW 7th Street and 3rd Avenue	1880	1330	3300	332
5 - SW 7th Street and 2nd Avenue	3060	2260	4580	539
6 - SW 8th Street and 5th Avenue	2470	1713	2650	585
7 - SW 8th Street and 2nd Avenue	4600	2793	4600	619
8 - SW 8th Street and 1st Avenue	3970	2102	3940	303
9 - SW 7th Street and 1st Avenue	2740	1353	4260	207
10 - SW 7th Street and Miami Avenue	2250	1182	4260	256
11 - SW 8th Street and Miami Avenue	3530	1753	3550	258
12 - SW 8th Street and Brickell Avenue	5260	4071	5450	666
13 - SW 7th Street and Brickell Avenue	4105	3413	4710	610

Table 3-12: Demand and Processed Volumes 2040 No-Build

Intersection	AM Peak		PM Peak	
	Demand Volume	Processed Vehicles	Demand Volume	Processed Vehicles
1 - SW 8th Street and 3rd Avenue	5270	1746	4610	1036
2 - SW 8th Street and 4th Avenue	7270	2556	6510	1516
3 - SW 7th Street and 4th Avenue	5270	1610	5790	1049
4 - SW 7th Street and 3rd Avenue	2630	937	4700	729
5 - SW 7th Street and 2nd Avenue	4150	1694	6140	1006
6 - SW 8th Street and 5th Avenue	3040	1487	3450	1097
7 - SW 8th Street and 2nd Avenue	6320	2353	6080	1243
8 - SW 8th Street and 1st Avenue	5000	1757	4770	1016
9 - SW 7th Street and 1st Avenue	3470	954	5790	710
10 - SW 7th Street and Miami Avenue	2980	692	5680	908
11 - SW 8th Street and Miami Avenue	4900	1376	4810	944
12 - SW 8th Street and Brickell Avenue	6750	2505	6900	1801
13 - SW 7th Street and Brickell Avenue	4910	1912	5780	1595

Table 3-13: Demand and Processed Volumes 2020 Build Scenario 1 (2 Lanes and Transit Alternative 3)

Intersection	AM Peak		PM Peak	
	Demand Volume	Processed Vehicles	Demand Volume	Processed Vehicles
1 - SW 8th Street and 3rd Avenue	2640	1830	2790	839
2 - SW 8th Street and 4th Avenue	960	728	1570	681
3 - SW 7th Street and 4th Avenue	3060	2298	3200	1096
4 - SW 7th Street and 3rd Avenue	2330	1727	2540	710
5 - SW 7th Street and 2nd Avenue	3020	2384	3240	1001
6 - SW 8th Street and 5th Avenue	1150	977	1710	888
7 - SW 8th Street and 2nd Avenue	3230	2519	3570	1109
8 - SW 8th Street and 1st Avenue	2830	2052	3540	841
9 - SW 7th Street and 1st Avenue	2570	1797	2890	665
10 - SW 7th Street and Miami Avenue	2260	1668	2950	656
11 - SW 8th Street and Miami Avenue	2610	1982	3280	890
12 - SW 8th Street and Brickell Avenue	4920	3324	6260	1592
13 - SW 7th Street and Brickell Avenue	4290	3076	4640	1277

Table 3-14: Demand and Processed Volumes 2040 Build Scenario 1 (2 Lanes and Transit Alternative 3)

Intersection	AM Peak		PM Peak	
	Demand Volume	Processed Vehicles	Demand Volume	Processed Vehicles
1 - SW 8th Street and 3rd Avenue	3350	1836	3460	273
2 - SW 8th Street and 4th Avenue	1290	562	2030	126
3 - SW 7th Street and 4th Avenue	4250	1450	4510	405
4 - SW 7th Street and 3rd Avenue	3180	1311	3660	339
5 - SW 7th Street and 2nd Avenue	4130	2049	4500	408
6 - SW 8th Street and 5th Avenue	1540	938	2250	658
7 - SW 8th Street and 2nd Avenue	4360	2468	4410	350
8 - SW 8th Street and 1st Avenue	3560	2046	4420	265
9 - SW 7th Street and 1st Avenue	3480	1645	3950	254
10 - SW 7th Street and Miami Avenue	3080	1571	3970	195
11 - SW 8th Street and Miami Avenue	3530	2006	4210	244
12 - SW 8th Street and Brickell Avenue	6240	3409	7960	510
13 - SW 7th Street and Brickell Avenue	5460	3104	5880	475

Table 3-15: Demand and Processed Volumes 2020 Build Scenario 2 (2 Way Alternative 3)

Intersection	AM Peak		PM Peak	
	Demand Volume	Processed Vehicles	Demand Volume	Processed Vehicles
1 - SW 8th Street and 3rd Avenue	2540	1871	3120	1379
2 - SW 8th Street and 4th Avenue	2440	1562	2270	1216
3 - SW 7th Street and 4th Avenue	2350	1498	2350	1127
4 - SW 7th Street and 3rd Avenue	1670	1193	1950	914
5 - SW 7th Street and 2nd Avenue	2420	2015	2360	1338
6 - SW 8th Street and 5th Avenue	1520	1218	1960	1255
7 - SW 8th Street and 2nd Avenue	3290	2472	3390	1685
8 - SW 8th Street and 1st Avenue	3060	1816	3330	1451
9 - SW 7th Street and 1st Avenue	2350	1351	2450	1232
10 - SW 7th Street and Miami Avenue	1920	1528	2500	1331
11 - SW 8th Street and Miami Avenue	2710	1971	3180	1498
12 - SW 8th Street and Brickell Avenue	5640	3864	5550	2653
13 - SW 7th Street and Brickell Avenue	4290	3334	4190	2290

Table 3-16: Demand and Processed Volumes 2040 Build Scenario 2 (2 Way Alternative 3)

Intersection	AM Peak		PM Peak	
	Demand Volume	Processed Vehicles	Demand Volume	Processed Vehicles
1 - SW 8th Street and 3rd Avenue	3620	1514	4360	1480
2 - SW 8th Street and 4th Avenue	3330	1260	3460	1214
3 - SW 7th Street and 4th Avenue	3060	1317	3890	1292
4 - SW 7th Street and 3rd Avenue	2310	1094	2710	961
5 - SW 7th Street and 2nd Avenue	3280	1807	3210	1262
6 - SW 8th Street and 5th Avenue	1820	1009	2330	1247
7 - SW 8th Street and 2nd Avenue	4460	2028	4670	1605
8 - SW 8th Street and 1st Avenue	3860	1550	4110	1473
9 - SW 7th Street and 1st Avenue	3200	1319	3290	1260
10 - SW 7th Street and Miami Avenue	2630	1354	3380	1364
11 - SW 8th Street and Miami Avenue	3750	1641	4370	1537
12 - SW 8th Street and Brickell Avenue	7560	3387	7330	2634
13 - SW 7th Street and Brickell Avenue	5560	2922	5450	2130

Table 3-17: Demand and Processed Volumes 2020 Build Scenario 3 (3 Lanes Reversed, Alternative 3)

Intersection	AM Peak		PM Peak	
	Demand Volume	Processed Vehicles	Demand Volume	Processed Vehicles
1 - SW 8th Street and 3rd Avenue	3150	1171	3520	654
2 - SW 8th Street and 4th Avenue	1360	462	1280	331
3 - SW 7th Street and 4th Avenue	4280	1200	4469	905
4 - SW 7th Street and 3rd Avenue	3150	894	3600	600
5 - SW 7th Street and 2nd Avenue	4040	1315	4230	793
6 - SW 8th Street and 5th Avenue	1450	664	1530	709
7 - SW 8th Street and 2nd Avenue	4150	1568	4080	855
8 - SW 8th Street and 1st Avenue	3850	1144	3410	532
9 - SW 7th Street and 1st Avenue	3460	660	3730	343
10 - SW 7th Street and Miami Avenue	2950	683	3900	331
11 - SW 8th Street and Miami Avenue	3250	1230	4160	597
12 - SW 8th Street and Brickell Avenue	6000	2526	7120	1280
13 - SW 7th Street and Brickell Avenue	5360	1918	5230	963

Table 3-18: Demand and Processed Volumes 2040 Build Scenario 3 (3 Lanes Reversed, Alternative 3)

Intersection	AM Peak		PM Peak	
	Demand Volume	Processed Vehicles	Demand Volume	Processed Vehicles
1 - SW 8th Street and 3rd Avenue	4480	1556	5000	959
2 - SW 8th Street and 4th Avenue	1830	544	1880	441
3 - SW 7th Street and 4th Avenue	5830	1090	4620	1258
4 - SW 7th Street and 3rd Avenue	4540	951	4850	761
5 - SW 7th Street and 2nd Avenue	5550	1395	5940	912
6 - SW 8th Street and 5th Avenue	1750	902	2150	930
7 - SW 8th Street and 2nd Avenue	5780	1847	5840	1174
8 - SW 8th Street and 1st Avenue	4750	1360	4130	976
9 - SW 7th Street and 1st Avenue	4680	679	5190	511
10 - SW 7th Street and Miami Avenue	3990	793	5490	489
11 - SW 8th Street and Miami Avenue	4550	1522	5600	1029
12 - SW 8th Street and Brickell Avenue	7830	2946	9150	2205
13 - SW 7th Street and Brickell Avenue	6860	2234	6800	1609

Table 3-19: Demand and Processed Volumes 2020 Build Scenario 4 (3 Lanes Alternative 4)

Intersection	AM Peak		PM Peak	
	Demand Volume	Processed Vehicles	Demand Volume	Processed Vehicles
1 - SW 8th Street and 3rd Avenue	3600	1901	3560	2095
2 - SW 8th Street and 4th Avenue	3680	2792	3470	3519
3 - SW 7th Street and 4th Avenue	2330	1642	2810	2547
4 - SW 7th Street and 3rd Avenue	1390	764	2880	1297
5 - SW 7th Street and 2nd Avenue	3080	1897	4780	2370
6 - SW 8th Street and 5th Avenue	2580	1936	2820	2494
7 - SW 8th Street and 2nd Avenue	4590	2764	4420	2720
8 - SW 8th Street and 1st Avenue	4120	2041	3940	2428
9 - SW 7th Street and 1st Avenue	2750	962	4220	2081
10 - SW 7th Street and Miami Avenue	2230	891	4200	1789
11 - SW 8th Street and Miami Avenue	3750	1644	3550	1967
12 - SW 8th Street and Brickell Avenue	5870	3809	5500	3705
13 - SW 7th Street and Brickell Avenue	4595	3110	5560	3387

Table 3-20: Demand and Processed Volumes 2040 Build Scenario 4 (3 Lanes Alternative 4)

Intersection	AM Peak		PM Peak	
	Demand Volume	Processed Vehicles	Demand Volume	Processed Vehicles
1 - SW 8th Street and 3rd Avenue	4790	1052	4530	2535
2 - SW 8th Street and 4th Avenue	4960	1438	4880	3479
3 - SW 7th Street and 4th Avenue	2540	868	3810	2621
4 - SW 7th Street and 3rd Avenue	1950	475	4050	1627
5 - SW 7th Street and 2nd Avenue	4060	1231	6440	2578
6 - SW 8th Street and 5th Avenue	3170	1023	3680	2555
7 - SW 8th Street and 2nd Avenue	5900	1589	5990	3178
8 - SW 8th Street and 1st Avenue	5000	1232	4770	2680
9 - SW 7th Street and 1st Avenue	3480	713	5650	2100
10 - SW 7th Street and Miami Avenue	2850	556	5590	1956
11 - SW 8th Street and Miami Avenue	5220	1014	4810	2313
12 - SW 8th Street and Brickell Avenue	7630	2309	6970	3760
13 - SW 7th Street and Brickell Avenue	5690	1830	7220	3325

Appendix E

AVERAGE AADT VOLUMES CALCULATION TABLES

Link Volumes
(No Build)

SW 8th Street											
		AM		PM		AADT based on AM		AADT based on PM		Average	
From	To	2020	2040	2020	2040	2020	2040	2020	2040	2020	2040
SR 9/SW 27th Ave.	SW 24th Ave.	1,770	2,160	1,680	2,050	19,670	24,000	18,670	22,780	19,170	23,390
SW 24th Ave.	SW 22nd Ave.	1,780	2,190	1,820	2,230	19,780	24,330	20,220	24,780	20,000	24,560
SW 22nd Ave.	SW 21st Ave.	2,030	2,490	1,990	2,440	22,560	27,670	22,110	27,110	22,340	27,390
SW 21st Ave.	SW 19th Ave.	2,030	2,490	1,990	2,440	22,560	27,670	22,110	27,110	22,340	27,390
SW 19th Ave.	SW 17th Ave.	2,030	2,490	1,990	2,440	22,560	27,670	22,110	27,110	22,340	27,390
SW 17th Ave.	SR 933/SW 12th Ave.	2,390	2,930	2,150	2,630	26,560	32,560	23,890	29,220	25,230	30,890
SR 933/SW 12th Ave	SR 7/SW 8th Ave.	2,280	2,790	2,170	2,670	25,330	31,000	24,110	29,670	24,720	30,340
SR 7/SW 8th Ave.	SW 5th Ave.	2,170	2,660	2,180	2,790	24,110	29,560	24,220	31,000	24,170	30,280
SW 5th Ave.	SW 4th Ave.	2,160	2,890	2,270	3,110	24,000	32,110	25,220	34,560	24,610	33,340
SW 4th Ave.	SW 3rd Ave.	3,950	5,340	3,380	4,550	43,890	59,330	37,560	50,560	40,730	54,950
SW 3rd Ave.	SW 2nd Ave.	3,090	4,430	2,880	3,950	34,330	49,220	32,000	43,890	33,170	46,560
SW 2nd Ave.	SW 1st Ave.	2,730	3,930	2,400	3,400	30,330	43,670	26,670	37,780	28,500	40,730
SW 1st Ave.	S. Miami Ave.	2,740	3,910	2,480	3,540	30,440	43,440	27,560	39,330	29,000	41,390
S. Miami Ave.	SR 5/Brickell Ave.	2,130	3,070	1,540	2,220	23,670	34,110	17,110	24,670	20,390	29,390

SW 7th Street											
		AM		PM		AADT based on AM		AADT based on PM		Average	
From	To	2020	2040	2020	2040	2020	2040	2020	2040	2020	2040
SR 5/Brickell Ave.	S. Miami Ave.	990	1,340	1,970	2,690	11,000	14,890	21,890	29,890	16,450	22,390
S. Miami Ave.	SW 1st Ave.	1,350	1,830	2,750	3,890	15,000	20,330	30,560	43,220	22,780	31,780
SW 1st Ave.	SW 2nd Ave.	1,420	1,930	2,720	3,880	15,780	21,440	30,220	43,110	23,000	32,280
SW 2nd Ave.	SW 3rd Ave.	1,490	2,110	2,880	4,090	16,560	23,440	32,000	45,440	24,280	34,440
SW 3rd Ave.	SW 4th Ave.	1,150	1,650	1,810	2,620	12,780	18,330	20,110	29,110	16,450	23,720
SW 4th Ave.	SR 7/SW 8th Ave.	930	1,290	1,960	2,550	10,330	14,330	21,780	28,330	16,060	21,330
SR 7/SW 8th Ave.	SR 933/SW 12th Ave.	940	1,320	2,110	2,580	10,440	14,670	23,440	28,670	16,940	21,670
SR 933/SW 12th Ave	SW16th Ave.	1,140	1,560	2,130	2,600	12,670	17,330	23,670	28,890	18,170	23,110
SW16th Ave.	SW 17th Ave.	1,140	1,560	2,130	2,600	12,670	17,330	23,670	28,890	18,170	23,110
SW 17th Ave.	SW 19th Ave.	1,210	1,570	1,920	2,350	13,440	17,440	21,330	26,110	17,390	21,780
SW 19th Ave.	SW 22nd Ave.	1,210	1,570	1,920	2,350	13,440	17,440	21,330	26,110	17,390	21,780
SW 22nd Ave.	SW Beacom Blvd.	1,100	1,360	1,620	1,980	12,220	15,110	18,000	22,000	15,110	18,560
SW Beacom Blvd.	SR 9/SW 27th Ave.	860	1,070	1,120	1,390	9,560	11,890	12,440	15,440	11,000	13,670

Link Volumes
(2 Lanes and Transit Alt. 3)

WB SW 8th Street

		AM		PM		AADT based on AM		AADT based on PM		Average	
From	**To**	**2020**	**2040**	**2020**	**2040**	**2020**	**2040**	**2020**	**2040**	**2020**	**2040**
SR 5/Brickell Ave.	S. Miami Ave.	1,660	2,290	1,750	2,390	18,440	25,440	19,440	26,560	18,940	26,000
S. Miami Ave.	SW 1st Ave.	1,720	2,470	2,030	2,650	19,110	27,440	22,560	29,440	20,840	28,440
SW 1st Ave.	SW 2nd Ave.	1,840	2,640	2,080	2,630	20,440	29,330	23,110	29,220	21,780	29,280
SW 2nd Ave.	SW 3rd Ave.	1,960	2,810	2,190	2,760	21,780	31,220	24,330	30,670	23,060	30,950
SW 3rd Ave.	SW 4th Ave.	500	700	950	1,240	5,560	7,780	10,560	13,780	8,060	10,780
SW 4th Ave.	SW 5th Ave.	800	1,130	1,300	1,730	8,890	12,560	14,440	19,220	11,670	15,890
SW 5th Ave.	SR 7/SW 8th Ave.	790	1,100	1,250	1,700	8,780	12,220	13,890	18,890	11,340	15,560
SR 7/SW 8th Ave.	SR 933/SW 12th Ave.	760	1,090	1,280	1,730	8,440	12,110	14,220	19,220	11,330	15,670
SR 933/SW 12th Ave.	SW 17th Ave.	840	1,190	1,390	1,820	9,330	13,220	15,440	20,220	12,390	16,720
SW 17th Ave.	SW 19th Ave.	800	1,120	1,470	1,870	8,890	12,440	16,330	20,780	12,610	16,610
SW 19th Ave.	SW 21st Ave.	800	1,120	1,470	1,870	8,890	12,440	16,330	20,780	12,610	16,610
SW 21st Ave.	SW 22nd Ave.	800	1,120	1,470	1,870	8,890	12,440	16,330	20,780	12,610	16,610
SW 22nd Ave.	SW 24th Ave.	720	1,040	1,350	1,730	8,000	11,560	15,000	19,220	11,500	15,390
SW 24th Ave.	SR 9/SW 27th Ave.	730	1,020	1,450	1,820	8,110	11,330	16,110	20,220	12,110	15,780

EB SW 7th Street

		AM		PM		AADT based on AM		AADT based on PM		Average	
From	**To**	**2020**	**2040**	**2020**	**2040**	**2020**	**2040**	**2020**	**2040**	**2020**	**2040**
SR 9/SW 27th Ave.	SW Beacom Blvd.	1,320	1,590	1,640	2,420	14,670	17,670	18,220	26,890	16,450	22,280
SW Beacom Blvd.	SW 22nd Ave.	1,590	2,110	1,800	2,640	17,670	23,440	20,000	29,330	18,840	26,390
SW 22nd Ave.	SW 19th Ave.	1,640	2,320	1,820	2,690	18,220	25,780	20,220	29,890	19,220	27,840
SW 19th Ave.	SW 17th Ave.	1,640	2,320	1,820	2,690	18,220	25,780	20,220	29,890	19,220	27,840
SW 17th Ave.	SW16th Ave.	1,760	2,490	1,960	2,910	19,560	27,670	21,780	32,330	20,670	30,000
SW16th Ave.	SR 933/SW 12th Ave.	1,760	2,490	1,960	2,910	19,560	27,670	21,780	32,330	20,670	30,000
SR 933/SW 12th Ave.	SR 7/SW 8th Ave.	1,700	2,430	1,930	2,940	18,890	27,000	21,440	32,670	20,170	29,840
SR 7/SW 8th Ave.	SW 4th Ave.	1,740	2,510	1,930	2,990	19,330	27,890	21,440	33,220	20,390	30,560
SW 4th Ave.	SW 3rd Ave.	1,740	2,410	2,190	3,250	19,330	26,780	24,330	36,110	21,830	31,450
SW 3rd Ave.	SW 2nd Ave.	1,900	2,720	1,910	2,880	21,110	30,220	21,220	32,000	21,170	31,110
SW 2nd Ave.	SW 1st Ave.	1,520	2,190	1,500	2,250	16,890	24,330	16,670	25,000	16,780	24,670
SW 1st Ave.	S. Miami Ave.	1,500	2,120	1,670	2,430	16,670	23,560	18,560	27,000	17,620	25,280
S. Miami Ave.	SR 5/Brickell Ave.	1,250	1,810	1,150	1,640	13,890	20,110	12,780	18,220	13,340	19,170

Link Volumes
(2-Way Alt. 3)

SW 8th Street

		AM - WB SW 8th St.		AM - EB SW 8th St.		PM - WB SW 8th St		PM - WB SW 8th St		AADT on SW 8th St. based on AM		AADT on SW 8th St. based on PM		Average	
From	**To**	**2020**	**2040**	**2020**	**2040**	**2020**	**2040**	**2020**	**2040**	**2020**	**2040**	**2020**	**2040**	**2020**	**2040**
SR 5/Brickell Ave.	S. Miami Ave.	820	1,150	1,000	1,440	980	1,370	730	1,050	20,220	28,780	19,000	26,890	19,610	27,840
S. Miami Ave.	SW 1st Ave.	790	1,130	1,020	1,450	1,060	1,510	910	1,300	20,110	28,670	21,890	31,220	21,000	29,950
SW 1st Ave.	SW 2nd Ave.	790	1,120	950	1,360	1,030	1,480	900	1,290	19,330	27,560	21,440	30,780	20,390	29,170
SW 2nd Ave.	SW 3rd Ave.	830	1,180	1,080	1,550	1,180	1,680	1,070	1,530	21,220	30,330	25,000	35,670	23,110	33,000
SW 3rd Ave.	SW 4th Ave.	260	370	990	1,400	1,070	1,510	990	1,390	13,890	19,670	22,890	32,220	18,390	25,950
SW 4th Ave.	SW 5th Ave.	220	290	620	830	690	900	620	810	9,330	12,440	14,560	19,000	11,950	15,720
SW 5th Ave.	SR 7/SW 8th Ave.	220	280	700	870	680	820	660	790	10,220	12,780	14,890	17,890	12,560	15,340
SR 7/SW 8th Ave.	SR 933/SW 12th Ave.	200	280	730	900	660	790	700	840	10,330	13,110	15,110	18,110	12,720	15,610
SR 933/SW 12th Ave.	SW 17th Ave.	250	320	800	990	670	810	730	880	11,670	14,560	15,560	18,780	13,620	16,670
SW 17th Ave.	SW 19th Ave.	250	310	730	900	620	750	700	840	10,890	13,440	14,670	17,670	12,780	15,560
SW 19th Ave.	SW 21st Ave.	250	310	730	900	620	750	700	840	10,890	13,440	14,670	17,670	12,780	15,560
SW 21st Ave.	SW 22nd Ave.	250	310	730	900	620	750	700	840	10,890	13,440	14,670	17,670	12,780	15,560
SW 22nd Ave.	SW 24th Ave.	240	320	630	780	550	660	700	840	9,670	12,220	13,890	16,670	11,780	14,450
SW 24th Ave.	SR 9/SW 27th Ave.	280	370	620	770	390	490	710	850	10,000	12,670	12,220	14,890	11,110	13,780

SW 7th Street

		AM - WB SW 7th St.		AM - EB SW 7th St.		PM - WB SW 7th St.		PM - EB SW 7th St.		AADT on SW 7th St. based on AM		AADT on SW 7th St. based on PM		Average	
From	**To**	**2020**	**2040**	**2020**	**2040**	**2020**	**2040**	**2020**	**2040**	**2020**	**2040**	**2020**	**2040**	**2020**	**2040**
SR 9/SW 27th Ave.	SW Beacom Blvd.	390	480	310	390	390	470	530	660	7,780	9,670	10,220	12,560	9,000	11,120
SW Beacom Blvd.	SW 22nd Ave.	370	470	420	520	520	640	620	760	8,780	11,000	12,670	15,560	10,730	13,280
SW 22nd Ave.	SW 19th Ave.	380	480	490	600	460	560	680	820	9,670	12,000	12,670	15,330	11,170	13,670
SW 19th Ave.	SW 17th Ave.	380	480	490	600	460	560	680	820	9,670	12,000	12,670	15,330	11,170	13,670
SW 17th Ave.	SW16th Ave.	380	470	570	720	490	590	750	910	10,560	13,220	13,780	16,670	12,170	14,950
SW16th Ave.	SR 933/SW 12th Ave.	380	470	570	720	490	590	750	910	10,560	13,220	13,780	16,670	12,170	14,950
SR 933/SW 12th Ave.	SR 7/SW 8th Ave.	320	400	600	790	460	590	730	900	10,220	13,220	13,220	16,560	11,720	14,890
SR 7/SW 8th Ave.	SW 4th Ave.	310	410	630	880	470	630	740	930	10,440	14,330	13,440	17,330	11,940	15,830
SW 4th Ave.	SW 3rd Ave.	320	460	860	1,210	440	630	1,010	1,330	13,110	18,560	16,110	21,780	14,610	20,170
SW 3rd Ave.	SW 2nd Ave.	540	770	700	990	740	1,060	580	810	13,780	19,560	14,670	20,780	14,230	20,170
SW 2nd Ave.	SW 1st Ave.	500	730	620	890	630	910	420	580	12,440	18,000	11,670	16,560	12,060	17,280
SW 1st Ave.	S. Miami Ave.	500	710	610	880	680	970	520	740	12,330	17,670	13,330	19,000	12,830	18,340
S. Miami Ave.	SR 5/Brickell Ave.	490	690	510	730	660	920	310	440	11,110	15,780	10,780	15,110	10,950	15,450

Link Volumes
(3 Lanes Alt. 3)

SW 8th Street											
		AM		PM		AADT based on AM		AADT based on PM		Average	
From	To	2020	2040	2020	2040	2020	2040	2020	2040	2020	2040
SR 5/Brickell Ave.	S. Miami Ave.	2,140	3,070	2,330	3,200	23,780	34,110	25,890	35,560	24,840	34,840
S. Miami Ave.	SW 1st Ave.	2,350	3,420	2,530	3,570	26,110	38,000	28,110	39,670	27,110	38,840
SW 1st Ave.	SW 2nd Ave.	2,580	3,710	2,420	3,530	28,670	41,220	26,890	39,220	27,780	40,220
SW 2nd Ave.	SW 3rd Ave.	2,720	3,920	2,790	4,040	30,220	43,560	31,000	44,890	30,610	44,230
SW 3rd Ave.	SW 4th Ave.	720	1,020	570	930	8,000	11,330	6,330	10,330	7,170	10,830
SW 4th Ave.	SW 5th Ave.	1,070	1,390	1,110	1,650	11,890	15,440	12,330	18,330	12,110	16,890
SW 5th Ave.	SR 7/SW 8th Ave.	1,050	1,280	1,010	1,400	11,670	14,220	11,220	15,560	11,450	14,890
SR 7/SW 8th Ave.	SR 933/SW 12th Ave.	1,070	1,300	1,030	1,310	11,890	14,440	11,440	14,560	11,670	14,500
SR 933/SW 12th Ave.	SW 17th Ave.	1,200	1,450	1,080	1,320	13,330	16,110	12,000	14,670	12,670	15,390
SW 17th Ave.	SW 19th Ave.	1,130	1,370	1,090	1,310	12,560	15,220	12,110	14,560	12,340	14,890
SW 19th Ave.	SW 21st Ave.	1,130	1,370	1,090	1,310	12,560	15,220	12,110	14,560	12,340	14,890
SW 21st Ave.	SW 22nd Ave.	1,130	1,370	1,090	1,310	12,560	15,220	12,110	14,560	12,340	14,890
SW 22nd Ave.	SW 24th Ave.	1,020	1,240	830	1,000	11,330	13,780	9,220	11,110	10,280	12,450
SW 24th Ave.	SR 9/SW 27th Ave.	1,040	1,260	850	1,030	11,560	14,000	9,440	11,440	10,500	12,720

SW 7th Street											
		AM		PM		AADT based on AM		AADT based on PM		Average	
From	To	2020	2040	2020	2040	2020	2040	2020	2040	2020	2040
SR 9/SW 27th Ave.	SW Beacom Blvd.	1820	2230	2050	2480	20,220	24,780	22,780	27,560	21,500	26,170
SW Beacom Blvd.	SW 22nd Ave.	2270	2840	2320	2780	25,220	31,560	25,780	30,890	25,500	31,230
SW 22nd Ave.	SW 19th Ave.	2340	2940	2360	2850	26,000	32,670	26,220	31,670	26,110	32,170
SW 19th Ave.	SW 17th Ave.	2340	2940	2360	2850	26,000	32,670	26,220	31,670	26,110	32,170
SW 17th Ave.	SW16th Ave.	2490	3020	2580	3140	27,670	33,560	28,670	34,890	28,170	34,230
SW16th Ave.	SR 933/SW 12th Ave.	2490	3020	2580	3140	27,670	33,560	28,670	34,890	28,170	34,230
SR 933/SW 12th Ave.	SR 7/SW 8th Ave.	2380	3050	2610	3120	26,440	33,890	29,000	34,670	27,720	34,280
SR 7/SW 8th Ave.	SW 4th Ave.	2390	3370	2580	3330	26,560	37,440	28,670	37,000	27,620	37,220
SW 4th Ave.	SW 3rd Ave.	3070	4360	3210	4300	34,110	48,440	35,670	47,780	34,890	48,110
SW 3rd Ave.	SW 2nd Ave.	2690	3940	2900	3970	29,890	43,780	32,220	44,110	31,060	43,950
SW 2nd Ave.	SW 1st Ave.	2200	3110	2170	3220	24,440	34,560	24,110	35,780	24,280	35,170
SW 1st Ave.	S. Miami Ave.	2180	3060	2400	3490	24,220	34,000	26,670	38,780	25,450	36,390
S. Miami Ave.	SR 5/Brickell Ave.	1750	2420	1630	2340	19,440	26,890	18,110	26,000	18,780	26,450

Link Volumes
(3 Lanes Alt. 4)

SW 8th Street											
		AM		PM		AADT based on AM		AADT based on PM		Average	
From	To	2020	2040	2020	2040	2020	2040	2020	2040	2020	2040
SR 9/SW 27th Ave.	SW 24th Ave.	1,770	2,160	1,770	2,160	19,670	24,000	19,670	24,000	19,670	24,000
SW 24th Ave.	SW 22nd Ave.	1,780	2,190	1,820	2,230	19,780	24,330	20,220	24,780	20,000	24,560
SW 22nd Ave.	SW 21st Ave.	2,030	2,490	1,990	2,440	22,560	27,670	22,110	27,110	22,340	27,390
SW 21st Ave.	SW 19th Ave.	2,030	2,490	1,990	2,440	22,560	27,670	22,110	27,110	22,340	27,390
SW 19th Ave.	SW 17th Ave.	2,030	2,490	1,990	2,440	22,560	27,670	22,110	27,110	22,340	27,390
SW 17th Ave.	SR 933/SW 12th Ave.	2,390	2,930	2,150	2,630	26,560	32,560	23,890	29,220	25,230	30,890
SR 933/SW 12th Ave.	SR 7/SW 8th Ave.	2,280	2,790	2,170	2,670	25,330	31,000	24,110	29,670	24,720	30,340
SR 7/SW 8th Ave.	SW 5th Ave.	2,170	2,660	2,200	2,820	24,110	29,560	24,440	31,330	24,280	30,450
SW 5th Ave.	SW 4th Ave.	2,270	3,020	2,390	3,290	25,220	33,560	26,560	36,560	25,890	35,060
SW 4th Ave.	SW 3rd Ave.	2,430	3,380	2,390	3,310	27,000	37,560	26,560	36,780	26,780	37,170
SW 3rd Ave.	SW 2nd Ave.	3,150	4,400	2,900	3,920	35,000	48,890	32,220	43,560	33,610	46,230
SW 2nd Ave.	SW 1st Ave.	2,740	3,930	2,310	3,350	30,440	43,670	25,670	37,220	28,060	40,450
SW 1st Ave.	S. Miami Ave.	2,850	4,070	2,480	3,540	31,670	45,220	27,560	39,330	29,620	42,280
S. Miami Ave.	SR 5/Brickell Ave.	2,540	3,680	1,560	2,250	28,220	40,890	17,330	25,000	22,780	32,950

SW 7th Street											
		AM		PM		AADT based on AM		AADT based on PM		Average	
From	To	2020	2040	2020	2040	2020	2040	2020	2040	2020	2040
SR 5/Brickell Ave.	S. Miami Ave.	1,100	1,420	2,220	3,180	12,220	15,780	24,670	35,330	18,450	25,560
S. Miami Ave.	SW 1st Ave.	1,350	1,780	2,690	3,760	15,000	19,780	29,890	41,780	22,450	30,780
SW 1st Ave.	SW 2nd Ave.	1,470	2,020	2,810	3,970	16,330	22,440	31,220	44,110	23,780	33,280
SW 2nd Ave.	SW 3rd Ave.	1,370	1,920	2,740	2,620	15,220	21,330	30,440	29,110	22,830	25,220
SW 3rd Ave.	SW 4th Ave.	890	1,280	1,790	2,590	9,890	14,220	19,890	28,780	14,890	21,500
SW 4th Ave.	SR 7/SW 8th Ave.	930	1,290	1,870	2,450	10,330	14,330	20,780	27,220	15,560	20,780
SR 7/SW 8th Ave.	SR 933/SW 12th Ave.	940	1,320	2,050	2,510	10,440	14,670	22,780	27,890	16,610	21,280
SR 933/SW 12th Ave.	SW16th Ave.	940	1,320	2,050	2,510	10,440	14,670	22,780	27,890	16,610	21,280
SW16th Ave.	SW 17th Ave.	1,140	1,560	2,100	2,570	12,670	17,330	23,330	28,560	18,000	22,950
SW 17th Ave.	SW 19th Ave.	1,140	1,560	2,100	2,570	12,670	17,330	23,330	28,560	18,000	22,950
SW 19th Ave.	SW 22nd Ave.	1,320	1,800	1,960	2,400	14,670	20,000	21,780	26,670	18,230	23,340
SW 22nd Ave.	SW Beacom Blvd.	1,070	1,430	1,730	2,120	11,890	15,890	19,220	23,560	15,560	19,730
SW Beacom Blvd.	SR 9/SW 27th Ave.	1,290	1,510	1,130	1,400	14,330	16,780	12,560	15,560	13,450	16,170

Appendix F

ARTPLAN REPORTS

ARTPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst		**Arterial Name**	SR 90/SW 8 St.	**Study Period**	**Standard K**
Date Prepared	11/13/2014 8:20:08 AM	**From**	SR 9/SW 27 Ave.	**Modal Analysis**	Multimodal
Agency		**To**	US 1	**Program**	ARTPLAN 2012
Area Type	Large Urbanized	**Peak Direction**	Eastbound	**Version Date**	12/12/2012
Arterial Class	2				

File Name	G:\PROJECTS\57675_Jacobs-FDOT SR7-SW8th St to Tamiami\05 Project Wking Files\Calcs\Operational Analyses\ARTPLAN\No Build\SW 8 St No Build 2020.xap
User Notes	No Build 2020

Arterial Data

K	0.09	**PHF**	0.95	**Control Type**	CoordinatedActuated
D	0.999	**% Heavy Vehicles**	2	**Base Sat. Flow Rate**	1950

Automobile Intersection Data

Cross Street	Cycle Length	Thru g/C	Arr. Type	INT # Dir.Lanes	% Left Turns	% Right Turns	Left Turn Lanes	Left Turn Phasing	# Left Turn Lanes	LT Storage Length	Left g/C	Right Turn Lanes
SW 24 Ave.	120	0.75	3	3	3	3	No	None	N/A	N/A	N/A	No
SW 22 Ave.	120	0.54	3	3	9	4	No	None	N/A	N/A	N/A	No
SW 19 Ave.	120	0.66	3	3	5	1	No	None	N/A	N/A	N/A	No
SW 17 Ave.	120	0.51	3	3	7	6	No	None	N/A	N/A	N/A	No
SR 933/SW 12 Ave.	120	0.4	3	3	9	5	No	None	N/A	N/A	N/A	No
SR 7/SW 8 Ave.	120	0.6	3	3	8	3	No	None	N/A	N/A	N/A	No
SW 5 Ave.	130	0.62	3	3	7	1	No	None	N/A	N/A	N/A	No
SW 4 Ave.	130	0.42	3	3	0	4	No	None	N/A	N/A	N/A	No
SW 3 Ave.	130	0.64	3	3	1	8	No	None	N/A	N/A	N/A	No
SW 2 Ave.	130	0.57	3	3	17	11	No	None	N/A	N/A	N/A	No
SW 1 Ave.	130	0.58	3	3	0	21	No	None	N/A	N/A	N/A	No
S. Miami Ave.	130	0.67	3	3	12	0	No	None	N/A	N/A	N/A	No
US 1	150	0.28	3	2	37	15	Yes	Protected	2	1000	0.25	No

Automobile Segment Data

Segment #	Length	AADT	Hourly Vol.	SEG # Dir.Lanes	Posted Speed	Free Flow Speed	Median Type	On-Street Parking	Parking Activity
1 (to SW 24 Ave.)	1361	19200	1726	3	30	35	None	Yes	Low
2 (to SW 22 Ave.)	1341	20000	1798	3	30	35	None	Yes	Low
3 (to SW 19 Ave.)	1890	22300	2005	3	30	35	None	Yes	Low
4 (to SW 17 Ave.)	813	22300	2005	3	30	35	None	Yes	Low

5 (to SR 933/SW 12 Ave.)	2656	25200	2266	3	30	35	None	Yes	Low
6 (to SR 7/SW 8 Ave.)	2313	24700	2221	3	30	35	None	Yes	Low
7 (to SW 5 Ave.)	1653	24200	2176	3	30	35	None	Yes	Low
8 (to SW 4 Ave.)	554	24600	2212	3	30	35	None	Yes	Low
9 (to SW 3 Ave.)	539	40700	3659	3	30	35	None	Yes	Low
10 (to SW 2 Ave.)	576	33200	2985	3	30	35	None	Yes	Low
11 (to SW 1 Ave.)	581	28500	2562	3	30	35	None	Yes	Low
12 (to S. Miami Ave.)	655	29000	2607	3	30	35	None	Yes	Low
13 (to US 1)	898	20400	1834	3	30	35	None	Yes	Low

Automobile LOS

Segment #	Thru Mvmt Flow Rate	Adj. Sat. Flow Rate	v/c	Control Delay	Int. Approach LOS	Queue Ratio	Speed (mph)	Segment LOS
1 (to SW 24 Ave.)	1817	3812	0.635	7.96	A	0.00	24.93	B
2 (to SW 22 Ave.)	1893	3820	0.918	31.25	C	0.00	15.45	D
3 (to SW 19 Ave.)	2111	3858	0.829	16.25	B	0.00	22.89	B
4 (to SW 17 Ave.)	2111	3844	1.076	71.41	E	0.00	6.47	F
5 (to SR 933/SW 12 Ave.)	2385	3885	1.535	296.88	F	0.00	5.22	F
6 (to SR 7/SW 8 Ave.)	2338	3884	1.003	30.47	C	0.00	19.90	C
7 (to SW 5 Ave.)	2291	3910	0.945	23.76	C	0.00	19.14	C
8 (to SW 4 Ave.)	2328	4885	1.135	104.10	F	0.00	3.49	F
9 (to SW 3 Ave.)	3852	3922	1.534	708.90	F	0.00	0.56	F
10 (to SW 2 Ave.)	3142	3914	1.408	244.98	F	0.00	1.66	F
11 (to SW 1 Ave.)	2697	4859	0.957	26.97	C	0.00	10.05	E
12 (to S. Miami Ave.)	2744	3944	1.038	43.58	D	0.00	7.94	F
13 (to US 1)	1216	3100	0.924	54.59	D	0.39	8.52	F

Arterial Length	**3.1458**	**Weighted g/C**	**0.43**	**FFS Delay**	**1728.05**	**Threshold Delay**	**1165.27**	**Auto Speed**	**###**	**Auto LOS**	**###**

Automobile Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1000 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1					
2					
3					
4					
*					
Lanes	**Hourly Volume In Both Directions**				
2					
4					
6					
8					
*					
Lanes	**Annual Average Daily Traffic**				
2					
4					
6					
8					
*					

Multimodal Segment Data

Segment #	Outside Lane Width	Pave Cond	Pave Shldr /Bike Lane	Side Path	Side Path Separation	Side walk	Sidewalk Roadway Separation	Sidewalk Roadway Protective Barrier	Bus Freq	Passenger Load Factor	Amenities	Bus Stop Type
1 (to SW 24 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
2 (to SW 22 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
3 (to SW 19 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
4 (to SW 17 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
5 (to SR 933/SW 12 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
6 (to SR 7/SW 8 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
7 (to SW 5 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
8 (to SW 4 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
9 (to SW 3 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
10 (to SW 2 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
11 (to SW 1 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
12 (to S. Miami Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
13 (to US 1)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical

Pedestrian SubSegment Data

	% of Segment			Sidewalk			Separation			Barrier		
Segment #	**1**	**2**	**3**	**1**	**2**	**3**	**1**	**2**	**3**	**1**	**2**	**3**
1 (to SW 24 Ave.)	100			Yes			Adjacent			No		
2 (to SW 22 Ave.)	100			Yes			Adjacent			No		
3 (to SW 19 Ave.)	100			Yes			Adjacent			No		
4 (to SW 17 Ave.)	100			Yes			Adjacent			No		
5 (to SR 933/SW 12 Ave.)	100			Yes			Adjacent			No		
6 (to SR 7/SW 8 Ave.)	100			Yes			Adjacent			No		
7 (to SW 5 Ave.)	100			Yes			Adjacent			No		
8 (to SW 4 Ave.)	100			Yes			Adjacent			No		
9 (to SW 3 Ave.)	100			Yes			Adjacent			No		
10 (to SW 2 Ave.)	100			Yes			Adjacent			No		
11 (to SW 1 Ave.)	100			Yes			Adjacent			No		
12 (to S. Miami Ave.)	100			Yes			Adjacent			No		
13 (to US 1)	100			Yes			Adjacent			No		

Multimodal LOS

	Bicycle Street		Bicycle Sidepath		Pedestrian					Bus	
Link #	**Score**	**LOS**	**Score**	**LOS**	**1**	**2**	**3**	**Score**	**LOS**	**Adj. Buses**	**LOS**

1 (to SW 24 Ave.)	3.63	D	N/A	N/A	2.94	C	5.39	B
2 (to SW 22 Ave.)	3.64	D	N/A	N/A	2.99	C	5.99	B
3 (to SW 19 Ave.)	3.71	D	N/A	N/A	3.17	C	5.99	B
4 (to SW 17 Ave.)	3.63	D	N/A	N/A	3.10	C	5.99	B
5 (to SR 933/SW 12 Ave.)	3.78	D	N/A	N/A	3.39	C	9.43	A
6 (to SR 7/SW 8 Ave.)	3.77	D	N/A	N/A	3.35	C	6.28	A
7 (to SW 5 Ave.)	3.74	D	N/A	N/A	3.30	C	5.99	B
8 (to SW 4 Ave.)	3.56	D	N/A	N/A	3.21	C	6.28	A
9 (to SW 3 Ave.)	3.73	D	N/A	N/A	4.34	E	6.10	A
10 (to SW 2 Ave.)	3.70	D	N/A	N/A	3.82	D	7.18	A
11 (to SW 1 Ave.)	3.64	D	N/A	N/A	3.49	C	5.66	B
12 (to S. Miami Ave.)	3.69	D	N/A	N/A	3.55	D	5.99	B
13 (to US 1)	3.60	D	N/A	N/A	2.98	C	5.99	B
	Bicycle LOS	**3.70**	**D**		**Pedestrian LOS**	**3.31**	**C**	**Bus LOS**	**6.59**	**A**

MultiModal Service Volume Tables

Bicycle

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	0	0	0	0	0
2	0	0	0	0	0
3	0	0	0	0	0
4	0	0	0	0	0
*	0	0	0	0	0
Lanes	**Hourly Volume In Both Directions**				
2	0	0	0	0	0
4	0	0	0	0	0
6	0	0	0	0	0
8	0	0	0	0	0
*	0	0	0	0	0
Lanes	**Annual Average Daily Traffic**				
2	0	0	0	0	0
4	0	0	0	0	0
6	0	0	0	0	0
8	0	0	0	0	0
*	0	0	0	0	0

Pedestrian

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	0	0	0	0	0
2	0	0	0	0	0
3	0	0	0	0	0
4	0	0	0	0	0
*	0	0	0	0	0
Lanes	**Hourly Volume In Both Directions**				
2	0	0	0	0	0
4	0	0	0	0	0
6	0	0	0	0	0
8	0	0	0	0	0
*	0	0	0	0	0
Lanes	**Annual Average Daily Traffic**				
2	0	0	0	0	0
4	0	0	0	0	0
6	0	0	0	0	0
8	0	0	0	0	0
*	0	0	0	0	0

Bus

A	B	C	D	E
Buses Per Hour In Peak Direction				
Buses in Study Hour in Peak Direction (Daily)				

*** Service Volumes for the specific facility being analyzed, based on # of lanes from the intersection and segment data screens.**
**** Cannot be achieved based on input data provided.**
***** Not applicable for that level of service letter grade. See generalized tables notes for more details.**
 # Under the given conditions, left turn lane storage is highly likely to overflow. The number of directional thru lanes should be reduced accordingly.
Facility weighted g/C exceeds normally acceptable upper range (0.5); verify that g/C inputs are correct.
Intersection capacity (ies) are exceeded for the full hour; an operational level analysis tool is more appropriate for this situation.

ARTPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst		**Arterial Name**	WB SR 90/SW 7 St.	**Study Period**	**Standard K**
Date Prepared	11/13/2014 12:41:23 PM	**From**	US 1	**Modal Analysis**	Multimodal
Agency		**To**	SR 9/SW 27 Ave.	**Program**	ARTPLAN 2012
Area Type	Large Urbanized	**Peak Direction**	Westbound	**Version Date**	12/12/2012
Arterial Class	2				
File Name	G:\PROJECTS\57675_Jacobs-FDOT SR7-SW8th St to Tamiami\05 Project Wking Files\Calcs\Operational Analyses\ARTPLAN\No Build\SW 7 St No Build 2020.xap				
User Notes	SW 7 St., No Build 2020				

Arterial Data

K	0.09	**PHF**	0.95	**Control Type**	CoordinatedActuated
D	0.999	**% Heavy Vehicles**	2	**Base Sat. Flow Rate**	1950

Automobile Intersection Data

Cross Street	Cycle Length	Thru g/C	Arr. Type	INT # Dir.Lanes	% Left Turns	% Right Turns	Left Turn Lanes	Left Turn Phasing	# Left Turn Lanes	LT Storage Length	Left g/C	Right Turn Lanes
S. Miami Ave.	130	0.53	3	3	0	10	No	None	N/A	N/A	N/A	No
SW 1 Ave.	130	0.44	3	3	14	0	No	None	N/A	N/A	N/A	No
SW 2 Ave.	130	0.48	3	3	11	12	No	None	N/A	N/A	N/A	No
SW 3 Ave.	130	0.68	3	3	21	8	No	None	N/A	N/A	N/A	No
SW 4 Ave.	130	0.33	3	2	41	0	Yes	ProtPerm	2	1000	0.25	No
SR 7/SW 8 Ave.	120	0.61	3	3	7	9	No	None	N/A	N/A	N/A	No
SR 933/SW 12 Ave.	120	0.42	3	3	8	8	No	None	N/A	N/A	N/A	No
SW 16 Ave.	120	0.75	3	3	8	8	No	None	N/A	N/A	N/A	No
SW 17 Ave.	120	0.36	3	3	12	12	No	None	N/A	N/A	N/A	No
SW 19 Ave.	120	0.54	3	3	5	2	No	None	N/A	N/A	N/A	No
SW 22 Ave.	120	0.5	3	3	12	7	No	None	N/A	N/A	N/A	No
Beacom Blvd.	120	0.48	3	2	45	0	Yes	ProtPerm	1	1000	0.25	No
SR 9/SW 27 Ave.	130	0.22	3	1	38	24	Yes	Protected	2	438	0.25	Yes

Automobile Segment Data

Segment #	Length	AADT	Hourly Vol.	SEG # Dir.Lanes	Posted Speed	Free Flow Speed	Median Type	On-Street Parking	Parking Activity
1 (to S. Miami Ave.)	966	16500	1484	3	30	35	None	No	N/A
2 (to SW 1 Ave.)	576	22800	2050	3	30	35	None	No	N/A

3 (to SW 2 Ave.)	781	23000	2068	3	30	35	None	No	N/A
4 (to SW 3 Ave.)	554	24300	2185	3	30	35	None	No	N/A
5 (to SW 4 Ave.)	533	16500	1484	3	30	35	None	No	N/A
6 (to SR 7/SW 8 Ave.)	2218	16100	1448	3	30	35	None	No	N/A
7 (to SR 933/SW 12 Ave.)	2313	16900	1519	3	30	35	None	No	N/A
8 (to SW 16 Ave.)	2196	18200	1636	3	30	35	None	No	N/A
9 (to SW 17 Ave.)	465	18200	1636	3	30	35	None	No	N/A
10 (to SW 19 Ave.)	1352	17400	1564	3	30	35	None	No	N/A
11 (to SW 22 Ave.)	1341	17400	1564	3	30	35	None	No	N/A
12 (to Beacom Blvd.)	2096	15100	1358	3	30	35	None	No	N/A
13 (to SR 9/SW 27 Ave.)	438	11000	989	1	30	35	None	No	N/A

Automobile LOS

Segment #	Thru Mvmt Flow Rate	Adj. Sat. Flow Rate	v/c	Control Delay	Int. Approach LOS	Queue Ratio	Speed (mph)	Segment LOS
1 (to S. Miami Ave.)	1562	4721	0.624	22.34	C	0.00	15.63	D
2 (to SW 1 Ave.)	2158	3892	1.260	166.41	F	0.00	2.38	F
3 (to SW 2 Ave.)	2177	3863	1.174	119.18	F	0.00	4.14	F
4 (to SW 3 Ave.)	2300	3892	0.869	16.67	B	0.00	13.12	D
5 (to SW 4 Ave.)	922	3116	0.809	42.50	D	0.28	7.07	F
6 (to SR 7/SW 8 Ave.)	1524	3757	0.665	16.11	B	0.00	24.68	B
7 (to SR 933/SW 12 Ave.)	1599	3770	1.010	56.36	E	0.00	15.36	D
8 (to SW 16 Ave.)	1722	3786	0.606	6.97	A	0.00	28.61	A
9 (to SW 17 Ave.)	1722	3776	1.267	169.93	F	0.00	1.95	F
10 (to SW 19 Ave.)	1646	3792	0.804	22.76	C	0.00	18.28	C
11 (to SW 22 Ave.)	1646	3779	0.871	29.60	C	0.00	16.11	D
12 (to Beacom Blvd.)	786	3098	0.529	22.25	C	#	22.06	B
13 (to SR 9/SW 27 Ave.)	396	1248	1.440	272.54	F	0.40	1.19	F

Arterial Length	**3.1456**	**Weighted g/C**	**0.37**	**FFS Delay**	**1016.42**	**Threshold Delay**	**453.68**	**Auto Speed**	**###**	**Auto LOS**	**###**

Automobile Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1000 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1					
2					
3					
4					
*					
Lanes	**Hourly Volume In Both Directions**				
2					
4					
6					
8					
*					
Lanes	**Annual Average Daily Traffic**				
2					
4					
6					
8					
*					

Multimodal Segment Data

Segment #	Outside Lane Width	Pave Cond	Pave Shldr /Bike Lane	Side Path	Side Path Separation	Side walk	Sidewalk Roadway Separation	Sidewalk Roadway Protective Barrier	Bus Freq	Passenger Load Factor	Amenities	Bus Stop Type
1 (to S. Miami Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
2 (to SW 1 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
3 (to SW 2 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
4 (to SW 3 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
5 (to SW 4 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
6 (to SR 7/SW 8 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
7 (to SR 933/SW 12 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
8 (to SW 16 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
9 (to SW 17 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
10 (to SW 19 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
11 (to SW 22 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
12 (to Beacom Blvd.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
13 (to SR 9/SW 27 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical

Pedestrian SubSegment Data

	% of Segment			Sidewalk			Separation			Barrier		
Segment #	**1**	**2**	**3**	**1**	**2**	**3**	**1**	**2**	**3**	**1**	**2**	**3**
1 (to S. Miami Ave.)	100			Yes			Adjacent			No		
2 (to SW 1 Ave.)	100			Yes			Adjacent			No		
3 (to SW 2 Ave.)	100			Yes			Adjacent			No		
4 (to SW 3 Ave.)	100			Yes			Adjacent			No		
5 (to SW 4 Ave.)	100			Yes			Adjacent			No		
6 (to SR 7/SW 8 Ave.)	100			Yes			Adjacent			No		
7 (to SR 933/SW 12 Ave.)	100			Yes			Adjacent			No		
8 (to SW 16 Ave.)	100			Yes			Adjacent			No		
9 (to SW 17 Ave.)	100			Yes			Adjacent			No		
10 (to SW 19 Ave.)	100			Yes			Adjacent			No		
11 (to SW 22 Ave.)	100			Yes			Adjacent			No		
12 (to Beacom Blvd.)	100			Yes			Adjacent			No		
13 (to SR 9/SW 27 Ave.)	100			Yes			Adjacent			No		

Multimodal LOS

	Bicycle	Bicycle	Pedestrian	Bus

	Street		Sidepath								
Link #	Score	LOS	Score	LOS	1	2	3	Score	LOS	Adj. Buses	LOS
1 (to S. Miami Ave.)	4.06	D	N/A	N/A				3.12	C	5.12	B
2 (to SW 1 Ave.)	4.16	D	N/A	N/A				3.49	C	7.18	A
3 (to SW 2 Ave.)	4.23	D	N/A	N/A				3.55	D	6.84	A
4 (to SW 3 Ave.)	4.17	D	N/A	N/A				3.59	D	3.99	C
5 (to SW 4 Ave.)	3.94	D	N/A	N/A				3.03	C	5.12	B
6 (to SR 7/SW 8 Ave.)	4.04	D	N/A	N/A				3.07	C	5.69	B
7 (to SR 933/SW 12 Ave.)	4.13	D	N/A	N/A				3.19	C	6.82	A
8 (to SW 16 Ave.)	4.18	D	N/A	N/A				3.28	C	5.99	B
9 (to SW 17 Ave.)	3.95	D	N/A	N/A				3.12	C	5.99	B
10 (to SW 19 Ave.)	4.13	D	N/A	N/A				3.21	C	5.69	B
11 (to SW 22 Ave.)	4.13	D	N/A	N/A				3.21	C	5.69	B
12 (to Beacom Blvd.)	4.04	D	N/A	N/A				3.07	C	5.69	B
13 (to SR 9/SW 27 Ave.)	4.17	D	N/A	N/A				4.16	D	7.18	A
	Bicycle LOS	**4.11**	**D**					**Pedestrian LOS**	**3.24**	**C**	**Bus LOS**	**5.94**	**B**

MultiModal Service Volume Tables

Bicycle

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	0	0	0	0	0
2	0	0	0	0	0
3	0	0	0	0	0
4	0	0	0	0	0
*	0	0	0	0	0
Lanes	**Hourly Volume In Both Directions**				
2	0	0	0	0	0
4	0	0	0	0	0
6	0	0	0	0	0
8	0	0	0	0	0
*	0	0	0	0	0
Lanes	**Annual Average Daily Traffic**				
2	0	0	0	0	0
4	0	0	0	0	0
6	0	0	0	0	0
8	0	0	0	0	0
*	0	0	0	0	0

Pedestrian

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	0	0	0	0	0
2	0	0	0	0	0
3	0	0	0	0	0
4	0	0	0	0	0
*	0	0	0	0	0
Lanes	**Hourly Volume In Both Directions**				
2	0	0	0	0	0
4	0	0	0	0	0
6	0	0	0	0	0
8	0	0	0	0	0
*	0	0	0	0	0
Lanes	**Annual Average Daily Traffic**				
2	0	0	0	0	0
4	0	0	0	0	0
6	0	0	0	0	0
8	0	0	0	0	0
*	0	0	0	0	0

Bus

A	B	C	D	E
Buses Per Hour In Peak Direction				
Buses in Study Hour in Peak Direction (Daily)				

*** Service Volumes for the specific facility being analyzed, based on # of lanes from the intersection and segment data screens.**
**** Cannot be achieved based on input data provided.**
***** Not applicable for that level of service letter grade. See generalized tables notes for more details.**
 # Under the given conditions, left turn lane storage is highly likely to overflow. The number of directional thru lanes should be reduced accordingly.
Facility weighted g/C exceeds normally acceptable upper range (0.5); verify that g/C inputs are correct.
Intersection capacity (ies) are exceeded for the full hour; an operational level analysis tool is more appropriate for this situation.

ARTPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst		**Arterial Name**	SR 90/SW 8 St.	**Study Period**	**Standard K**
Date Prepared	11/13/2014 8:20:08 AM	**From**	SR 9/SW 27 Ave.	**Modal Analysis**	Multimodal
Agency		**To**	US 1	**Program**	ARTPLAN 2012
Area Type	Large Urbanized	**Peak Direction**	Eastbound	**Version Date**	12/12/2012
Arterial Class	2				
File Name	G:\PROJECTS\57675_Jacobs-FDOT SR7-SW8th St to Tamiami\05 Project Wking Files\Calcs\Operational Analyses\ARTPLAN\No Build\SW 8 St No Build 2040.xap				
User Notes	No Build 2040				

Arterial Data

K	0.09	**PHF**	0.95	**Control Type**	CoordinatedActuated
D	0.999	**% Heavy Vehicles**	2	**Base Sat. Flow Rate**	1950

Automobile Intersection Data

Cross Street	Cycle Length	Thru g/C	Arr. Type	INT # Dir.Lanes	% Left Turns	% Right Turns	Left Turn Lanes	Left Turn Phasing	# Left Turn Lanes	LT Storage Length	Left g/C	Right Turn Lanes
SW 24 Ave.	120	0.7	3	3	3	3	No	None	N/A	N/A	N/A	No
SW 22 Ave.	120	0.54	3	3	9	4	No	None	N/A	N/A	N/A	No
SW 19 Ave.	120	0.66	3	3	5	1	No	None	N/A	N/A	N/A	No
SW 17 Ave.	120	0.51	3	3	7	6	No	None	N/A	N/A	N/A	No
SR 933/SW 12 Ave.	120	0.4	3	3	9	5	No	None	N/A	N/A	N/A	No
SR 7/SW 8 Ave.	120	0.6	3	3	8	3	No	None	N/A	N/A	N/A	No
SW 5 Ave.	150	0.61	3	3	7	1	No	None	N/A	N/A	N/A	No
SW 4 Ave.	150	0.5	3	3	0	4	No	None	N/A	N/A	N/A	No
SW 3 Ave.	150	0.58	3	3	1	8	No	None	N/A	N/A	N/A	No
SW 2 Ave.	150	0.54	3	3	17	11	No	None	N/A	N/A	N/A	No
SW 1 Ave.	150	0.55	3	3	0	21	No	None	N/A	N/A	N/A	No
S. Miami Ave.	150	0.71	3	3	12	0	No	None	N/A	N/A	N/A	No
US 1	150	0.28	3	2	37	15	Yes	Protected	2	1000	0.25	No

Automobile Segment Data

Segment #	Length	AADT	Hourly Vol.	SEG # Dir.Lanes	Posted Speed	Free Flow Speed	Median Type	On-Street Parking	Parking Activity
1 (to SW 24 Ave.)	1361	23400	2104	3	30	35	None	Yes	Low
2 (to SW 22 Ave.)	1341	24600	2212	3	30	35	None	Yes	Low
3 (to SW 19 Ave.)	1890	27400	2464	3	30	35	None	Yes	Low
4 (to SW 17 Ave.)	813	27400	2464	3	30	35	None	Yes	Low

5 (to SR 933/SW 12 Ave.)	2656	30900	2778	3	30	35	None	Yes	Low
6 (to SR 7/SW 8 Ave.)	2313	30300	2724	3	30	35	None	Yes	Low
7 (to SW 5 Ave.)	1653	30300	2724	3	30	35	None	Yes	Low
8 (to SW 4 Ave.)	554	33300	2994	3	30	35	None	Yes	Low
9 (to SW 3 Ave.)	539	55000	4945	3	30	35	None	Yes	Low
10 (to SW 2 Ave.)	576	46600	4190	3	30	35	None	Yes	Low
11 (to SW 1 Ave.)	581	40700	3659	3	30	35	None	Yes	Low
12 (to S. Miami Ave.)	655	41400	3722	3	30	35	None	Yes	Low
13 (to US 1)	898	29400	2643	3	30	35	None	Yes	Low

Automobile LOS

Segment #	Thru Mvmt Flow Rate	Adj. Sat. Flow Rate	v/c	Control Delay	Int. Approach LOS	Queue Ratio	Speed (mph)	Segment LOS
1 (to SW 24 Ave.)	2215	3867	0.818	14.02	B	0.00	21.39	C
2 (to SW 22 Ave.)	2328	3880	1.111	85.56	F	0.00	8.19	F
3 (to SW 19 Ave.)	2594	3926	1.001	25.97	C	0.00	19.41	C
4 (to SW 17 Ave.)	2594	3912	1.300	178.05	F	0.00	2.99	F
5 (to SR 933/SW 12 Ave.)	2924	3930	1.860	471.61	F	0.00	3.49	F
6 (to SR 7/SW 8 Ave.)	2867	3936	1.214	132.15	F	0.00	8.79	F
7 (to SW 5 Ave.)	2867	3941	1.193	128.97	F	0.00	6.99	F
8 (to SW 4 Ave.)	3152	4916	1.282	179.47	F	0.00	2.14	F
9 (to SW 3 Ave.)	5205	3922	2.288	539.37	F	0.00	0.73	F
10 (to SW 2 Ave.)	4411	3914	2.087	364.11	F	0.00	1.14	F
11 (to SW 1 Ave.)	3852	4859	1.441	272.05	F	0.00	1.51	F
12 (to S. Miami Ave.)	3918	3944	1.399	1128.90	F	0.00	0.42	F
13 (to US 1)	1753	3061	0.709	48.96	D	#	9.12	F

Arterial Length	**3.1458**	**Weighted g/C**	**0.43**	**FFS Delay**	**3646.23**	**Threshold Delay**	**3083.45**	**Auto Speed**	**###**	**Auto LOS**	**###**

Automobile Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1000 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1					
2					
3					
4					
*					
Lanes	**Hourly Volume In Both Directions**				
2					
4					
6					
8					
*					
Lanes	**Annual Average Daily Traffic**				
2					
4					
6					
8					
*					

Multimodal Segment Data

Segment #	Outside Lane Width	Pave Cond	Pave Shldr /Bike Lane	Side Path	Side Path Separation	Side walk	Sidewalk Roadway Separation	Sidewalk Roadway Protective Barrier	Bus Freq	Passenger Load Factor	Amenities	Bus Stop Type
1 (to SW 24 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
2 (to SW 22 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
3 (to SW 19 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
4 (to SW 17 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
5 (to SR 933/SW 12 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
6 (to SR 7/SW 8 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
7 (to SW 5 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
8 (to SW 4 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
9 (to SW 3 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
10 (to SW 2 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
11 (to SW 1 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
12 (to S. Miami Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
13 (to US 1)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical

Pedestrian SubSegment Data

	% of Segment			Sidewalk			Separation			Barrier		
Segment #	**1**	**2**	**3**	**1**	**2**	**3**	**1**	**2**	**3**	**1**	**2**	**3**
1 (to SW 24 Ave.)	100			Yes			Adjacent			No		
2 (to SW 22 Ave.)	100			Yes			Adjacent			No		
3 (to SW 19 Ave.)	100			Yes			Adjacent			No		
4 (to SW 17 Ave.)	100			Yes			Adjacent			No		
5 (to SR 933/SW 12 Ave.)	100			Yes			Adjacent			No		
6 (to SR 7/SW 8 Ave.)	100			Yes			Adjacent			No		
7 (to SW 5 Ave.)	100			Yes			Adjacent			No		
8 (to SW 4 Ave.)	100			Yes			Adjacent			No		
9 (to SW 3 Ave.)	100			Yes			Adjacent			No		
10 (to SW 2 Ave.)	100			Yes			Adjacent			No		
11 (to SW 1 Ave.)	100			Yes			Adjacent			No		
12 (to S. Miami Ave.)	100			Yes			Adjacent			No		
13 (to US 1)	100			Yes			Adjacent			No		

Multimodal LOS

	Bicycle Street		Bicycle Sidepath		Pedestrian					Bus	
Link #	**Score**	**LOS**	**Score**	**LOS**	**1**	**2**	**3**	**Score**	**LOS**	**Adj. Buses**	**LOS**

1 (to SW 24 Ave.)	3.72	D	N/A	N/A	3.23	C	5.39	B
2 (to SW 22 Ave.)	3.74	D	N/A	N/A	3.31	C	7.54	A
3 (to SW 19 Ave.)	3.80	D	N/A	N/A	3.53	D	5.99	B
4 (to SW 17 Ave.)	3.71	D	N/A	N/A	3.46	C	7.54	A
5 (to SR 933/SW 12 Ave.)	3.87	D	N/A	N/A	3.78	D	8.98	A
6 (to SR 7/SW 8 Ave.)	3.85	D	N/A	N/A	3.73	D	7.18	A
7 (to SW 5 Ave.)	3.84	D	N/A	N/A	3.72	D	7.18	A
8 (to SW 4 Ave.)	3.68	D	N/A	N/A	3.82	D	7.18	A
9 (to SW 3 Ave.)	3.64	D	N/A	N/A	5.31	F	3.95	C
10 (to SW 2 Ave.)	3.78	D	N/A	N/A	4.76	E	6.10	A
11 (to SW 1 Ave.)	3.77	D	N/A	N/A	4.35	E	6.10	A
12 (to S. Miami Ave.)	3.82	D	N/A	N/A	4.41	E	6.10	A
13 (to US 1)	3.76	D	N/A	N/A	3.61	D	5.99	B
Bicycle LOS	**3.79**	**D**			**Pedestrian LOS**	**3.81**	**D**	**Bus LOS**	**6.92**	**A**

MultiModal Service Volume Tables

Bicycle

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	0	0	0	0	0
2	0	0	0	0	0
3	0	0	0	0	0
4	0	0	0	0	0
*	0	0	0	0	0
Lanes	**Hourly Volume In Both Directions**				
2	0	0	0	0	0
4	0	0	0	0	0
6	0	0	0	0	0
8	0	0	0	0	0
*	0	0	0	0	0
Lanes	**Annual Average Daily Traffic**				
2	0	0	0	0	0
4	0	0	0	0	0
6	0	0	0	0	0
8	0	0	0	0	0
*	0	0	0	0	0

Pedestrian

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	0	0	0	0	0
2	0	0	0	0	0
3	0	0	0	0	0
4	0	0	0	0	0
*	0	0	0	0	0
Lanes	**Hourly Volume In Both Directions**				
2	0	0	0	0	0
4	0	0	0	0	0
6	0	0	0	0	0
8	0	0	0	0	0
*	0	0	0	0	0
Lanes	**Annual Average Daily Traffic**				
2	0	0	0	0	0
4	0	0	0	0	0
6	0	0	0	0	0
8	0	0	0	0	0
*	0	0	0	0	0

Bus

A	B	C	D	E
Buses Per Hour In Peak Direction				
Buses in Study Hour in Peak Direction (Daily)				

ARTPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst		**Arterial Name**	WB SR 90/SW 7 St.	**Study Period**	**Standard K**
Date Prepared	11/13/2014 12:41:23 PM	**From**	US 1	**Modal Analysis**	Multimodal
Agency		**To**	SR 9/SW 27 Ave.	**Program**	ARTPLAN 2012
Area Type	Large Urbanized	**Peak Direction**	Westbound	**Version Date**	12/12/2012
Arterial Class	2				
File Name	G:\PROJECTS\57675_Jacobs-FDOT SR7-SW8th St to Tamiami\05 Project Wking Files\Calcs\Operational Analyses\ARTPLAN\No Build\SW 7 St No Build 2040.xap				
User Notes	SW 7 St., No Build 2040				

Arterial Data

K	0.09	**PHF**	0.95	**Control Type**	CoordinatedActuated
D	0.999	**% Heavy Vehicles**	2	**Base Sat. Flow Rate**	1950

Automobile Intersection Data

Cross Street	Cycle Length	Thru g/C	Arr. Type	INT # Dir.Lanes	% Left Turns	% Right Turns	Left Turn Lanes	Left Turn Phasing	# Left Turn Lanes	LT Storage Length	Left g/C	Right Turn Lanes
S. Miami Ave.	150	0.57	3	3	0	10	No	None	N/A	N/A	N/A	No
SW 1 Ave.	150	0.62	3	3	14	0	No	None	N/A	N/A	N/A	No
SW 2 Ave.	150	0.54	3	3	11	12	No	None	N/A	N/A	N/A	No
SW 3 Ave.	150	0.69	3	3	21	8	No	None	N/A	N/A	N/A	No
SW 4 Ave.	150	0.34	3	2	41	0	Yes	ProtPerm	2	1000	0.25	No
SR 7/SW 8 Ave.	120	0.44	3	3	7	9	No	None	N/A	N/A	N/A	No
SR 933/SW 12 Ave.	120	0.42	3	3	8	8	No	None	N/A	N/A	N/A	No
SW 16 Ave.	120	0.75	3	3	8	8	No	None	N/A	N/A	N/A	No
SW 17 Ave.	120	0.36	3	3	12	12	No	None	N/A	N/A	N/A	No
SW 19 Ave.	120	0.73	3	3	5	2	No	None	N/A	N/A	N/A	No
SW 22 Ave.	120	0.52	3	3	12	7	No	None	N/A	N/A	N/A	No
Beacom Blvd.	120	0.48	3	2	45	0	Yes	ProtPerm	1	1000	0.25	No
SR 9/SW 27 Ave.	130	0.22	3	1	38	24	Yes	Protected	2	438	0.25	Yes

Automobile Segment Data

Segment #	Length	AADT	Hourly Vol.	SEG # Dir.Lanes	Posted Speed	Free Flow Speed	Median Type	On-Street Parking	Parking Activity
1 (to S. Miami Ave.)	966	22400	2014	3	30	35	None	No	N/A
2 (to SW 1 Ave.)	576	31800	2859	3	30	35	None	No	N/A

3 (to SW 2 Ave.)	781	32300	2904	3	30	35	None	No	N/A
4 (to SW 3 Ave.)	554	34400	3093	3	30	35	None	No	N/A
5 (to SW 4 Ave.)	533	23700	2131	3	30	35	None	No	N/A
6 (to SR 7/SW 8 Ave.)	2218	21300	1915	3	30	35	None	No	N/A
7 (to SR 933/SW 12 Ave.)	2313	21700	1951	3	30	35	None	No	N/A
8 (to SW 16 Ave.)	2196	23100	2077	3	30	35	None	No	N/A
9 (to SW 17 Ave.)	465	23100	2077	3	30	35	None	No	N/A
10 (to SW 19 Ave.)	1352	21800	1960	3	30	35	None	No	N/A
11 (to SW 22 Ave.)	1341	21800	1960	3	30	35	None	No	N/A
12 (to Beacom Blvd.)	2096	18600	1672	3	30	35	None	No	N/A
13 (to SR 9/SW 27 Ave.)	438	13700	1232	1	30	35	None	No	N/A

Automobile LOS

Segment #	Thru Mvmt Flow Rate	Adj. Sat. Flow Rate	v/c	Control Delay	Int. Approach LOS	Queue Ratio	Speed (mph)	Segment LOS
1 (to S. Miami Ave.)	2120	4887	0.761	25.64	C	0.00	14.45	D
2 (to SW 1 Ave.)	3009	3944	1.231	151.68	F	0.00	2.59	F
3 (to SW 2 Ave.)	3057	3911	1.447	274.19	F	0.00	1.95	F
4 (to SW 3 Ave.)	3256	3922	1.203	134.15	F	0.00	2.79	F
5 (to SW 4 Ave.)	1323	3192	0.997	57.07	E	0.57	5.62	F
6 (to SR 7/SW 8 Ave.)	2016	3823	1.198	129.63	F	0.00	8.78	F
7 (to SR 933/SW 12 Ave.)	2054	3831	1.276	168.30	F	0.00	7.42	F
8 (to SW 16 Ave.)	2186	3850	0.757	8.85	A	0.00	27.30	B
9 (to SW 17 Ave.)	2186	3839	1.582	321.00	F	0.00	1.07	F
10 (to SW 19 Ave.)	2063	3849	0.734	9.59	A	0.00	24.14	B
11 (to SW 22 Ave.)	2063	3835	1.035	55.39	E	0.00	11.18	E
12 (to Beacom Blvd.)	968	3127	0.645	23.69	C	#	21.45	C
13 (to SR 9/SW 27 Ave.)	493	1262	1.774	423.71	F	0.55	0.78	F

Arterial Length	**3.1456**	**Weighted g/C**	**0.38**	**FFS Delay**	**1841.34**	**Threshold Delay**	**1278.60**	**Auto Speed**	**###**	**Auto LOS**	**###**

Automobile Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1000 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1					
2					
3					
4					
*					
Lanes	**Hourly Volume In Both Directions**				
2					
4					
6					
8					
*					
Lanes	**Annual Average Daily Traffic**				
2					
4					
6					
8					
*					

Multimodal Segment Data

Segment #	Outside Lane Width	Pave Cond	Pave Shldr /Bike Lane	Side Path	Side Path Separation	Side walk	Sidewalk Roadway Separation	Sidewalk Roadway Protective Barrier	Bus Freq	Passenger Load Factor	Amenities	Bus Stop Type
1 (to S. Miami Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
2 (to SW 1 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
3 (to SW 2 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
4 (to SW 3 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
5 (to SW 4 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
6 (to SR 7/SW 8 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
7 (to SR 933/SW 12 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
8 (to SW 16 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
9 (to SW 17 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
10 (to SW 19 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
11 (to SW 22 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
12 (to Beacom Blvd.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
13 (to SR 9/SW 27 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical

Pedestrian SubSegment Data

	% of Segment			Sidewalk			Separation			Barrier		
Segment #	**1**	**2**	**3**	**1**	**2**	**3**	**1**	**2**	**3**	**1**	**2**	**3**
1 (to S. Miami Ave.)	100			Yes			Adjacent			No		
2 (to SW 1 Ave.)	100			Yes			Adjacent			No		
3 (to SW 2 Ave.)	100			Yes			Adjacent			No		
4 (to SW 3 Ave.)	100			Yes			Adjacent			No		
5 (to SW 4 Ave.)	100			Yes			Adjacent			No		
6 (to SR 7/SW 8 Ave.)	100			Yes			Adjacent			No		
7 (to SR 933/SW 12 Ave.)	100			Yes			Adjacent			No		
8 (to SW 16 Ave.)	100			Yes			Adjacent			No		
9 (to SW 17 Ave.)	100			Yes			Adjacent			No		
10 (to SW 19 Ave.)	100			Yes			Adjacent			No		
11 (to SW 22 Ave.)	100			Yes			Adjacent			No		
12 (to Beacom Blvd.)	100			Yes			Adjacent			No		
13 (to SR 9/SW 27 Ave.)	100			Yes			Adjacent			No		

Multimodal LOS

	Bicycle	Bicycle	Pedestrian	Bus

	Street		Sidepath								
Link #	Score	LOS	Score	LOS	1	2	3	Score	LOS	Adj. Buses	LOS
1 (to S. Miami Ave.)	4.25	D	N/A	N/A				3.53	D	5.13	B
2 (to SW 1 Ave.)	4.30	E	N/A	N/A				4.12	D	7.18	A
3 (to SW 2 Ave.)	4.37	E	N/A	N/A				4.19	D	7.18	A
4 (to SW 3 Ave.)	4.31	E	N/A	N/A				4.30	E	5.09	B
5 (to SW 4 Ave.)	4.14	D	N/A	N/A				3.54	D	5.70	B
6 (to SR 7/SW 8 Ave.)	4.21	D	N/A	N/A				3.32	C	7.18	A
7 (to SR 933/SW 12 Ave.)	4.28	E	N/A	N/A				3.52	D	6.84	A
8 (to SW 16 Ave.)	4.31	E	N/A	N/A				3.62	D	5.70	B
9 (to SW 17 Ave.)	4.07	D	N/A	N/A				3.47	C	7.18	A
10 (to SW 19 Ave.)	4.26	E	N/A	N/A				3.51	D	5.13	B
11 (to SW 22 Ave.)	4.26	E	N/A	N/A				3.51	D	5.70	B
12 (to Beacom Blvd.)	4.20	D	N/A	N/A				3.31	C	5.99	B
13 (to SR 9/SW 27 Ave.)	4.23	D	N/A	N/A				4.72	E	6.10	A
	Bicycle LOS	**4.25**	**E**					**Pedestrian LOS**	**3.62**	**D**	**Bus LOS**	**6.19**	**A**

MultiModal Service Volume Tables

Bicycle

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	0	0	0	0	0
2	0	0	0	0	0
3	0	0	0	0	0
4	0	0	0	0	0
*	0	0	0	0	0
Lanes	**Hourly Volume In Both Directions**				
2	0	0	0	0	0
4	0	0	0	0	0
6	0	0	0	0	0
8	0	0	0	0	0
*	0	0	0	0	0
Lanes	**Annual Average Daily Traffic**				
2	0	0	0	0	0
4	0	0	0	0	0
6	0	0	0	0	0
8	0	0	0	0	0
*	0	0	0	0	0

Pedestrian

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	0	0	0	0	0
2	0	0	0	0	0
3	0	0	0	0	0
4	0	0	0	0	0
*	0	0	0	0	0
Lanes	**Hourly Volume In Both Directions**				
2	0	0	0	0	0
4	0	0	0	0	0
6	0	0	0	0	0
8	0	0	0	0	0
*	0	0	0	0	0
Lanes	**Annual Average Daily Traffic**				
2	0	0	0	0	0
4	0	0	0	0	0
6	0	0	0	0	0
8	0	0	0	0	0
*	0	0	0	0	0

Bus

A	B	C	D	E
Buses Per Hour In Peak Direction				
Buses in Study Hour in Peak Direction (Daily)				

*** Service Volumes for the specific facility being analyzed, based on # of lanes from the intersection and segment data screens.**
**** Cannot be achieved based on input data provided.**
***** Not applicable for that level of service letter grade. See generalized tables notes for more details.**
 # Under the given conditions, left turn lane storage is highly likely to overflow. The number of directional thru lanes should be reduced accordingly.
Facility weighted g/C exceeds normally acceptable upper range (0.5); verify that g/C inputs are correct.
Intersection capacity (ies) are exceeded for the full hour; an operational level analysis tool is more appropriate for this situation.

ARTPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst		**Arterial Name**	SW 8 St.	**Study Period**	**Standard K**
Date Prepared	11/13/2014 8:20:08 AM	**From**	SR 9/SW 27 Ave.	**Modal Analysis**	Multimodal
Agency		**To**	US 1	**Program**	ARTPLAN 2012
Area Type	Large Urbanized	**Peak Direction**	Westbound	**Version Date**	12/12/2012
Arterial Class	2				

File Name	G:\PROJECTS\57675_Jacobs-FDOT SR7-SW8th St to Tamiami\05 Project Wking Files\Calcs\Operational Analyses\ARTPLAN\2L Transit Alt 3\SW 8 St 2L Transit Alt 3 2020.xap
User Notes	SW 8 St 2 Lanes+Transit Alt3,2020

Arterial Data

K	0.09	**PHF**	0.95	**Control Type**	Pretimed
D	0.999	**% Heavy Vehicles**	2	**Base Sat. Flow Rate**	1950

Automobile Intersection Data

Cross Street	Cycle Length	Thru g/C	Arr. Type	INT # Dir.Lanes	% Left Turns	% Right Turns	Left Turn Lanes	Left Turn Phasing	# Left Turn Lanes	LT Storage Length	Left g/C	Right Turn Lanes
SW 24 Ave.	120	0.79	3	2	2	3	No	None	N/A	N/A	N/A	No
SW 22 Ave.	120	0.42	3	2	12	9	No	None	N/A	N/A	N/A	No
SW 19 Ave.	120	0.5	3	2	5	5	No	None	N/A	N/A	N/A	No
SW 17 Ave.	120	0.52	3	2	10	6	No	None	N/A	N/A	N/A	No
SR 933/SW 12 Ave.	120	0.52	3	2	10	6	No	None	N/A	N/A	N/A	No
SR 7/SW 8 Ave.	120	0.58	3	2	7	4	No	None	N/A	N/A	N/A	No
SW 5 Ave.	120	0.63	3	2	0	9	No	None	N/A	N/A	N/A	No
SW 4 Ave.	130	0.57	3	2	1	0	No	None	N/A	N/A	N/A	No
SW 3 Ave.	130	0.62	3	2	0	12	No	None	N/A	N/A	N/A	No
SW 2 Ave.	130	0.55	3	2	4	4	No	None	N/A	N/A	N/A	No
SW 1 Ave.	130	0.57	3	2	18	0	No	None	N/A	N/A	N/A	No
S. Miami Ave.	130	0.58	3	2	0	16	No	None	N/A	N/A	N/A	No
US 1	150	0.31	3	1	33	16	No	None	N/A	N/A	N/A	No

Automobile Segment Data

Segment #	Length	AADT	Hourly Vol.	SEG # Dir.Lanes	Posted Speed	Free Flow Speed	Median Type	On-Street Parking	Parking Activity
1 (to SW 24 Ave.)	1361	12100	1088	2	30	35	None	Yes	Low
2 (to SW 22 Ave.)	1341	11500	1034	2	30	35	None	Yes	Low
3 (to SW 19 Ave.)	1890	12600	1133	2	30	35	None	Yes	Low
4 (to SW 17 Ave.)	813	12600	1133	2	30	35	None	Yes	Low

5 (to SR 933/SW 12 Ave.)	2656	12400	1115	2	30	35	None	Yes	Low
6 (to SR 7/SW 8 Ave.)	2313	11300	1016	2	30	35	None	Yes	Low
7 (to SW 5 Ave.)	1653	11300	1016	2	30	35	None	Yes	Low
8 (to SW 4 Ave.)	554	11700	1052	2	30	35	None	Yes	Low
9 (to SW 3 Ave.)	539	8100	728	2	30	35	None	Yes	Low
10 (to SW 2 Ave.)	576	23100	2077	2	30	35	None	Yes	Low
11 (to SW 1 Ave.)	581	21800	1960	2	30	35	None	Yes	Low
12 (to S. Miami Ave.)	655	20800	1870	2	30	35	None	Yes	Low
13 (to US 1)	898	18900	1699	1	30	35	None	Yes	Low

Automobile LOS

Segment #	Thru Mvmt Flow Rate	Adj. Sat. Flow Rate	v/c	Control Delay	Int. Approach LOS	Queue Ratio	Speed (mph)	Segment LOS
1 (to SW 24 Ave.)	1145	2520	0.575	5.82	A	0.00	26.16	B
2 (to SW 22 Ave.)	1088	2491	0.958	50.34	D	0.00	11.78	E
3 (to SW 19 Ave.)	1193	2523	0.945	32.47	C	0.00	17.93	C
4 (to SW 17 Ave.)	1193	2521	0.910	29.04	C	0.00	11.96	E
5 (to SR 933/SW 12 Ave.)	1174	2519	0.896	29.15	C	0.00	21.42	C
6 (to SR 7/SW 8 Ave.)	1069	2508	0.735	19.55	B	0.00	23.23	B
7 (to SW 5 Ave.)	1069	3124	0.543	13.14	B	0.00	23.35	B
8 (to SW 4 Ave.)	1107	2533	0.767	24.63	C	0.00	10.30	E
9 (to SW 3 Ave.)	766	3079	0.401	12.85	B	0.00	14.35	D
10 (to SW 2 Ave.)	2186	2609	1.524	320.13	F	0.00	1.29	F
11 (to SW 1 Ave.)	2063	2616	1.376	225.36	F	0.00	1.80	F
12 (to S. Miami Ave.)	1968	3234	1.049	53.19	D	0.00	6.82	F
13 (to US 1)	1788	1244	1.403	246.11	F	0.00	2.35	F

Arterial Length	**3.1458**	**Weighted g/C**	**0.44**	**FFS Delay**	**1137.76**	**Threshold Delay**	**574.98**	**Auto Speed**	**###**	**Auto LOS**	**###**

Automobile Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1000 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1					
2					
3					
4					
*					
Lanes	**Hourly Volume In Both Directions**				
2					
4					
6					
8					
*					
Lanes	**Annual Average Daily Traffic**				
2					
4					
6					
8					
*					

Multimodal Segment Data

Segment #	Outside Lane Width	Pave Cond	Pave Shldr /Bike Lane	Side Path	Side Path Separation	Side walk	Sidewalk Roadway Separation	Sidewalk Roadway Protective Barrier	Bus Freq	Passenger Load Factor	Amenities	Bus Stop Type
1 (to SW 24 Ave.)	Typical	Typical	Yes	No	N/A	Yes	Typical	No	6	0.85	Excellent	Typical
2 (to SW 22 Ave.)	Typical	Typical	Yes	No	N/A	Yes	Typical	No	6	0.85	Excellent	Typical
3 (to SW 19 Ave.)	Typical	Typical	Yes	No	N/A	Yes	Typical	No	6	0.85	Excellent	Typical
4 (to SW 17 Ave.)	Typical	Typical	Yes	No	N/A	Yes	Typical	No	6	0.85	Excellent	Typical
5 (to SR 933/SW 12 Ave.)	Typical	Typical	Yes	No	N/A	Yes	Typical	No	6	0.85	Excellent	Typical
6 (to SR 7/SW 8 Ave.)	Typical	Typical	Yes	No	N/A	Yes	Typical	No	6	0.85	Excellent	Typical
7 (to SW 5 Ave.)	Typical	Typical	Yes	No	N/A	Yes	Typical	No	6	0.85	Excellent	Typical
8 (to SW 4 Ave.)	Typical	Typical	Yes	No	N/A	Yes	Typical	No	6	0.85	Excellent	Typical
9 (to SW 3 Ave.)	Typical	Typical	Yes	No	N/A	Yes	Typical	No	6	0.85	Excellent	Typical
10 (to SW 2 Ave.)	Typical	Typical	Yes	No	N/A	Yes	Typical	No	6	0.85	Excellent	Typical
11 (to SW 1 Ave.)	Typical	Typical	Yes	No	N/A	Yes	Typical	No	6	0.85	Excellent	Typical
12 (to S. Miami Ave.)	Typical	Typical	Yes	No	N/A	Yes	Typical	No	6	0.85	Excellent	Typical
13 (to US 1)	Typical	Typical	Yes	No	N/A	Yes	Typical	No	6	0.85	Excellent	Typical

Pedestrian SubSegment Data

	% of Segment			Sidewalk			Separation			Barrier		
Segment #	**1**	**2**	**3**	**1**	**2**	**3**	**1**	**2**	**3**	**1**	**2**	**3**
1 (to SW 24 Ave.)	100			Yes			Typical			No		
2 (to SW 22 Ave.)	100			Yes			Typical			No		
3 (to SW 19 Ave.)	100			Yes			Typical			No		
4 (to SW 17 Ave.)	100			Yes			Typical			No		
5 (to SR 933/SW 12 Ave.)	100			Yes			Typical			No		
6 (to SR 7/SW 8 Ave.)	100			Yes			Typical			No		
7 (to SW 5 Ave.)	100			Yes			Typical			No		
8 (to SW 4 Ave.)	100			Yes			Typical			No		
9 (to SW 3 Ave.)	100			Yes			Typical			No		
10 (to SW 2 Ave.)	100			Yes			Typical			No		
11 (to SW 1 Ave.)	100			Yes			Typical			No		
12 (to S. Miami Ave.)	100			Yes			Typical			No		
13 (to US 1)	100			Yes			Typical			No		

Multimodal LOS

	Bicycle Street		Bicycle Sidepath		Pedestrian					Bus	
Link #	**Score**	**LOS**	**Score**	**LOS**	**1**	**2**	**3**	**Score**	**LOS**	**Adj. Buses**	**LOS**

1 (to SW 24 Ave.)	1.47	A	N/A	N/A	2.60	B	6.21	A
2 (to SW 22 Ave.)	1.43	A	N/A	N/A	2.54	B	6.55	A
3 (to SW 19 Ave.)	1.47	A	N/A	N/A	2.58	B	6.90	A
4 (to SW 17 Ave.)	1.43	A	N/A	N/A	2.60	B	6.21	A
5 (to SR 933/SW 12 Ave.)	1.53	A	N/A	N/A	2.67	B	6.90	A
6 (to SR 7/SW 8 Ave.)	1.45	A	N/A	N/A	2.55	B	6.55	A
7 (to SW 5 Ave.)	1.43	A	N/A	N/A	2.53	B	5.90	B
8 (to SW 4 Ave.)	1.26	A	N/A	N/A	2.45	B	6.21	A
9 (to SW 3 Ave.)	1.00	A	N/A	N/A	2.06	B	4.59	B
10 (to SW 2 Ave.)	1.59	A	N/A	N/A	3.66	D	7.90	A
11 (to SW 1 Ave.)	1.57	A	N/A	N/A	3.52	D	7.90	A
12 (to S. Miami Ave.)	1.60	A	N/A	N/A	3.42	C	6.91	A
13 (to US 1)	1.29	A	N/A	N/A	5.15	F	4.35	B
	Bicycle LOS	**1.46**	**A**		**Pedestrian LOS**	**2.97**	**C**	**Bus LOS**	**6.44**	**A**

MultiModal Service Volume Tables

Bicycle

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	0	0	0	0	0
2	0	0	0	0	0
3	0	0	0	0	0
4	0	0	0	0	0
*	0	0	0	0	0
Lanes	**Hourly Volume In Both Directions**				
2	0	0	0	0	0
4	0	0	0	0	0
6	0	0	0	0	0
8	0	0	0	0	0
*	0	0	0	0	0
Lanes	**Annual Average Daily Traffic**				
2	0	0	0	0	0
4	0	0	0	0	0
6	0	0	0	0	0
8	0	0	0	0	0
*	0	0	0	0	0

Pedestrian

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	0	0	0	0	0
2	0	0	0	0	0
3	0	0	0	0	0
4	0	0	0	0	0
*	0	0	0	0	0
Lanes	**Hourly Volume In Both Directions**				
2	0	0	0	0	0
4	0	0	0	0	0
6	0	0	0	0	0
8	0	0	0	0	0
*	0	0	0	0	0
Lanes	**Annual Average Daily Traffic**				
2	0	0	0	0	0
4	0	0	0	0	0
6	0	0	0	0	0
8	0	0	0	0	0
*	0	0	0	0	0

Bus

A	B	C	D	E
Buses Per Hour In Peak Direction				
Buses in Study Hour in Peak Direction (Daily)				

*** Service Volumes for the specific facility being analyzed, based on # of lanes from the intersection and segment data screens.**
**** Cannot be achieved based on input data provided.**
***** Not applicable for that level of service letter grade. See generalized tables notes for more details.**
 # Under the given conditions, left turn lane storage is highly likely to overflow. The number of directional thru lanes should be reduced accordingly.
Facility weighted g/C exceeds normally acceptable upper range (0.5); verify that g/C inputs are correct.
Intersection capacity (ies) are exceeded for the full hour; an operational level analysis tool is more appropriate for this situation.

ARTPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst		**Arterial Name**	SR 90/SW 7 St.	**Study Period**	**Standard K**
Date Prepared	11/13/2014 12:41:23 PM	**From**	US 1	**Modal Analysis**	Multimodal
Agency		**To**	SR 9/SW 27 Ave.	**Program**	ARTPLAN 2012
Area Type	Large Urbanized	**Peak Direction**	Eastbound	**Version Date**	12/12/2012
Arterial Class	2				
File Name	G:\PROJECTS\57675_Jacobs-FDOT SR7-SW8th St to Tamiami\05 Project Wking Files\Calcs\Operational Analyses\ARTPLAN\2L Transit Alt 3\SW 7 St 2L Transit Alt 3 2020.xap				
User Notes	2 Lanes+Transit Alternative 3, 2020				

Arterial Data

K	0.09	**PHF**	0.95	**Control Type**	CoordinatedActuated
D	0.999	**% Heavy Vehicles**	2	**Base Sat. Flow Rate**	1950

Automobile Intersection Data

Cross Street	Cycle Length	Thru g/C	Arr. Type	INT # Dir.Lanes	% Left Turns	% Right Turns	Left Turn Lanes	Left Turn Phasing	# Left Turn Lanes	LT Storage Length	Left g/C	Right Turn Lanes
S. Miami Ave.	130	0.55	3	2	40	0	No	None	N/A	N/A	N/A	No
SW 1 Ave.	130	0.41	3	2	0	20	No	None	N/A	N/A	N/A	No
SW 2 Ave.	130	0.61	3	2	22	16	No	None	N/A	N/A	N/A	No
SW 3 Ave.	130	0.56	3	2	11	11	No	None	N/A	N/A	N/A	No
SW 4 Ave.	130	0.55	3	2	0	7	No	None	N/A	N/A	N/A	No
SR 7/SW 8 Ave.	120	0.65	3	2	8	2	No	None	N/A	N/A	N/A	No
SR 933/SW 12 Ave.	120	0.53	3	2	7	4	No	None	N/A	N/A	N/A	No
SW 16 Ave.	120	0.73	3	2	0	5	No	None	N/A	N/A	N/A	No
SW 17 Ave.	120	0.54	3	2	5	4	No	None	N/A	N/A	N/A	No
SW 19 Ave.	120	0.72	3	2	5	5	No	None	N/A	N/A	N/A	No
SW 22 Ave.	120	0.47	3	2	6	3	No	None	N/A	N/A	N/A	No
Beacom Blvd.	120	0.56	3	2	7	3	No	None	N/A	N/A	N/A	No
SR 9/SW 27 Ave.	130	0.44	3	1	38	24	Yes	Protected	1	235	0.12	Yes

Automobile Segment Data

Segment #	Length	AADT	Hourly Vol.	SEG # Dir.Lanes	Posted Speed	Free Flow Speed	Median Type	On-Street Parking	Parking Activity
1 (to S. Miami Ave.)	966	13300	1196	2	30	35	None	No	N/A
2 (to SW 1 Ave.)	576	17600	1582	2	30	35	None	No	N/A

3 (to SW 2 Ave.)	781	16800	1510	2	30	35	None	No	N/A
4 (to SW 3 Ave.)	554	21200	1906	2	30	35	None	No	N/A
5 (to SW 4 Ave.)	533	21800	1960	2	30	35	None	No	N/A
6 (to SR 7/SW 8 Ave.)	2218	20400	1834	2	30	35	None	No	N/A
7 (to SR 933/SW 12 Ave.)	2313	20200	1816	2	30	35	None	No	N/A
8 (to SW 16 Ave.)	2196	20700	1861	2	30	35	None	No	N/A
9 (to SW 17 Ave.)	465	20700	1861	2	30	35	None	No	N/A
10 (to SW 19 Ave.)	1352	19200	1726	2	30	35	None	No	N/A
11 (to SW 22 Ave.)	1341	19200	1726	2	30	35	None	No	N/A
12 (to Beacom Blvd.)	2096	18800	1690	2	30	35	None	No	N/A
13 (to SR 9/SW 27 Ave.)	438	16500	1484	1	30	35	None	No	N/A

Automobile LOS

Segment #	Thru Mvmt Flow Rate	Adj. Sat. Flow Rate	v/c	Control Delay	Int. Approach LOS	Queue Ratio	Speed (mph)	Segment LOS
1 (to S. Miami Ave.)	1259	2343	-0.230	NaN	F	0.00	NaN	F
2 (to SW 1 Ave.)	1665	3015	0.398	NaN	F	0.00	NaN	F
3 (to SW 2 Ave.)	1589	2359	0.029	10.10	B	0.00	20.00	C
4 (to SW 3 Ave.)	2006	2437	0.412	17.27	B	0.00	13.08	D
5 (to SW 4 Ave.)	2063	3175	0.711	23.90	C	0.00	10.54	E
6 (to SR 7/SW 8 Ave.)	1931	2609	1.045	53.34	D	0.00	15.44	D
7 (to SR 933/SW 12 Ave.)	1912	2609	1.382	222.05	F	0.00	5.93	F
8 (to SW 16 Ave.)	1959	3259	0.823	11.28	B	0.00	25.49	B
9 (to SW 17 Ave.)	1959	2609	1.390	228.68	F	0.00	1.47	F
10 (to SW 19 Ave.)	1817	2607	0.968	17.76	B	0.00	19.69	C
11 (to SW 22 Ave.)	1817	2611	1.481	272.40	F	0.00	3.15	F
12 (to Beacom Blvd.)	1779	2608	1.218	135.30	F	0.00	8.09	F
13 (to SR 9/SW 27 Ave.)	594	1246	0.686	29.84	C	#	7.61	F

Arterial Length	**3.1456**	**Weighted g/C**	**0.49**	**FFS Delay**	**NaN**	**Threshold Delay**	**NaN**	**Auto Speed**	**###**	**Auto LOS**	**###**

Automobile Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1000 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1					
2					
3					
4					
*					
Lanes	**Hourly Volume In Both Directions**				
2					
4					
6					
8					
*					
Lanes	**Annual Average Daily Traffic**				
2					
4					
6					
8					
*					

Multimodal Segment Data

Segment #	Outside Lane Width	Pave Cond	Pave Shldr /Bike Lane	Side Path	Side Path Separation	Side walk	Sidewalk Roadway Separation	Sidewalk Roadway Protective Barrier	Bus Freq	Passenger Load Factor	Amenities	Bus Stop Type
1 (to S. Miami Ave.)	Typical	Typical	Yes	No	N/A	Yes	Typical	No	6	0.85	Excellent	Typical
2 (to SW 1 Ave.)	Typical	Typical	Yes	No	N/A	Yes	Typical	No	6	0.85	Excellent	Typical
3 (to SW 2 Ave.)	Typical	Typical	Yes	No	N/A	Yes	Typical	No	6	0.85	Excellent	Typical
4 (to SW 3 Ave.)	Typical	Typical	Yes	No	N/A	Yes	Typical	No	6	0.85	Excellent	Typical
5 (to SW 4 Ave.)	Typical	Typical	Yes	No	N/A	Yes	Typical	No	6	0.85	Excellent	Typical
6 (to SR 7/SW 8 Ave.)	Typical	Typical	Yes	No	N/A	Yes	Typical	No	6	0.85	Excellent	Typical
7 (to SR 933/SW 12 Ave.)	Typical	Typical	Yes	No	N/A	Yes	Typical	No	6	0.85	Excellent	Typical
8 (to SW 16 Ave.)	Typical	Typical	Yes	No	N/A	Yes	Typical	No	6	0.85	Excellent	Typical
9 (to SW 17 Ave.)	Typical	Typical	Yes	No	N/A	Yes	Typical	No	6	0.85	Excellent	Typical
10 (to SW 19 Ave.)	Typical	Typical	Yes	No	N/A	Yes	Typical	No	6	0.85	Excellent	Typical
11 (to SW 22 Ave.)	Typical	Typical	Yes	No	N/A	Yes	Typical	No	6	0.85	Excellent	Typical
12 (to Beacom Blvd.)	Typical	Typical	Yes	No	N/A	Yes	Typical	No	6	0.85	Excellent	Typical
13 (to SR 9/SW 27 Ave.)	Typical	Typical	Yes	No	N/A	Yes	Typical	No	6	0.85	Excellent	Typical

Pedestrian SubSegment Data

	% of Segment			Sidewalk			Separation			Barrier		
Segment #	**1**	**2**	**3**	**1**	**2**	**3**	**1**	**2**	**3**	**1**	**2**	**3**
1 (to S. Miami Ave.)	100			Yes			Typical			No		
2 (to SW 1 Ave.)	100			Yes			Typical			No		
3 (to SW 2 Ave.)	100			Yes			Typical			No		
4 (to SW 3 Ave.)	100			Yes			Typical			No		
5 (to SW 4 Ave.)	100			Yes			Typical			No		
6 (to SR 7/SW 8 Ave.)	100			Yes			Typical			No		
7 (to SR 933/SW 12 Ave.)	100			Yes			Typical			No		
8 (to SW 16 Ave.)	100			Yes			Typical			No		
9 (to SW 17 Ave.)	100			Yes			Typical			No		
10 (to SW 19 Ave.)	100			Yes			Typical			No		
11 (to SW 22 Ave.)	100			Yes			Typical			No		
12 (to Beacom Blvd.)	100			Yes			Typical			No		
13 (to SR 9/SW 27 Ave.)	100			Yes			Typical			No		

Multimodal LOS

	Bicycle	Bicycle	Pedestrian	Bus

	Street		Sidepath								
Link #	**Score**	**LOS**	**Score**	**LOS**	**1**	**2**	**3**	**Score**	**LOS**	**Adj. Buses**	**LOS**
1 (to S. Miami Ave.)	2.49	B	N/A	N/A				3.02	C	0.00	F
2 (to SW 1 Ave.)	0.50	A	N/A	N/A				1.50	A	0.00	F
3 (to SW 2 Ave.)	1.72	A	N/A	N/A				2.06	B	4.22	B
4 (to SW 3 Ave.)	1.71	A	N/A	N/A				2.05	B	4.22	B
5 (to SW 4 Ave.)	1.88	A	N/A	N/A				2.22	B	4.22	B
6 (to SR 7/SW 8 Ave.)	2.45	B	N/A	N/A				2.90	C	6.58	A
7 (to SR 933/SW 12 Ave.)	2.69	B	N/A	N/A				3.61	D	7.90	A
8 (to SW 16 Ave.)	2.73	B	N/A	N/A				3.83	D	6.58	A
9 (to SW 17 Ave.)	2.49	B	N/A	N/A				3.69	D	7.90	A
10 (to SW 19 Ave.)	2.68	B	N/A	N/A				3.66	D	5.93	B
11 (to SW 22 Ave.)	2.68	B	N/A	N/A				3.66	D	7.90	A
12 (to Beacom Blvd.)	2.69	B	N/A	N/A				3.63	D	7.90	A
13 (to SR 9/SW 27 Ave.)	2.53	B	N/A	N/A				4.97	E	3.92	C
	Bicycle LOS	**2.54**	**B**			**Pedestrian LOS**		**3.45**	**C**	**Bus LOS**	**6.01**	**A**

MultiModal Service Volume Tables

Bicycle

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	0	0	0	0	0
2	0	0	0	0	0
3	0	0	0	0	0
4	0	0	0	0	0
*	0	0	0	0	0
Lanes	**Hourly Volume In Both Directions**				
2	0	0	0	0	0
4	0	0	0	0	0
6	0	0	0	0	0
8	0	0	0	0	0
*	0	0	0	0	0
Lanes	**Annual Average Daily Traffic**				
2	0	0	0	0	0
4	0	0	0	0	0
6	0	0	0	0	0
8	0	0	0	0	0
*	0	0	0	0	0

Pedestrian

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	0	0	0	0	0
2	0	0	0	0	0
3	0	0	0	0	0
4	0	0	0	0	0
*	0	0	0	0	0
Lanes	**Hourly Volume In Both Directions**				
2	0	0	0	0	0
4	0	0	0	0	0
6	0	0	0	0	0
8	0	0	0	0	0
*	0	0	0	0	0
Lanes	**Annual Average Daily Traffic**				
2	0	0	0	0	0
4	0	0	0	0	0
6	0	0	0	0	0
8	0	0	0	0	0
*	0	0	0	0	0

Bus

A	B	C	D	E
Buses Per Hour In Peak Direction				
Buses in Study Hour in Peak Direction (Daily)				

*** Service Volumes for the specific facility being analyzed, based on # of lanes from the intersection and segment data screens.**
**** Cannot be achieved based on input data provided.**
***** Not applicable for that level of service letter grade. See generalized tables notes for more details.**
 # Under the given conditions, left turn lane storage is highly likely to overflow. The number of directional thru lanes should be reduced accordingly.
Facility weighted g/C exceeds normally acceptable upper range (0.5); verify that g/C inputs are correct.
Intersection capacity (ies) are exceeded for the full hour; an operational level analysis tool is more appropriate for this situation.

ARTPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst		**Arterial Name**	SW 8 St.	**Study Period**	**Standard K**
Date Prepared	11/13/2014 8:20:08 AM	**From**	SR 9/SW 27 Ave.	**Modal Analysis**	Multimodal
Agency		**To**	US 1	**Program**	ARTPLAN 2012
Area Type	Large Urbanized	**Peak Direction**	Westbound	**Version Date**	12/12/2012
Arterial Class	2				

File Name	G:\PROJECTS\57675_Jacobs-FDOT SR7-SW8th St to Tamiami\05 Project Wking Files\Calcs\Operational Analyses\ARTPLAN\2L Transit Alt 3\SW 8 St 2L Transit Alt 3 2040.xap
User Notes	SW 8 St 2 Lanes+Transit Alt3,2040

Arterial Data

K	0.09	**PHF**	0.95	**Control Type**	CoordinatedActuated
D	0.999	**% Heavy Vehicles**	2	**Base Sat. Flow Rate**	1950

Automobile Intersection Data

Cross Street	Cycle Length	Thru g/C	Arr. Type	INT # Dir.Lanes	% Left Turns	% Right Turns	Left Turn Lanes	Left Turn Phasing	# Left Turn Lanes	LT Storage Length	Left g/C	Right Turn Lanes
SW 24 Ave.	150	0.8	3	2	2	3	No	None	N/A	N/A	N/A	No
SW 22 Ave.	150	0.47	3	2	12	9	No	None	N/A	N/A	N/A	No
SW 19 Ave.	150	0.69	3	2	5	5	No	None	N/A	N/A	N/A	No
SW 17 Ave.	150	0.52	3	2	10	6	No	None	N/A	N/A	N/A	No
SR 933/SW 12 Ave.	150	0.53	3	2	10	6	No	None	N/A	N/A	N/A	No
SR 7/SW 8 Ave.	150	0.57	3	2	7	4	No	None	N/A	N/A	N/A	No
SW 5 Ave.	150	0.6	3	2	0	9	No	None	N/A	N/A	N/A	No
SW 4 Ave.	150	0.51	3	2	1	0	No	None	N/A	N/A	N/A	No
SW 3 Ave.	150	0.67	3	2	0	12	No	None	N/A	N/A	N/A	No
SW 2 Ave.	150	0.59	3	2	4	4	No	None	N/A	N/A	N/A	No
SW 1 Ave.	150	0.58	3	2	18	0	No	None	N/A	N/A	N/A	No
S. Miami Ave.	150	0.61	3	2	0	16	No	None	N/A	N/A	N/A	No
US 1	150	0.31	3	1	33	16	No	None	N/A	N/A	N/A	No

Automobile Segment Data

Segment #	Length	AADT	Hourly Vol.	SEG # Dir.Lanes	Posted Speed	Free Flow Speed	Median Type	On-Street Parking	Parking Activity
1 (to SW 24 Ave.)	1361	15800	1421	2	30	35	None	Yes	Low
2 (to SW 22 Ave.)	1341	15400	1385	2	30	35	None	Yes	Low
3 (to SW 19 Ave.)	1890	16600	1493	2	30	35	None	Yes	Low
4 (to SW 17 Ave.)	813	16600	1493	2	30	35	None	Yes	Low

5 (to SR 933/SW 12 Ave.)	2656	16700	1501	2	30	35	None	Yes	Low
6 (to SR 7/SW 8 Ave.)	2313	15700	1412	2	30	35	None	Yes	Low
7 (to SW 5 Ave.)	1653	15600	1403	2	30	35	None	Yes	Low
8 (to SW 4 Ave.)	554	15900	1430	2	30	35	None	Yes	Low
9 (to SW 3 Ave.)	539	10800	971	2	30	35	None	Yes	Low
10 (to SW 2 Ave.)	576	31000	2787	2	30	35	None	Yes	Low
11 (to SW 1 Ave.)	581	29300	2634	2	30	35	None	Yes	Low
12 (to S. Miami Ave.)	655	28400	2553	2	30	35	None	Yes	Low
13 (to US 1)	898	26000	2338	1	30	35	None	Yes	Low

Automobile LOS

Segment #	Thru Mvmt Flow Rate	Adj. Sat. Flow Rate	v/c	Control Delay	Int. Approach LOS	Queue Ratio	Speed (mph)	Segment LOS
1 (to SW 24 Ave.)	1496	2611	0.716	8.38	A	0.00	24.14	B
2 (to SW 22 Ave.)	1458	2600	1.193	140.20	F	0.00	5.57	F
3 (to SW 19 Ave.)	1572	2607	0.874	18.76	B	0.00	21.65	C
4 (to SW 17 Ave.)	1572	2606	1.160	118.90	F	0.00	4.25	F
5 (to SR 933/SW 12 Ave.)	1580	2606	1.144	107.89	F	0.00	11.13	E
6 (to SR 7/SW 8 Ave.)	1486	2609	0.999	39.09	D	0.00	17.93	C
7 (to SW 5 Ave.)	1477	3250	0.757	22.26	C	0.00	19.51	C
8 (to SW 4 Ave.)	1505	2616	1.128	106.13	F	0.00	3.42	F
9 (to SW 3 Ave.)	1022	3153	0.484	12.16	B	0.00	14.64	D
10 (to SW 2 Ave.)	2934	2609	1.906	308.35	F	0.00	1.33	F
11 (to SW 1 Ave.)	2773	2616	1.827	150.77	F	0.00	2.59	F
12 (to S. Miami Ave.)	2687	3234	1.362	230.71	F	0.00	1.95	F
13 (to US 1)	2461	1245	1.416	252.38	F	0.00	NaN	F

Arterial Length	**3.1458**	**Weighted g/C**	**0.45**	**FFS Delay**	**NaN**	**Threshold Delay**	**NaN**	**Auto Speed**	**###**	**Auto LOS**	**###**

Automobile Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1000 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	**	**	280	380	***
2	**	**	680	760	***
3	**	**	1080	1160	***
4	**	**	1480	1540	***
*	**	**	380	***	***
Lanes	**Hourly Volume In Both Directions**				
2	**	**	290	380	***
4	**	**	690	770	***
6	**	**	1090	1170	***
8	**	**	1490	1560	***
*	**	**	380	***	***
Lanes	**Annual Average Daily Traffic**				
2	**	**	3200	4300	***
4	**	**	7600	8600	***
6	**	**	12100	12900	***
8	**	**	16500	17300	***
*	**	**	4300	***	***

Multimodal Segment Data

Segment #	Outside Lane Width	Pave Cond	Pave Shldr /Bike Lane	Side Path	Side Path Separation	Side walk	Sidewalk Roadway Separation	Sidewalk Roadway Protective Barrier	Bus Freq	Passenger Load Factor	Amenities	Bus Stop Type
1 (to SW 24 Ave.)	Typical	Typical	Yes	No	N/A	Yes	Typical	No	6	0.85	Excellent	Typical
2 (to SW 22 Ave.)	Typical	Typical	Yes	No	N/A	Yes	Typical	No	6	0.85	Excellent	Typical
3 (to SW 19 Ave.)	Typical	Typical	Yes	No	N/A	Yes	Typical	No	6	0.85	Excellent	Typical
4 (to SW 17 Ave.)	Typical	Typical	Yes	No	N/A	Yes	Typical	No	6	0.85	Excellent	Typical
5 (to SR 933/SW 12 Ave.)	Typical	Typical	Yes	No	N/A	Yes	Typical	No	6	0.85	Excellent	Typical
6 (to SR 7/SW 8 Ave.)	Typical	Typical	Yes	No	N/A	Yes	Typical	No	6	0.85	Excellent	Typical
7 (to SW 5 Ave.)	Typical	Typical	Yes	No	N/A	Yes	Typical	No	6	0.85	Excellent	Typical
8 (to SW 4 Ave.)	Typical	Typical	Yes	No	N/A	Yes	Typical	No	6	0.85	Excellent	Typical
9 (to SW 3 Ave.)	Typical	Typical	Yes	No	N/A	Yes	Typical	No	6	0.85	Excellent	Typical
10 (to SW 2 Ave.)	Typical	Typical	Yes	No	N/A	Yes	Typical	No	6	0.85	Excellent	Typical
11 (to SW 1 Ave.)	Typical	Typical	Yes	No	N/A	Yes	Typical	No	6	0.85	Excellent	Typical
12 (to S. Miami Ave.)	Typical	Typical	Yes	No	N/A	Yes	Typical	No	6	0.85	Excellent	Typical
13 (to US 1)	Typical	Typical	Yes	No	N/A	Yes	Typical	No	6	0.85	Excellent	Typical

Pedestrian SubSegment Data

	% of Segment			Sidewalk			Separation			Barrier		
Segment #	**1**	**2**	**3**	**1**	**2**	**3**	**1**	**2**	**3**	**1**	**2**	**3**
1 (to SW 24 Ave.)	100			Yes			Typical			No		
2 (to SW 22 Ave.)	100			Yes			Typical			No		
3 (to SW 19 Ave.)	100			Yes			Typical			No		
4 (to SW 17 Ave.)	100			Yes			Typical			No		
5 (to SR 933/SW 12 Ave.)	100			Yes			Typical			No		
6 (to SR 7/SW 8 Ave.)	100			Yes			Typical			No		
7 (to SW 5 Ave.)	100			Yes			Typical			No		
8 (to SW 4 Ave.)	100			Yes			Typical			No		
9 (to SW 3 Ave.)	100			Yes			Typical			No		
10 (to SW 2 Ave.)	100			Yes			Typical			No		
11 (to SW 1 Ave.)	100			Yes			Typical			No		
12 (to S. Miami Ave.)	100			Yes			Typical			No		
13 (to US 1)	100			Yes			Typical			No		

Multimodal LOS

	Bicycle Street		Bicycle Sidepath		Pedestrian					Bus	
Link #	**Score**	**LOS**	**Score**	**LOS**	**1**	**2**	**3**	**Score**	**LOS**	**Adj. Buses**	**LOS**

1 (to SW 24 Ave.)	1.61	A	N/A	N/A	2.99	C	5.93	B
2 (to SW 22 Ave.)	1.60	A	N/A	N/A	2.94	C	7.90	A
3 (to SW 19 Ave.)	1.65	A	N/A	N/A	3.09	C	6.91	A
4 (to SW 17 Ave.)	1.55	A	N/A	N/A	3.02	C	8.30	A
5 (to SR 933/SW 12 Ave.)	1.67	A	N/A	N/A	3.11	C	8.30	A
6 (to SR 7/SW 8 Ave.)	1.64	A	N/A	N/A	3.00	C	6.58	A
7 (to SW 5 Ave.)	1.62	A	N/A	N/A	2.98	C	6.58	A
8 (to SW 4 Ave.)	1.42	A	N/A	N/A	2.89	C	6.58	A
9 (to SW 3 Ave.)	1.19	A	N/A	N/A	2.34	B	4.59	B
10 (to SW 2 Ave.)	1.65	A	N/A	N/A	4.48	E	6.72	A
11 (to SW 1 Ave.)	1.65	A	N/A	N/A	4.31	E	6.72	A
12 (to S. Miami Ave.)	1.70	A	N/A	N/A	4.23	D	7.90	A
13 (to US 1)	NaN	F	N/A	N/A	NaN	F	0.00	F
	Bicycle LOS	**NaN**	**F**		**Pedestrian LOS**	**NaN**	**F**	**Bus LOS**	**6.66**	**A**

MultiModal Service Volume Tables

Bicycle

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	1000	> 1000	***	***	***
2	2000	> 2000	***	***	***
3	3000	> 3000	***	***	***
4	4000	> 4000	***	***	***
*	1000	> 1000	***	***	***
Lanes	**Hourly Volume In Both Directions**				
2	1010	> 1010	***	***	***
4	2010	> 2010	***	***	***
6	3010	> 3010	***	***	***
8	4010	> 4010	***	***	***
*	1010	> 1010	***	***	***
Lanes	**Annual Average Daily Traffic**				
2	11200	> 11200	***	***	***
4	22300	> 22300	***	***	***
6	33400	> 33400	***	***	***
8	44500	> 44500	***	***	***
*	11200	> 11200	***	***	***

Pedestrian

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	300	620	950	1000	> 1000
2	580	1230	1880	2000	> 2000
3	860	1830	2800	3000	> 3000
4	1140	2430	3720	4000	> 4000
*	540	1000	> 1000	***	***
Lanes	**Hourly Volume In Both Directions**				
2	300	630	950	1010	> 1010
4	580	1230	1880	2010	> 2010
6	860	1830	2800	3010	> 3010
8	1140	2430	3730	4010	> 4010
*	550	1010	> 1010	***	***
Lanes	**Annual Average Daily Traffic**				
2	3300	6900	10500	11200	> 11200
4	6500	13700	20900	22300	> 22300
6	9600	20300	31100	33400	> 33400
8	12600	27000	41400	44500	> 44500
*	6100	11200	> 11200	***	***

Bus

A	B	C	D	E
Buses Per Hour In Peak Direction				
>= 5	>= 4	>= 3	>= 2	>= 1
Buses in Study Hour in Peak Direction (Daily)				

>= 4.84	>= 3.23	>= 2.42	>= 1.62	>= 0.81

*** Service Volumes for the specific facility being analyzed, based on # of lanes from the intersection and segment data screens.**
**** Cannot be achieved based on input data provided.**
***** Not applicable for that level of service letter grade. See generalized tables notes for more details.**
 # Under the given conditions, left turn lane storage is highly likely to overflow. The number of directional thru lanes should be reduced accordingly.
Facility weighted g/C exceeds normally acceptable upper range (0.5); verify that g/C inputs are correct.
Intersection capacity (ies) are exceeded for the full hour; an operational level analysis tool is more appropriate for this situation.

ARTPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst		**Arterial Name**	SR 90/SW 7 St.	**Study Period**	**Standard K**
Date Prepared	11/13/2014 12:41:23 PM	**From**	US 1	**Modal Analysis**	Multimodal
Agency		**To**	SR 9/SW 27 Ave.	**Program**	ARTPLAN 2012
Area Type	Large Urbanized	**Peak Direction**	Eastbound	**Version Date**	12/12/2012
Arterial Class	2				
File Name	G:\PROJECTS\57675_Jacobs-FDOT SR7-SW8th St to Tamiami\05 Project Wking Files\Calcs\Operational Analyses\ARTPLAN\2L Transit Alt 3\SW 7 St 2L Transit Alt 3 2040.xap				
User Notes	2 Lanes+Transit Alternative 3, 2040				

Arterial Data

K	0.09	**PHF**	0.95	**Control Type**	CoordinatedActuated
D	0.999	**% Heavy Vehicles**	2	**Base Sat. Flow Rate**	1950

Automobile Intersection Data

Cross Street	Cycle Length	Thru g/C	Arr. Type	INT # Dir.Lanes	% Left Turns	% Right Turns	Left Turn Lanes	Left Turn Phasing	# Left Turn Lanes	LT Storage Length	Left g/C	Right Turn Lanes
S. Miami Ave.	150	0.62	3	2	40	0	No	None	N/A	N/A	N/A	No
SW 1 Ave.	150	0.47	3	2	0	20	No	None	N/A	N/A	N/A	No
SW 2 Ave.	150	0.65	3	2	22	16	No	None	N/A	N/A	N/A	No
SW 3 Ave.	150	0.61	3	2	11	11	No	None	N/A	N/A	N/A	No
SW 4 Ave.	150	0.47	3	2	0	7	No	None	N/A	N/A	N/A	No
SR 7/SW 8 Ave.	150	0.65	3	2	8	2	No	None	N/A	N/A	N/A	No
SR 933/SW 12 Ave.	150	0.57	3	2	7	4	No	None	N/A	N/A	N/A	No
SW 16 Ave.	150	0.79	3	2	0	5	No	None	N/A	N/A	N/A	No
SW 17 Ave.	150	0.58	3	2	5	4	No	None	N/A	N/A	N/A	No
SW 19 Ave.	150	0.72	3	2	5	5	No	None	N/A	N/A	N/A	No
SW 22 Ave.	150	0.44	3	2	6	3	No	None	N/A	N/A	N/A	No
Beacom Blvd.	150	0.44	3	2	7	3	No	None	N/A	N/A	N/A	No
SR 9/SW 27 Ave.	130	0.22	3	1	38	24	Yes	Protected	1	235	0.12	Yes

Automobile Segment Data

Segment #	Length	AADT	Hourly Vol.	SEG # Dir.Lanes	Posted Speed	Free Flow Speed	Median Type	On-Street Parking	Parking Activity
1 (to S. Miami Ave.)	966	19200	1726	2	30	35	None	No	N/A
2 (to SW 1 Ave.)	576	25300	2275	2	30	35	None	No	N/A

3 (to SW 2 Ave.)	781	24700	2221	2	30	35	None	No	N/A
4 (to SW 3 Ave.)	554	31100	2796	2	30	35	None	No	N/A
5 (to SW 4 Ave.)	533	31500	2832	2	30	35	None	No	N/A
6 (to SR 7/SW 8 Ave.)	2218	30500	2742	2	30	35	None	No	N/A
7 (to SR 933/SW 12 Ave.)	2313	29800	2679	2	30	35	None	No	N/A
8 (to SW 16 Ave.)	2196	30000	2697	2	30	35	None	No	N/A
9 (to SW 17 Ave.)	465	30000	2697	2	30	35	None	No	N/A
10 (to SW 19 Ave.)	1352	27800	2499	2	30	35	None	No	N/A
11 (to SW 22 Ave.)	1341	27800	2499	2	30	35	None	No	N/A
12 (to Beacom Blvd.)	2096	26400	2374	2	30	35	None	No	N/A
13 (to SR 9/SW 27 Ave.)	438	22300	2005	1	30	35	None	No	N/A

Automobile LOS

Segment #	Thru Mvmt Flow Rate	Adj. Sat. Flow Rate	v/c	Control Delay	Int. Approach LOS	Queue Ratio	Speed (mph)	Segment LOS
1 (to S. Miami Ave.)	1817	2431	0.221	12.88	B	0.00	19.31	C
2 (to SW 1 Ave.)	2395	3225	0.987	59.38	E	0.00	5.81	F
3 (to SW 2 Ave.)	2338	2587	0.910	23.77	C	0.00	13.29	D
4 (to SW 3 Ave.)	2943	2596	1.858	301.50	F	0.00	1.32	F
5 (to SW 4 Ave.)	2981	3255	1.949	677.83	F	0.00	0.58	F
6 (to SR 7/SW 8 Ave.)	2886	2613	1.700	227.25	F	0.00	5.53	F
7 (to SR 933/SW 12 Ave.)	2820	2609	1.896	231.91	F	0.00	5.63	F
8 (to SW 16 Ave.)	2839	3259	1.103	72.50	E	0.00	12.29	E
9 (to SW 17 Ave.)	2839	2609	1.876	244.21	F	0.00	1.38	F
10 (to SW 19 Ave.)	2631	2607	1.401	-479.94	A	0.00	-2.15	F
11 (to SW 22 Ave.)	2631	2611	2.290	-2559.24	A	0.00	-0.38	F
12 (to Beacom Blvd.)	2499	2611	2.175	1077.31	F	0.00	1.31	F
13 (to SR 9/SW 27 Ave.)	802	1230	0.965	60.24	E	#	NaN	F

Arterial Length	**3.1456**	**Weighted g/C**	**0.40**	**FFS Delay**	**NaN**	**Threshold Delay**	**NaN**	**Auto Speed**	**###**	**Auto LOS**	**###**

Automobile Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1000 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	**	**	340	560	***
2	**	**	780	1140	***
3	**	**	1240	1700	***
4	**	**	1700	2280	***
*	**	**	610	720	***
Lanes	**Hourly Volume In Both Directions**				
2	**	**	350	560	***
4	**	**	790	1140	***
6	**	**	1250	1710	***
8	**	**	1710	2280	***
*	**	**	620	720	***
Lanes	**Annual Average Daily Traffic**				
2	**	**	3800	6200	***
4	**	**	8700	12600	***
6	**	**	13800	19000	***
8	**	**	19000	25400	***
*	**	**	6800	8000	***

Multimodal Segment Data

Segment #	Outside Lane Width	Pave Cond	Pave Shldr /Bike Lane	Side Path	Side Path Separation	Side walk	Sidewalk Roadway Separation	Sidewalk Roadway Protective Barrier	Bus Freq	Passenger Load Factor	Amenities	Bus Stop Type
1 (to S. Miami Ave.)	Typical	Typical	Yes	No	N/A	Yes	Typical	No	6	0.85	Excellent	Typical
2 (to SW 1 Ave.)	Typical	Typical	Yes	No	N/A	Yes	Typical	No	6	0.85	Excellent	Typical
3 (to SW 2 Ave.)	Typical	Typical	Yes	No	N/A	Yes	Typical	No	6	0.85	Excellent	Typical
4 (to SW 3 Ave.)	Typical	Typical	Yes	No	N/A	Yes	Typical	No	6	0.85	Excellent	Typical
5 (to SW 4 Ave.)	Typical	Typical	Yes	No	N/A	Yes	Typical	No	6	0.85	Excellent	Typical
6 (to SR 7/SW 8 Ave.)	Typical	Typical	Yes	No	N/A	Yes	Typical	No	6	0.85	Excellent	Typical
7 (to SR 933/SW 12 Ave.)	Typical	Typical	Yes	No	N/A	Yes	Typical	No	6	0.85	Excellent	Typical
8 (to SW 16 Ave.)	Typical	Typical	Yes	No	N/A	Yes	Typical	No	6	0.85	Excellent	Typical
9 (to SW 17 Ave.)	Typical	Typical	Yes	No	N/A	Yes	Typical	No	6	0.85	Excellent	Typical
10 (to SW 19 Ave.)	Typical	Typical	Yes	No	N/A	Yes	Typical	No	6	0.85	Excellent	Typical
11 (to SW 22 Ave.)	Typical	Typical	Yes	No	N/A	Yes	Typical	No	6	0.85	Excellent	Typical
12 (to Beacom Blvd.)	Typical	Typical	Yes	No	N/A	Yes	Typical	No	6	0.85	Excellent	Typical
13 (to SR 9/SW 27 Ave.)	Typical	Typical	Yes	No	N/A	Yes	Typical	No	6	0.85	Excellent	Typical

Pedestrian SubSegment Data

	% of Segment			Sidewalk			Separation			Barrier		
Segment #	**1**	**2**	**3**	**1**	**2**	**3**	**1**	**2**	**3**	**1**	**2**	**3**
1 (to S. Miami Ave.)	100			Yes			Typical			No		
2 (to SW 1 Ave.)	100			Yes			Typical			No		
3 (to SW 2 Ave.)	100			Yes			Typical			No		
4 (to SW 3 Ave.)	100			Yes			Typical			No		
5 (to SW 4 Ave.)	100			Yes			Typical			No		
6 (to SR 7/SW 8 Ave.)	100			Yes			Typical			No		
7 (to SR 933/SW 12 Ave.)	100			Yes			Typical			No		
8 (to SW 16 Ave.)	100			Yes			Typical			No		
9 (to SW 17 Ave.)	100			Yes			Typical			No		
10 (to SW 19 Ave.)	100			Yes			Typical			No		
11 (to SW 22 Ave.)	100			Yes			Typical			No		
12 (to Beacom Blvd.)	100			Yes			Typical			No		
13 (to SR 9/SW 27 Ave.)	100			Yes			Typical			No		

Multimodal LOS

	Bicycle	Bicycle	Pedestrian	Bus

	Street		Sidepath								
Link #	**Score**	**LOS**	**Score**	**LOS**	**1**	**2**	**3**	**Score**	**LOS**	**Adj. Buses**	**LOS**
1 (to S. Miami Ave.)	2.65	B	N/A	N/A				3.63	D	5.93	B
2 (to SW 1 Ave.)	2.17	B	N/A	N/A				2.57	B	6.55	A
3 (to SW 2 Ave.)	2.52	B	N/A	N/A				3.20	C	5.93	B
4 (to SW 3 Ave.)	2.61	B	N/A	N/A				3.92	D	7.90	A
5 (to SW 4 Ave.)	2.67	B	N/A	N/A				4.85	E	6.72	A
6 (to SR 7/SW 8 Ave.)	2.85	C	N/A	N/A				4.83	E	6.72	A
7 (to SR 933/SW 12 Ave.)	2.85	C	N/A	N/A				4.76	E	6.72	A
8 (to SW 16 Ave.)	2.85	C	N/A	N/A				4.78	E	6.72	A
9 (to SW 17 Ave.)	2.59	B	N/A	N/A				4.67	E	6.72	A
10 (to SW 19 Ave.)	2.81	C	N/A	N/A				4.54	E	8.39	A
11 (to SW 22 Ave.)	2.81	C	N/A	N/A				4.54	E	8.39	A
12 (to Beacom Blvd.)	2.82	C	N/A	N/A				4.41	E	8.39	A
13 (to SR 9/SW 27 Ave.)	NaN	F	N/A	N/A				NaN	F	0.00	F
	Bicycle LOS	**NaN**	**F**				**Pedestrian LOS**	**NaN**	**F**	**Bus LOS**	**6.96**	**A**

MultiModal Service Volume Tables

Bicycle

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	300	1000	> 1000	***	***
2	590	2000	> 2000	***	***
3	880	3000	> 3000	***	***
4	1180	4000	> 4000	***	***
*	580	1000	> 1000	***	***
Lanes	**Hourly Volume In Both Directions**				
2	300	1010	> 1010	***	***
4	590	2010	> 2010	***	***
6	890	3010	> 3010	***	***
8	1180	4010	> 4010	***	***
*	580	1010	> 1010	***	***
Lanes	**Annual Average Daily Traffic**				
2	3300	11200	> 11200	***	***
4	6600	22300	> 22300	***	***
6	9800	33400	> 33400	***	***
8	13100	44500	> 44500	***	***
*	6500	11200	> 11200	***	***

Pedestrian

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	160	480	800	1000	> 1000
2	300	950	1600	2000	> 2000
3	460	1420	2400	3000	> 3000
4	610	1900	3190	4000	> 4000
*	300	920	1000	> 1000	***
Lanes	**Hourly Volume In Both Directions**				
2	160	480	800	1010	> 1010
4	310	950	1600	2010	> 2010
6	460	1430	2400	3010	> 3010
8	610	1900	3200	4010	> 4010
*	300	920	1010	> 1010	***
Lanes	**Annual Average Daily Traffic**				
2	1700	5300	8900	11200	> 11200
4	3400	10600	17800	22300	> 22300
6	5100	15800	26700	33400	> 33400
8	6800	21100	35500	44500	> 44500
*	3300	10200	11200	> 11200	***

Bus

A	B	C	D	E
Buses Per Hour In Peak Direction				
>= 5	>= 4	>= 3	>= 2	>= 1
Buses in Study Hour in Peak Direction (Daily)				

>= 4.96	>= 3.31	>= 2.48	>= 1.66	>= 0.83

*** Service Volumes for the specific facility being analyzed, based on # of lanes from the intersection and segment data screens.**
**** Cannot be achieved based on input data provided.**
***** Not applicable for that level of service letter grade. See generalized tables notes for more details.**
 # Under the given conditions, left turn lane storage is highly likely to overflow. The number of directional thru lanes should be reduced accordingly.
Facility weighted g/C exceeds normally acceptable upper range (0.5); verify that g/C inputs are correct.
Intersection capacity (ies) are exceeded for the full hour; an operational level analysis tool is more appropriate for this situation.

ARTPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst		**Arterial Name**	SW 8 St.	**Study Period**	**Standard K**
Date Prepared	11/13/2014 8:20:08 AM	**From**	SR 9/SW 27 Ave.	**Modal Analysis**	Multimodal
Agency		**To**	US 1	**Program**	ARTPLAN 2012
Area Type	Large Urbanized	**Peak Direction**	Eastbound	**Version Date**	12/12/2012
Arterial Class	2				

File Name	G:\PROJECTS\57675_Jacobs-FDOT SR7-SW8th St to Tamiami\05 Project Wking Files\Calcs\Operational Analyses\ARTPLAN\2Way Alt 3\SW 8 St 2Way Alt 3 2020.xap
User Notes	SW 8 St 2 Way Alt3,2020

Arterial Data

K	0.09	**PHF**	0.95	**Control Type**	CoordinatedActuated
D	0.589	**% Heavy Vehicles**	2	**Base Sat. Flow Rate**	1950

Automobile Intersection Data

Cross Street	Cycle Length	Thru g/C	Arr. Type	INT # Dir.Lanes	% Left Turns	% Right Turns	Left Turn Lanes	Left Turn Phasing	# Left Turn Lanes	LT Storage Length	Left g/C	Right Turn Lanes
SW 24 Ave.	120	0.71	3	1	5	5	Yes	ProtPerm	1	235	0.07	No
SW 22 Ave.	120	0.45	3	1	5	5	Yes	ProtPerm	1	235	0.07	No
SW 19 Ave.	120	0.69	3	1	5	5	Yes	ProtPerm	1	235	0.07	No
SW 17 Ave.	120	0.5	3	1	5	5	Yes	ProtPerm	1	235	0.07	No
SR 933/SW 12 Ave.	120	0.51	3	1	5	5	Yes	ProtPerm	1	235	0.07	No
SR 7/SW 8 Ave.	120	0.62	3	1	5	4	Yes	ProtPerm	1	235	0.07	No
SW 5 Ave.	120	0.56	3	1	0	5	Yes	ProtPerm	1	235	0.07	No
SW 4 Ave.	130	0.6	3	1	5	0	Yes	ProtPerm	1	235	0.07	No
SW 3 Ave.	130	0.54	3	1	0	5	Yes	ProtPerm	1	235	0.07	No
SW 2 Ave.	130	0.58	3	1	5	5	Yes	ProtPerm	1	235	0.07	No
SW 1 Ave.	130	0.51	3	1	5	0	Yes	ProtPerm	1	235	0.07	No
S. Miami Ave.	130	0.55	3	1	0	5	Yes	ProtPerm	1	235	0.07	No
US 1	140	0.31	3	1	8	8	Yes	Protected	1	235	0.07	No

Automobile Segment Data

Segment #	Length	AADT	Hourly Vol.	SEG # Dir.Lanes	Posted Speed	Free Flow Speed	Median Type	On-Street Parking	Parking Activity
1 (to SW 24 Ave.)	1361	11100	588	1	30	35	None	Yes	Low
2 (to SW 22 Ave.)	1341	11800	626	1	30	35	None	Yes	Low
3 (to SW 19 Ave.)	1890	12800	679	1	30	35	None	Yes	Low
4 (to SW 17 Ave.)	813	12800	679	1	30	35	None	Yes	Low

5 (to SR 933/SW 12 Ave.)	2656	13600	721	1	30	35	None	Yes	Low
6 (to SR 7/SW 8 Ave.)	2313	12700	673	1	30	35	None	Yes	Low
7 (to SW 5 Ave.)	1653	12600	668	1	30	35	None	Yes	Low
8 (to SW 4 Ave.)	554	12000	636	1	30	35	None	Yes	Low
9 (to SW 3 Ave.)	539	18400	975	1	30	35	None	Yes	Low
10 (to SW 2 Ave.)	576	23100	1225	1	30	35	None	Yes	Low
11 (to SW 1 Ave.)	581	20400	1081	1	30	35	None	Yes	Low
12 (to S. Miami Ave.)	655	21000	1113	1	30	35	None	Yes	Low
13 (to US 1)	898	19600	1039	1	30	35	None	Yes	Low

Automobile LOS

Segment #	Thru Mvmt Flow Rate	Adj. Sat. Flow Rate	v/c	Control Delay	Int. Approach LOS	Queue Ratio	Speed (mph)	Segment LOS
1 (to SW 24 Ave.)	588	1552	0.533	9.66	A	0.11	23.07	B
2 (to SW 22 Ave.)	626	1559	0.892	44.10	D	0.11	12.54	E
3 (to SW 19 Ave.)	679	1568	0.628	11.09	B	0.12	24.43	B
4 (to SW 17 Ave.)	679	1568	0.866	35.95	D	0.12	10.28	E
5 (to SR 933/SW 12 Ave.)	721	1575	0.898	33.13	C	0.13	20.03	C
6 (to SR 7/SW 8 Ave.)	673	1568	0.692	16.50	B	0.12	23.64	B
7 (to SW 5 Ave.)	703	1572	0.799	26.10	C	0.00	18.09	C
8 (to SW 4 Ave.)	636	1575	0.673	19.39	B	0.12	11.46	E
9 (to SW 3 Ave.)	1026	1606	1.184	129.03	F	0.00	2.79	F
10 (to SW 2 Ave.)	1225	1606	1.280	171.14	F	0.24	2.29	F
11 (to SW 1 Ave.)	1081	1611	1.239	151.00	F	0.20	2.58	F
12 (to S. Miami Ave.)	1172	1606	1.326	196.34	F	0.00	2.26	F
13 (to US 1)	1006	1597	1.506	291.10	F	0.37	2.07	F

Arterial Length	**3.1458**	**Weighted g/C**	**0.44**	**FFS Delay**	**1220.86**	**Threshold Delay**	**658.08**	**Auto Speed**	**###**	**Auto LOS**	**###**

Automobile Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1000 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1					
2					
3					
4					
*					
Lanes	**Hourly Volume In Both Directions**				
2					
4					
6					
8					
*					
Lanes	**Annual Average Daily Traffic**				
2					
4					
6					
8					
*					

Multimodal Segment Data

Segment #	Outside Lane Width	Pave Cond	Pave Shldr /Bike Lane	Side Path	Side Path Separation	Side walk	Sidewalk Roadway Separation	Sidewalk Roadway Protective Barrier	Bus Freq	Passenger Load Factor	Amenities	Bus Stop Type
1 (to SW 24 Ave.)	Typical	Typical	Yes	No	N/A	Yes	Wide	No	6	0.69	Fair	Typical
2 (to SW 22 Ave.)	Typical	Typical	Yes	No	N/A	Yes	Wide	No	6	0.69	Fair	Typical
3 (to SW 19 Ave.)	Typical	Typical	Yes	No	N/A	Yes	Wide	No	6	0.69	Fair	Typical
4 (to SW 17 Ave.)	Typical	Typical	Yes	No	N/A	Yes	Wide	No	6	0.69	Fair	Typical
5 (to SR 933/SW 12 Ave.)	Typical	Typical	Yes	No	N/A	Yes	Wide	No	6	0.69	Fair	Typical
6 (to SR 7/SW 8 Ave.)	Typical	Typical	Yes	No	N/A	Yes	Wide	No	6	0.69	Fair	Typical
7 (to SW 5 Ave.)	Typical	Typical	Yes	No	N/A	Yes	Wide	No	6	0.69	Fair	Typical
8 (to SW 4 Ave.)	Typical	Typical	Yes	No	N/A	Yes	Wide	No	6	0.69	Fair	Typical
9 (to SW 3 Ave.)	Typical	Typical	Yes	No	N/A	Yes	Wide	No	6	0.69	Fair	Typical
10 (to SW 2 Ave.)	Typical	Typical	Yes	No	N/A	Yes	Wide	No	6	0.69	Fair	Typical
11 (to SW 1 Ave.)	Typical	Typical	Yes	No	N/A	Yes	Wide	No	6	0.69	Fair	Typical
12 (to S. Miami Ave.)	Typical	Typical	Yes	No	N/A	Yes	Wide	No	6	0.69	Fair	Typical
13 (to US 1)	Typical	Typical	Yes	No	N/A	Yes	Wide	No	6	0.69	Fair	Typical

Pedestrian SubSegment Data

	% of Segment			Sidewalk			Separation			Barrier		
Segment #	1	2	3	1	2	3	1	2	3	1	2	3
1 (to SW 24 Ave.)	100			Yes			Wide			No		
2 (to SW 22 Ave.)	100			Yes			Wide			No		
3 (to SW 19 Ave.)	100			Yes			Wide			No		
4 (to SW 17 Ave.)	100			Yes			Wide			No		
5 (to SR 933/SW 12 Ave.)	100			Yes			Wide			No		
6 (to SR 7/SW 8 Ave.)	100			Yes			Wide			No		
7 (to SW 5 Ave.)	100			Yes			Wide			No		
8 (to SW 4 Ave.)	100			Yes			Wide			No		
9 (to SW 3 Ave.)	100			Yes			Wide			No		
10 (to SW 2 Ave.)	100			Yes			Wide			No		
11 (to SW 1 Ave.)	100			Yes			Wide			No		
12 (to S. Miami Ave.)	100			Yes			Wide			No		
13 (to US 1)	100			Yes			Wide			No		

Multimodal LOS

	Bicycle Street		Bicycle Sidepath		Pedestrian					Bus	
Link #	Score	LOS	Score	LOS	1	2	3	Score	LOS	Adj. Buses	LOS

1 (to SW 24 Ave.)	1.50	A	N/A	N/A	2.68	B	5.94	B
2 (to SW 22 Ave.)	1.52	A	N/A	N/A	2.77	C	6.30	A
3 (to SW 19 Ave.)	1.59	A	N/A	N/A	2.92	C	6.30	A
4 (to SW 17 Ave.)	1.46	A	N/A	N/A	2.83	C	6.30	A
5 (to SR 933/SW 12 Ave.)	1.64	A	N/A	N/A	3.03	C	6.30	A
6 (to SR 7/SW 8 Ave.)	1.60	A	N/A	N/A	2.91	C	6.30	A
7 (to SW 5 Ave.)	1.57	A	N/A	N/A	2.88	C	6.30	A
8 (to SW 4 Ave.)	1.27	A	N/A	N/A	2.67	B	5.94	B
9 (to SW 3 Ave.)	1.42	A	N/A	N/A	3.47	C	7.94	A
10 (to SW 2 Ave.)	1.53	A	N/A	N/A	4.07	D	7.56	A
11 (to SW 1 Ave.)	1.50	A	N/A	N/A	3.66	D	7.56	A
12 (to S. Miami Ave.)	1.57	A	N/A	N/A	3.69	D	7.56	A
13 (to US 1)	1.64	A	N/A	N/A	3.68	D	7.56	A
	Bicycle LOS	1.56	A		Pedestrian LOS	3.09	C	Bus LOS 6.54 A

MultiModal Service Volume Tables

Bicycle

	A	B	C	D	E
Lanes	Hourly Volume In Peak Direction				
1	0	0	0	0	0
2	0	0	0	0	0
3	0	0	0	0	0
4	0	0	0	0	0
*	0	0	0	0	0
Lanes	Hourly Volume In Both Directions				
2	0	0	0	0	0
4	0	0	0	0	0
6	0	0	0	0	0
8	0	0	0	0	0
*	0	0	0	0	0
Lanes	Annual Average Daily Traffic				
2	0	0	0	0	0
4	0	0	0	0	0
6	0	0	0	0	0
8	0	0	0	0	0
*	0	0	0	0	0

Pedestrian

	A	B	C	D	E
Lanes	Hourly Volume In Peak Direction				
1	0	0	0	0	0
2	0	0	0	0	0
3	0	0	0	0	0
4	0	0	0	0	0
*	0	0	0	0	0
Lanes	Hourly Volume In Both Directions				
2	0	0	0	0	0
4	0	0	0	0	0
6	0	0	0	0	0
8	0	0	0	0	0
*	0	0	0	0	0
Lanes	Annual Average Daily Traffic				
2	0	0	0	0	0
4	0	0	0	0	0
6	0	0	0	0	0
8	0	0	0	0	0
*	0	0	0	0	0

Bus

A	B	C	D	E
Buses Per Hour In Peak Direction				
Buses in Study Hour in Peak Direction (Daily)				

*** Service Volumes for the specific facility being analyzed, based on # of lanes from the intersection and segment data screens.**
**** Cannot be achieved based on input data provided.**
***** Not applicable for that level of service letter grade. See generalized tables notes for more details.**
 # Under the given conditions, left turn lane storage is highly likely to overflow. The number of directional thru lanes should be reduced accordingly.
Facility weighted g/C exceeds normally acceptable upper range (0.5); verify that g/C inputs are correct.
Intersection capacity (ies) are exceeded for the full hour; an operational level analysis tool is more appropriate for this situation.

ARTPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst		**Arterial Name**	SR 90/SW 7 St.	**Study Period**	**Standard K**
Date Prepared	11/13/2014 12:41:23 PM	**From**	US 1	**Modal Analysis**	Multimodal
Agency		**To**	SR 9/SW 27 Ave.	**Program**	ARTPLAN 2012
Area Type	Large Urbanized	**Peak Direction**	Westbound	**Version Date**	12/12/2012
Arterial Class	2				
File Name	G:\PROJECTS\57675_Jacobs-FDOT SR7-SW8th St to Tamiami\05 Project Wking Files\Calcs\Operational Analyses\ARTPLAN\2Way Alt 3\SW 7 St 2Way Alt 3 2020.xap				
User Notes	2 Way Alternative 3, 2020				

Arterial Data

K	0.09	**PHF**	0.95	**Control Type**	CoordinatedActuated
D	0.999	**% Heavy Vehicles**	2	**Base Sat. Flow Rate**	1950

Automobile Intersection Data

Cross Street	Cycle Length	Thru g/C	Arr. Type	INT # Dir.Lanes	% Left Turns	% Right Turns	Left Turn Lanes	Left Turn Phasing	# Left Turn Lanes	LT Storage Length	Left g/C	Right Turn Lanes
S. Miami Ave.	150	0.54	3	1	5	0	Yes	ProtPerm	1	235	0.07	No
SW 1 Ave.	150	0.33	3	1	0	5	Yes	ProtPerm	1	235	0.07	No
SW 2 Ave.	150	0.49	3	1	5	5	Yes	ProtPerm	1	235	0.07	No
SW 3 Ave.	150	0.6	3	1	5	5	Yes	ProtPerm	1	235	0.07	No
SW 4 Ave.	150	0.29	3	1	0	5	Yes	ProtPerm	1	235	0.07	No
SR 7/SW 8 Ave.	120	0.68	3	1	5	5	Yes	ProtPerm	1	235	0.07	No
SR 933/SW 12 Ave.	120	0.47	3	1	5	5	Yes	ProtPerm	1	235	0.07	No
SW 16 Ave.	120	0.67	3	1	0	5	Yes	ProtPerm	1	235	0.07	No
SW 17 Ave.	120	0.46	3	1	5	5	Yes	ProtPerm	1	235	0.07	No
SW 19 Ave.	120	0.72	3	1	5	5	Yes	ProtPerm	1	235	0.07	No
SW 22 Ave.	120	0.44	3	1	5	5	Yes	ProtPerm	1	235	0.07	No
Beacom Blvd.	120	0.22	3	1	5	5	Yes	ProtPerm	1	235	0.07	No
SR 9/SW 27 Ave.	130	0.11	3	1	5	5	Yes	Protected	1	235	0.07	Yes

Automobile Segment Data

Segment #	Length	AADT	Hourly Vol.	SEG # Dir.Lanes	Posted Speed	Free Flow Speed	Median Type	On-Street Parking	Parking Activity
1 (to S. Miami Ave.)	966	11000	989	1	30	35	None	No	N/A
2 (to SW 1 Ave.)	576	12800	1151	1	30	35	None	No	N/A

3 (to SW 2 Ave.)	781	12100	1088	1	30	35	None	No	N/A
4 (to SW 3 Ave.)	554	14200	1277	1	30	35	None	No	N/A
5 (to SW 4 Ave.)	533	14600	1313	1	30	35	None	No	N/A
6 (to SR 7/SW 8 Ave.)	2218	11900	1070	1	30	35	None	No	N/A
7 (to SR 933/SW 12 Ave.)	2313	11700	1052	1	30	35	None	No	N/A
8 (to SW 16 Ave.)	2196	12200	1097	1	30	35	None	No	N/A
9 (to SW 17 Ave.)	465	12200	1097	1	30	35	None	No	N/A
10 (to SW 19 Ave.)	1352	11200	1007	1	30	35	None	No	N/A
11 (to SW 22 Ave.)	1341	11200	1007	1	30	35	None	No	N/A
12 (to Beacom Blvd.)	2096	10700	962	1	30	35	None	No	N/A
13 (to SR 9/SW 27 Ave.)	438	9000	809	1	30	35	None	No	N/A

Automobile LOS

Segment #	Thru Mvmt Flow Rate	Adj. Sat. Flow Rate	v/c	Control Delay	Int. Approach LOS	Queue Ratio	Speed (mph)	Segment LOS
1 (to S. Miami Ave.)	989	1611	1.137	104.04	F	0.22	5.47	F
2 (to SW 1 Ave.)	1212	1606	1.776	430.99	F	0.00	0.97	F
3 (to SW 2 Ave.)	1088	1606	1.117	97.83	F	0.18	4.88	F
4 (to SW 3 Ave.)	1277	1606	1.177	121.61	F	0.24	3.05	F
5 (to SW 4 Ave.)	1382	1606	1.918	499.07	F	0.00	0.79	F
6 (to SR 7/SW 8 Ave.)	1070	1602	0.807	14.22	B	0.11	25.12	B
7 (to SR 933/SW 12 Ave.)	1052	1604	1.183	127.17	F	0.16	9.07	F
8 (to SW 16 Ave.)	1155	1606	1.073	58.30	E	0.00	14.28	D
9 (to SW 17 Ave.)	1097	1606	1.355	206.90	F	0.20	1.62	F
10 (to SW 19 Ave.)	1007	1606	0.871	13.54	B	0.16	21.38	C
11 (to SW 22 Ave.)	1007	1606	1.326	195.57	F	0.18	4.20	F
12 (to Beacom Blvd.)	962	1572	2.038	534.34	F	0.16	2.53	F
13 (to SR 9/SW 27 Ave.)	766	1533	3.018	986.60	F	0.11	0.34	F

Arterial Length	**3.1456**	**Weighted g/C**	**0.30**	**FFS Delay**	**3459.22**	**Threshold Delay**	**2896.48**	**Auto Speed**	**###**	**Auto LOS**	**###**

Automobile Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1000 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1					
2					
3					
4					
*					
Lanes	**Hourly Volume In Both Directions**				
2					
4					
6					
8					
*					
Lanes	**Annual Average Daily Traffic**				
2					
4					
6					
8					
*					

Multimodal Segment Data

Segment #	Outside Lane Width	Pave Cond	Pave Shldr /Bike Lane	Side Path	Side Path Separation	Side walk	Sidewalk Roadway Separation	Sidewalk Roadway Protective Barrier	Bus Freq	Passenger Load Factor	Amenities	Bus Stop Type
1 (to S. Miami Ave.)	Typical	Typical	No	No	N/A	Yes	Wide	No	6	0.7	Fair	Typical
2 (to SW 1 Ave.)	Typical	Typical	No	No	N/A	Yes	Wide	No	6	0.7	Fair	Typical
3 (to SW 2 Ave.)	Typical	Typical	No	No	N/A	Yes	Wide	No	6	0.7	Fair	Typical
4 (to SW 3 Ave.)	Typical	Typical	No	No	N/A	Yes	Wide	No	6	0.7	Fair	Typical
5 (to SW 4 Ave.)	Typical	Typical	No	No	N/A	Yes	Wide	No	6	0.7	Fair	Typical
6 (to SR 7/SW 8 Ave.)	Typical	Typical	No	No	N/A	Yes	Wide	No	6	0.7	Fair	Typical
7 (to SR 933/SW 12 Ave.)	Typical	Typical	No	No	N/A	Yes	Wide	No	6	0.7	Fair	Typical
8 (to SW 16 Ave.)	Typical	Typical	No	No	N/A	Yes	Wide	No	6	0.7	Fair	Typical
9 (to SW 17 Ave.)	Typical	Typical	No	No	N/A	Yes	Wide	No	6	0.7	Fair	Typical
10 (to SW 19 Ave.)	Typical	Typical	No	No	N/A	Yes	Wide	No	6	0.7	Fair	Typical
11 (to SW 22 Ave.)	Typical	Typical	No	No	N/A	Yes	Wide	No	6	0.7	Fair	Typical
12 (to Beacom Blvd.)	Typical	Typical	No	No	N/A	Yes	Wide	No	6	0.7	Fair	Typical
13 (to SR 9/SW 27 Ave.)	Typical	Typical	No	No	N/A	Yes	Wide	No	6	0.7	Fair	Typical

Pedestrian SubSegment Data

	% of Segment			Sidewalk			Separation			Barrier		
Segment #	**1**	**2**	**3**	**1**	**2**	**3**	**1**	**2**	**3**	**1**	**2**	**3**
1 (to S. Miami Ave.)	100			Yes			Adjacent			No		
2 (to SW 1 Ave.)	100			Yes			Adjacent			No		
3 (to SW 2 Ave.)	100			Yes			Adjacent			No		
4 (to SW 3 Ave.)	100			Yes			Adjacent			No		
5 (to SW 4 Ave.)	100			Yes			Adjacent			No		
6 (to SR 7/SW 8 Ave.)	100			Yes			Adjacent			No		
7 (to SR 933/SW 12 Ave.)	100			Yes			Adjacent			No		
8 (to SW 16 Ave.)	100			Yes			Adjacent			No		
9 (to SW 17 Ave.)	100			Yes			Adjacent			No		
10 (to SW 19 Ave.)	100			Yes			Adjacent			No		
11 (to SW 22 Ave.)	100			Yes			Adjacent			No		
12 (to Beacom Blvd.)	100			Yes			Adjacent			No		
13 (to SR 9/SW 27 Ave.)	100			Yes			Adjacent			No		

Multimodal LOS

	Bicycle	Bicycle	Pedestrian	Bus

	Street		Sidepath								
Link #	**Score**	**LOS**	**Score**	**LOS**	**1**	**2**	**3**	**Score**	**LOS**	**Adj. Buses**	**LOS**
1 (to S. Miami Ave.)	4.40	E	N/A	N/A				4.25	E	6.10	A
2 (to SW 1 Ave.)	4.36	E	N/A	N/A				4.58	E	6.10	A
3 (to SW 2 Ave.)	4.30	E	N/A	N/A				3.87	D	5.99	B
4 (to SW 3 Ave.)	4.33	E	N/A	N/A				4.41	E	5.09	B
5 (to SW 4 Ave.)	4.34	E	N/A	N/A				4.63	E	6.10	A
6 (to SR 7/SW 8 Ave.)	4.25	D	N/A	N/A				3.42	C	5.99	B
7 (to SR 933/SW 12 Ave.)	4.40	E	N/A	N/A				4.03	D	7.18	A
8 (to SW 16 Ave.)	4.43	E	N/A	N/A				4.19	D	7.18	A
9 (to SW 17 Ave.)	4.25	D	N/A	N/A				4.42	E	6.10	A
10 (to SW 19 Ave.)	4.40	E	N/A	N/A				4.11	D	5.39	B
11 (to SW 22 Ave.)	4.43	E	N/A	N/A				4.32	E	6.10	A
12 (to Beacom Blvd.)	4.41	E	N/A	N/A				4.08	D	8.98	A
13 (to SR 9/SW 27 Ave.)	3.94	D	N/A	N/A				3.16	C	7.18	A
	Bicycle LOS	**4.36**	**E**				**Pedestrian LOS**	**4.08**	**D**	**Bus LOS**	**6.69**	**A**

MultiModal Service Volume Tables

Bicycle

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	0	0	0	0	0
2	0	0	0	0	0
3	0	0	0	0	0
4	0	0	0	0	0
*	0	0	0	0	0
Lanes	**Hourly Volume In Both Directions**				
2	0	0	0	0	0
4	0	0	0	0	0
6	0	0	0	0	0
8	0	0	0	0	0
*	0	0	0	0	0
Lanes	**Annual Average Daily Traffic**				
2	0	0	0	0	0
4	0	0	0	0	0
6	0	0	0	0	0
8	0	0	0	0	0
*	0	0	0	0	0

Pedestrian

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	0	0	0	0	0
2	0	0	0	0	0
3	0	0	0	0	0
4	0	0	0	0	0
*	0	0	0	0	0
Lanes	**Hourly Volume In Both Directions**				
2	0	0	0	0	0
4	0	0	0	0	0
6	0	0	0	0	0
8	0	0	0	0	0
*	0	0	0	0	0
Lanes	**Annual Average Daily Traffic**				
2	0	0	0	0	0
4	0	0	0	0	0
6	0	0	0	0	0
8	0	0	0	0	0
*	0	0	0	0	0

Bus

A	B	C	D	E
Buses Per Hour In Peak Direction				
Buses in Study Hour in Peak Direction (Daily)				

*** Service Volumes for the specific facility being analyzed, based on # of lanes from the intersection and segment data screens.**
**** Cannot be achieved based on input data provided.**
***** Not applicable for that level of service letter grade. See generalized tables notes for more details.**
 # Under the given conditions, left turn lane storage is highly likely to overflow. The number of directional thru lanes should be reduced accordingly.
Facility weighted g/C exceeds normally acceptable upper range (0.5); verify that g/C inputs are correct.
Intersection capacity (ies) are exceeded for the full hour; an operational level analysis tool is more appropriate for this situation.

ARTPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst		**Arterial Name**	SW 8 St.	**Study Period**	**Standard K**
Date Prepared	11/13/2014 8:20:08 AM	**From**	SR 9/SW 27 Ave.	**Modal Analysis**	Multimodal
Agency		**To**	US 1	**Program**	ARTPLAN 2012
Area Type	Large Urbanized	**Peak Direction**	Eastbound	**Version Date**	12/12/2012
Arterial Class	2				

File Name	G:\PROJECTS\57675_Jacobs-FDOT SR7-SW8th St to Tamiami\05 Project Wking Files\Calcs\Operational Analyses\ARTPLAN\2Way Alt 3\SW 8 St 2Way Alt 3 2040.xap
User Notes	SW 8 St 2 Way Alt3,2040

Arterial Data

K	0.09	**PHF**	0.95	**Control Type**	CoordinatedActuated
D	0.589	**% Heavy Vehicles**	2	**Base Sat. Flow Rate**	1950

Automobile Intersection Data

Cross Street	Cycle Length	Thru g/C	Arr. Type	INT # Dir.Lanes	% Left Turns	% Right Turns	Left Turn Lanes	Left Turn Phasing	# Left Turn Lanes	LT Storage Length	Left g/C	Right Turn Lanes
SW 24 Ave.	140	0.67	3	1	5	5	Yes	ProtPerm	1	235	0.07	No
SW 22 Ave.	140	0.44	3	1	5	5	Yes	ProtPerm	1	235	0.07	No
SW 19 Ave.	140	0.71	3	1	5	5	Yes	ProtPerm	1	235	0.07	No
SW 17 Ave.	140	0.5	3	1	5	5	Yes	ProtPerm	1	235	0.07	No
SR 933/SW 12 Ave.	140	0.47	3	1	5	5	Yes	ProtPerm	1	235	0.07	No
SR 7/SW 8 Ave.	140	0.6	3	1	5	4	Yes	ProtPerm	1	235	0.07	No
SW 5 Ave.	140	0.55	3	1	0	5	Yes	ProtPerm	1	235	0.07	No
SW 4 Ave.	150	0.44	3	1	5	0	Yes	ProtPerm	1	235	0.07	No
SW 3 Ave.	150	0.5	3	1	0	5	Yes	ProtPerm	1	235	0.07	No
SW 2 Ave.	150	0.57	3	1	5	5	Yes	ProtPerm	1	235	0.07	No
SW 1 Ave.	150	0.5	3	1	5	0	Yes	ProtPerm	1	235	0.07	No
S. Miami Ave.	150	0.57	3	1	0	5	Yes	ProtPerm	1	235	0.07	No
US 1	140	0.3	3	1	8	8	Yes	Protected	1	235	0.07	No

Automobile Segment Data

Segment #	Length	AADT	Hourly Vol.	SEG # Dir.Lanes	Posted Speed	Free Flow Speed	Median Type	On-Street Parking	Parking Activity
1 (to SW 24 Ave.)	1361	13800	732	1	30	35	None	Yes	Low
2 (to SW 22 Ave.)	1341	14500	769	1	30	35	None	Yes	Low
3 (to SW 19 Ave.)	1890	15600	827	1	30	35	None	Yes	Low
4 (to SW 17 Ave.)	813	15600	827	1	30	35	None	Yes	Low

5 (to SR 933/SW 12 Ave.)	2656	16700	885	1	30	35	None	Yes	Low
6 (to SR 7/SW 8 Ave.)	2313	15600	827	1	30	35	None	Yes	Low
7 (to SW 5 Ave.)	1653	15300	811	1	30	35	None	Yes	Low
8 (to SW 4 Ave.)	554	15700	832	1	30	35	None	Yes	Low
9 (to SW 3 Ave.)	539	26000	1378	1	30	35	None	Yes	Low
10 (to SW 2 Ave.)	576	33000	1749	1	30	35	None	Yes	Low
11 (to SW 1 Ave.)	581	29200	1548	1	30	35	None	Yes	Low
12 (to S. Miami Ave.)	655	30000	1590	1	30	35	None	Yes	Low
13 (to US 1)	898	27800	1474	1	30	35	None	Yes	Low

Automobile LOS

Segment #	Thru Mvmt Flow Rate	Adj. Sat. Flow Rate	v/c	Control Delay	Int. Approach LOS	Queue Ratio	Speed (mph)	Segment LOS
1 (to SW 24 Ave.)	732	1598	0.684	16.47	B	0.16	19.65	C
2 (to SW 22 Ave.)	769	1605	1.089	97.26	F	0.16	7.36	F
3 (to SW 19 Ave.)	827	1606	0.725	12.51	B	0.17	23.46	B
4 (to SW 17 Ave.)	827	1606	1.030	69.00	E	0.18	6.52	F
5 (to SR 933/SW 12 Ave.)	885	1606	1.173	122.90	F	0.18	10.09	E
6 (to SR 7/SW 8 Ave.)	827	1607	0.858	24.07	C	0.17	21.00	C
7 (to SW 5 Ave.)	854	1606	0.967	42.95	D	0.00	14.23	D
8 (to SW 4 Ave.)	832	1611	1.173	129.27	F	0.19	2.85	F
9 (to SW 3 Ave.)	1451	1606	1.650	400.24	F	0.00	0.98	F
10 (to SW 2 Ave.)	1749	1606	1.547	363.50	F	0.37	1.13	F
11 (to SW 1 Ave.)	1548	1611	1.358	220.40	F	0.28	1.83	F
12 (to S. Miami Ave.)	1674	1606	1.417	260.29	F	0.00	1.74	F
13 (to US 1)	1427	1600	1.583	328.54	F	0.40	1.85	F

Arterial Length	**3.1458**	**Weighted g/C**	**0.42**	**FFS Delay**	**2182.92**	**Threshold Delay**	**1620.14**	**Auto Speed**	**###**	**Auto LOS**	**###**

Automobile Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1000 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1					
2					
3					
4					
*					
Lanes	**Hourly Volume In Both Directions**				
2					
4					
6					
8					
*					
Lanes	**Annual Average Daily Traffic**				
2					
4					
6					
8					
*					

Multimodal Segment Data

Segment #	Outside Lane Width	Pave Cond	Pave Shldr /Bike Lane	Side Path	Side Path Separation	Side walk	Sidewalk Roadway Separation	Sidewalk Roadway Protective Barrier	Bus Freq	Passenger Load Factor	Amenities	Bus Stop Type
1 (to SW 24 Ave.)	Typical	Typical	Yes	No	N/A	Yes	Wide	No	6	0.69	Fair	Typical
2 (to SW 22 Ave.)	Typical	Typical	Yes	No	N/A	Yes	Wide	No	6	0.69	Fair	Typical
3 (to SW 19 Ave.)	Typical	Typical	Yes	No	N/A	Yes	Wide	No	6	0.69	Fair	Typical
4 (to SW 17 Ave.)	Typical	Typical	Yes	No	N/A	Yes	Wide	No	6	0.69	Fair	Typical
5 (to SR 933/SW 12 Ave.)	Typical	Typical	Yes	No	N/A	Yes	Wide	No	6	0.69	Fair	Typical
6 (to SR 7/SW 8 Ave.)	Typical	Typical	Yes	No	N/A	Yes	Wide	No	6	0.69	Fair	Typical
7 (to SW 5 Ave.)	Typical	Typical	Yes	No	N/A	Yes	Wide	No	6	0.69	Fair	Typical
8 (to SW 4 Ave.)	Typical	Typical	Yes	No	N/A	Yes	Wide	No	6	0.69	Fair	Typical
9 (to SW 3 Ave.)	Typical	Typical	Yes	No	N/A	Yes	Wide	No	6	0.69	Fair	Typical
10 (to SW 2 Ave.)	Typical	Typical	Yes	No	N/A	Yes	Wide	No	6	0.69	Fair	Typical
11 (to SW 1 Ave.)	Typical	Typical	Yes	No	N/A	Yes	Wide	No	6	0.69	Fair	Typical
12 (to S. Miami Ave.)	Typical	Typical	Yes	No	N/A	Yes	Wide	No	6	0.69	Fair	Typical
13 (to US 1)	Typical	Typical	Yes	No	N/A	Yes	Wide	No	6	0.69	Fair	Typical

Pedestrian SubSegment Data

	% of Segment			Sidewalk			Separation			Barrier		
Segment #	**1**	**2**	**3**	**1**	**2**	**3**	**1**	**2**	**3**	**1**	**2**	**3**
1 (to SW 24 Ave.)	100			Yes			Wide			No		
2 (to SW 22 Ave.)	100			Yes			Wide			No		
3 (to SW 19 Ave.)	100			Yes			Wide			No		
4 (to SW 17 Ave.)	100			Yes			Wide			No		
5 (to SR 933/SW 12 Ave.)	100			Yes			Wide			No		
6 (to SR 7/SW 8 Ave.)	100			Yes			Wide			No		
7 (to SW 5 Ave.)	100			Yes			Wide			No		
8 (to SW 4 Ave.)	100			Yes			Wide			No		
9 (to SW 3 Ave.)	100			Yes			Wide			No		
10 (to SW 2 Ave.)	100			Yes			Wide			No		
11 (to SW 1 Ave.)	100			Yes			Wide			No		
12 (to S. Miami Ave.)	100			Yes			Wide			No		
13 (to US 1)	100			Yes			Wide			No		

Multimodal LOS

	Bicycle Street		Bicycle Sidepath		Pedestrian					Bus	
Link #	**Score**	**LOS**	**Score**	**LOS**	**1**	**2**	**3**	**Score**	**LOS**	**Adj. Buses**	**LOS**

1 (to SW 24 Ave.)	1.59	A	N/A	N/A	3.01	C	5.67	B
2 (to SW 22 Ave.)	1.61	A	N/A	N/A	3.10	C	7.94	A
3 (to SW 19 Ave.)	1.67	A	N/A	N/A	3.26	C	6.62	A
4 (to SW 17 Ave.)	1.54	A	N/A	N/A	3.18	C	6.62	A
5 (to SR 933/SW 12 Ave.)	1.72	A	N/A	N/A	3.40	C	7.94	A
6 (to SR 7/SW 8 Ave.)	1.69	A	N/A	N/A	3.27	C	6.62	A
7 (to SW 5 Ave.)	1.65	A	N/A	N/A	3.21	C	6.62	A
8 (to SW 4 Ave.)	1.38	A	N/A	N/A	3.14	C	7.94	A
9 (to SW 3 Ave.)	1.47	A	N/A	N/A	4.41	E	6.43	A
10 (to SW 2 Ave.)	1.38	A	N/A	N/A	5.00	E	6.43	A
11 (to SW 1 Ave.)	1.53	A	N/A	N/A	4.08	D	7.56	A
12 (to S. Miami Ave.)	1.60	A	N/A	N/A	3.93	D	7.56	A
13 (to US 1)	1.66	A	N/A	N/A	3.86	D	7.56	A
	Bicycle LOS	**1.63**	**A**		**Pedestrian LOS**	**3.49**	**C**	**Bus LOS**	**7.03**	**A**

MultiModal Service Volume Tables

Bicycle

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	0	0	0	0	0
2	0	0	0	0	0
3	0	0	0	0	0
4	0	0	0	0	0
*	0	0	0	0	0
Lanes	**Hourly Volume In Both Directions**				
2	0	0	0	0	0
4	0	0	0	0	0
6	0	0	0	0	0
8	0	0	0	0	0
*	0	0	0	0	0
Lanes	**Annual Average Daily Traffic**				
2	0	0	0	0	0
4	0	0	0	0	0
6	0	0	0	0	0
8	0	0	0	0	0
*	0	0	0	0	0

Pedestrian

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	0	0	0	0	0
2	0	0	0	0	0
3	0	0	0	0	0
4	0	0	0	0	0
*	0	0	0	0	0
Lanes	**Hourly Volume In Both Directions**				
2	0	0	0	0	0
4	0	0	0	0	0
6	0	0	0	0	0
8	0	0	0	0	0
*	0	0	0	0	0
Lanes	**Annual Average Daily Traffic**				
2	0	0	0	0	0
4	0	0	0	0	0
6	0	0	0	0	0
8	0	0	0	0	0
*	0	0	0	0	0

Bus

A	B	C	D	E
Buses Per Hour In Peak Direction				
Buses in Study Hour in Peak Direction (Daily)				

*** Service Volumes for the specific facility being analyzed, based on # of lanes from the intersection and segment data screens.**
**** Cannot be achieved based on input data provided.**
***** Not applicable for that level of service letter grade. See generalized tables notes for more details.**
 # Under the given conditions, left turn lane storage is highly likely to overflow. The number of directional thru lanes should be reduced accordingly.
Facility weighted g/C exceeds normally acceptable upper range (0.5); verify that g/C inputs are correct.
Intersection capacity (ies) are exceeded for the full hour; an operational level analysis tool is more appropriate for this situation.

ARTPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst		**Arterial Name**	SR 90/SW 7 St.	**Study Period**	**Standard K**
Date Prepared	11/13/2014 12:41:23 PM	**From**	US 1	**Modal Analysis**	Multimodal
Agency		**To**	SR 9/SW 27 Ave.	**Program**	ARTPLAN 2012
Area Type	Large Urbanized	**Peak Direction**	Westbound	**Version Date**	12/12/2012
Arterial Class	2				
File Name	G:\PROJECTS\57675_Jacobs-FDOT SR7-SW8th St to Tamiami\05 Project Wking Files\Calcs\Operational Analyses\ARTPLAN\2Way Alt 3\SW 7 St 2Way Alt 3 2040.xap				
User Notes	2 Way Alternative 3, 2040				

Arterial Data

K	0.09	**PHF**	0.95	**Control Type**	CoordinatedActuated
D	0.999	**% Heavy Vehicles**	2	**Base Sat. Flow Rate**	1950

Automobile Intersection Data

Cross Street	Cycle Length	Thru g/C	Arr. Type	INT # Dir.Lanes	% Left Turns	% Right Turns	Left Turn Lanes	Left Turn Phasing	# Left Turn Lanes	LT Storage Length	Left g/C	Right Turn Lanes
S. Miami Ave.	150	0.57	3	1	5	0	Yes	ProtPerm	1	235	0.07	No
SW 1 Ave.	150	0.33	3	1	0	5	Yes	ProtPerm	1	235	0.07	No
SW 2 Ave.	150	0.58	3	1	5	5	Yes	ProtPerm	1	235	0.07	No
SW 3 Ave.	150	0.44	3	1	5	5	Yes	ProtPerm	1	235	0.07	No
SW 4 Ave.	150	0.32	3	1	0	5	Yes	ProtPerm	1	235	0.07	No
SR 7/SW 8 Ave.	140	0.61	3	1	5	5	Yes	ProtPerm	1	235	0.07	No
SR 933/SW 12 Ave.	140	0.45	3	1	5	5	Yes	ProtPerm	1	235	0.07	No
SW 16 Ave.	140	0.72	3	1	0	5	Yes	ProtPerm	1	235	0.07	No
SW 17 Ave.	140	0.45	3	1	5	5	Yes	ProtPerm	1	235	0.07	No
SW 19 Ave.	140	0.72	3	1	5	5	Yes	ProtPerm	1	235	0.07	No
SW 22 Ave.	140	0.41	3	1	5	5	Yes	ProtPerm	1	235	0.07	No
Beacom Blvd.	140	0.26	3	1	5	5	Yes	ProtPerm	1	235	0.07	No
SR 9/SW 27 Ave.	130	0.15	3	1	5	5	Yes	Protected	1	235	0.07	Yes

Automobile Segment Data

Segment #	Length	AADT	Hourly Vol.	SEG # Dir.Lanes	Posted Speed	Free Flow Speed	Median Type	On-Street Parking	Parking Activity
1 (to S. Miami Ave.)	966	15500	1394	1	30	35	None	No	N/A
2 (to SW 1 Ave.)	576	18300	1645	1	30	35	None	No	N/A

3 (to SW 2 Ave.)	781	17300	1555	1	30	35	None	No	N/A
4 (to SW 3 Ave.)	554	20200	1816	1	30	35	None	No	N/A
5 (to SW 4 Ave.)	533	20200	1816	1	30	35	None	No	N/A
6 (to SR 7/SW 8 Ave.)	2218	15800	1421	1	30	35	None	No	N/A
7 (to SR 933/SW 12 Ave.)	2313	14900	1340	1	30	35	None	No	N/A
8 (to SW 16 Ave.)	2196	15000	1349	1	30	35	None	No	N/A
9 (to SW 17 Ave.)	465	15000	1349	1	30	35	None	No	N/A
10 (to SW 19 Ave.)	1352	13700	1232	1	30	35	None	No	N/A
11 (to SW 22 Ave.)	1341	13700	1232	1	30	35	None	No	N/A
12 (to Beacom Blvd.)	2096	13300	1196	1	30	35	None	No	N/A
13 (to SR 9/SW 27 Ave.)	438	11100	998	1	30	35	None	No	N/A

Automobile LOS

Segment #	Thru Mvmt Flow Rate	Adj. Sat. Flow Rate	v/c	Control Delay	Int. Approach LOS	Queue Ratio	Speed (mph)	Segment LOS
1 (to S. Miami Ave.)	1394	1611	1.394	245.16	F	0.31	2.58	F
2 (to SW 1 Ave.)	1732	1606	2.101	606.06	F	0.00	0.70	F
3 (to SW 2 Ave.)	1555	1606	1.123	94.75	F	0.22	4.99	F
4 (to SW 3 Ave.)	1816	1606	1.503	296.46	F	0.30	1.34	F
5 (to SW 4 Ave.)	1912	1606	1.759	421.47	F	0.00	0.93	F
6 (to SR 7/SW 8 Ave.)	1421	1604	0.779	20.88	C	0.10	22.91	B
7 (to SR 933/SW 12 Ave.)	1340	1606	1.093	95.47	F	0.15	11.11	E
8 (to SW 16 Ave.)	1420	1606	1.067	55.95	E	0.00	14.72	D
9 (to SW 17 Ave.)	1349	1606	1.398	236.81	F	0.24	1.42	F
10 (to SW 19 Ave.)	1232	1606	0.988	24.60	C	0.19	17.18	C
11 (to SW 22 Ave.)	1232	1606	1.445	261.28	F	0.24	3.25	F
12 (to Beacom Blvd.)	1196	1593	1.710	389.60	F	0.19	3.37	F
13 (to SR 9/SW 27 Ave.)	945	1536	2.282	649.44	F	0.10	0.51	F

Arterial Length	**3.1456**	**Weighted g/C**	**0.32**	**FFS Delay**	**3470.08**	**Threshold Delay**	**2907.34**	**Auto Speed**	**###**	**Auto LOS**	**###**

Automobile Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1000 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1					
2					
3					
4					
*					
Lanes	**Hourly Volume In Both Directions**				
2					
4					
6					
8					
*					
Lanes	**Annual Average Daily Traffic**				
2					
4					
6					
8					
*					

Multimodal Segment Data

Segment #	Outside Lane Width	Pave Cond	Pave Shldr /Bike Lane	Side Path	Side Path Separation	Side walk	Sidewalk Roadway Separation	Sidewalk Roadway Protective Barrier	Bus Freq	Passenger Load Factor	Amenities	Bus Stop Type
1 (to S. Miami Ave.)	Typical	Typical	No	No	N/A	Yes	Wide	No	6	0.7	Fair	Typical
2 (to SW 1 Ave.)	Typical	Typical	No	No	N/A	Yes	Wide	No	6	0.7	Fair	Typical
3 (to SW 2 Ave.)	Typical	Typical	No	No	N/A	Yes	Wide	No	6	0.7	Fair	Typical
4 (to SW 3 Ave.)	Typical	Typical	No	No	N/A	Yes	Wide	No	6	0.7	Fair	Typical
5 (to SW 4 Ave.)	Typical	Typical	No	No	N/A	Yes	Wide	No	6	0.7	Fair	Typical
6 (to SR 7/SW 8 Ave.)	Typical	Typical	No	No	N/A	Yes	Wide	No	6	0.7	Fair	Typical
7 (to SR 933/SW 12 Ave.)	Typical	Typical	No	No	N/A	Yes	Wide	No	6	0.7	Fair	Typical
8 (to SW 16 Ave.)	Typical	Typical	No	No	N/A	Yes	Wide	No	6	0.7	Fair	Typical
9 (to SW 17 Ave.)	Typical	Typical	No	No	N/A	Yes	Wide	No	6	0.7	Fair	Typical
10 (to SW 19 Ave.)	Typical	Typical	No	No	N/A	Yes	Wide	No	6	0.7	Fair	Typical
11 (to SW 22 Ave.)	Typical	Typical	No	No	N/A	Yes	Wide	No	6	0.7	Fair	Typical
12 (to Beacom Blvd.)	Typical	Typical	No	No	N/A	Yes	Wide	No	6	0.7	Fair	Typical
13 (to SR 9/SW 27 Ave.)	Typical	Typical	No	No	N/A	Yes	Wide	No	6	0.7	Fair	Typical

Pedestrian SubSegment Data

	% of Segment			Sidewalk			Separation			Barrier		
Segment #	**1**	**2**	**3**	**1**	**2**	**3**	**1**	**2**	**3**	**1**	**2**	**3**
1 (to S. Miami Ave.)	100			Yes			Wide			No		
2 (to SW 1 Ave.)	100			Yes			Wide			No		
3 (to SW 2 Ave.)	100			Yes			Wide			No		
4 (to SW 3 Ave.)	100			Yes			Wide			No		
5 (to SW 4 Ave.)	100			Yes			Wide			No		
6 (to SR 7/SW 8 Ave.)	100			Yes			Wide			No		
7 (to SR 933/SW 12 Ave.)	100			Yes			Wide			No		
8 (to SW 16 Ave.)	100			Yes			Wide			No		
9 (to SW 17 Ave.)	100			Yes			Wide			No		
10 (to SW 19 Ave.)	100			Yes			Wide			No		
11 (to SW 22 Ave.)	100			Yes			Wide			No		
12 (to Beacom Blvd.)	100			Yes			Wide			No		
13 (to SR 9/SW 27 Ave.)	100			Yes			Wide			No		

Multimodal LOS

	Bicycle	Bicycle	Pedestrian	Bus

	Street		Sidepath								
Link #	**Score**	**LOS**	**Score**	**LOS**	**1**	**2**	**3**	**Score**	**LOS**	**Adj. Buses**	**LOS**
1 (to S. Miami Ave.)	4.46	E	N/A	N/A				5.02	F	3.95	C
2 (to SW 1 Ave.)	4.40	E	N/A	N/A				5.33	F	3.95	C
3 (to SW 2 Ave.)	4.36	E	N/A	N/A				4.04	D	5.99	B
4 (to SW 3 Ave.)	4.38	E	N/A	N/A				4.85	E	6.10	A
5 (to SW 4 Ave.)	4.32	E	N/A	N/A				4.31	E	6.10	A
6 (to SR 7/SW 8 Ave.)	4.06	D	N/A	N/A				2.95	C	5.69	B
7 (to SR 933/SW 12 Ave.)	4.32	E	N/A	N/A				3.53	D	6.84	A
8 (to SW 16 Ave.)	4.38	E	N/A	N/A				3.78	D	7.18	A
9 (to SW 17 Ave.)	4.27	E	N/A	N/A				4.45	E	6.10	A
10 (to SW 19 Ave.)	4.40	E	N/A	N/A				3.96	D	5.99	B
11 (to SW 22 Ave.)	4.47	E	N/A	N/A				4.49	E	6.10	A
12 (to Beacom Blvd.)	4.42	E	N/A	N/A				4.02	D	8.98	A
13 (to SR 9/SW 27 Ave.)	3.90	D	N/A	N/A				2.94	C	7.18	A
	Bicycle LOS	**4.33**	**E**				**Pedestrian LOS**	**4.03**	**D**	**Bus LOS**	**6.47**	**A**

MultiModal Service Volume Tables

Bicycle

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	0	0	0	0	0
2	0	0	0	0	0
3	0	0	0	0	0
4	0	0	0	0	0
*	0	0	0	0	0
Lanes	**Hourly Volume In Both Directions**				
2	0	0	0	0	0
4	0	0	0	0	0
6	0	0	0	0	0
8	0	0	0	0	0
*	0	0	0	0	0
Lanes	**Annual Average Daily Traffic**				
2	0	0	0	0	0
4	0	0	0	0	0
6	0	0	0	0	0
8	0	0	0	0	0
*	0	0	0	0	0

Pedestrian

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	0	0	0	0	0
2	0	0	0	0	0
3	0	0	0	0	0
4	0	0	0	0	0
*	0	0	0	0	0
Lanes	**Hourly Volume In Both Directions**				
2	0	0	0	0	0
4	0	0	0	0	0
6	0	0	0	0	0
8	0	0	0	0	0
*	0	0	0	0	0
Lanes	**Annual Average Daily Traffic**				
2	0	0	0	0	0
4	0	0	0	0	0
6	0	0	0	0	0
8	0	0	0	0	0
*	0	0	0	0	0

Bus

A	B	C	D	E
Buses Per Hour In Peak Direction				
Buses in Study Hour in Peak Direction (Daily)				

*** Service Volumes for the specific facility being analyzed, based on # of lanes from the intersection and segment data screens.**
**** Cannot be achieved based on input data provided.**
***** Not applicable for that level of service letter grade. See generalized tables notes for more details.**
 # Under the given conditions, left turn lane storage is highly likely to overflow. The number of directional thru lanes should be reduced accordingly.
Facility weighted g/C exceeds normally acceptable upper range (0.5); verify that g/C inputs are correct.
Intersection capacity (ies) are exceeded for the full hour; an operational level analysis tool is more appropriate for this situation.

ARTPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst		**Arterial Name**	SW 8 St.	**Study Period**	**Standard K**
Date Prepared	11/13/2014 8:20:08 AM	**From**	SR 9/SW 27 Ave.	**Modal Analysis**	Multimodal
Agency		**To**	US 1	**Program**	ARTPLAN 2012
Area Type	Large Urbanized	**Peak Direction**	Westbound	**Version Date**	12/12/2012
Arterial Class	2				

File Name	G:\PROJECTS\57675_Jacobs-FDOT SR7-SW8th St to Tamiami\05 Project Wking Files\Calcs\Operational Analyses\ARTPLAN\3L Alt 3\SW 8 St Alt 3 2020.xap
User Notes	SW 8 St 3 Lanes Alt 3 2020

Arterial Data

K	0.09	**PHF**	0.95	**Control Type**	CoordinatedActuated
D	0.999	**% Heavy Vehicles**	2	**Base Sat. Flow Rate**	1950

Automobile Intersection Data

Cross Street	Cycle Length	Thru g/C	Arr. Type	INT # Dir.Lanes	% Left Turns	% Right Turns	Left Turn Lanes	Left Turn Phasing	# Left Turn Lanes	LT Storage Length	Left g/C	Right Turn Lanes
SW 24 Ave.	120	0.78	3	3	5	5	No	None	N/A	N/A	N/A	No
SW 22 Ave.	120	0.41	3	3	24	17	No	None	N/A	N/A	N/A	No
SW 19 Ave.	120	0.9	3	3	5	5	No	None	N/A	N/A	N/A	No
SW 17 Ave.	120	0.65	3	3	20	12	No	None	N/A	N/A	N/A	No
SR 933/SW 12 Ave.	120	0.56	3	3	20	12	No	None	N/A	N/A	N/A	No
SR 7/SW 8 Ave.	120	0.61	3	3	9	9	No	None	N/A	N/A	N/A	No
SW 5 Ave.	120	0.62	3	3	0	17	No	None	N/A	N/A	N/A	No
SW 4 Ave.	130	0.39	3	3	1	0	No	None	N/A	N/A	N/A	No
SW 3 Ave.	130	0.62	3	3	0	13	No	None	N/A	N/A	N/A	No
SW 2 Ave.	130	0.52	3	3	5	5	No	None	N/A	N/A	N/A	No
SW 1 Ave.	130	0.48	3	3	18	0	No	None	N/A	N/A	N/A	No
S. Miami Ave.	130	0.52	3	3	0	20	No	None	N/A	N/A	N/A	No
US 1	150	0.31	3	1	35	16	No	None	N/A	N/A	N/A	No

Automobile Segment Data

Segment #	Length	AADT	Hourly Vol.	SEG # Dir.Lanes	Posted Speed	Free Flow Speed	Median Type	On-Street Parking	Parking Activity
1 (to SW 24 Ave.)	1361	10500	944	3	30	35	None	Yes	Low
2 (to SW 22 Ave.)	1341	10300	926	3	30	35	None	Yes	Low
3 (to SW 19 Ave.)	1890	12300	1106	3	30	35	None	Yes	Low
4 (to SW 17 Ave.)	813	12300	1106	3	30	35	None	Yes	Low
5 (to SR 933/SW 12 Ave.)	2656	12700	1142	3	30	35	None	Yes	Low
6 (to SR 7/SW 8 Ave.)	2313	11700	1052	3	30	35	None	Yes	Low
7 (to SW 5 Ave.)	1653	11500	1034	3	30	35	None	Yes	Low
8 (to SW 4 Ave.)	554	12100	1088	3	30	35	None	Yes	Low
9 (to SW 3 Ave.)	539	7200	647	3	30	35	None	Yes	Low
10 (to SW 2 Ave.)	576	30600	2751	3	30	35	None	Yes	Low
11 (to SW 1 Ave.)	581	27800	2499	3	30	35	None	Yes	Low
12 (to S. Miami Ave.)	655	27100	2437	3	30	35	None	Yes	Low
13 (to US 1)	898	24800	2230	3	30	35	None	Yes	Low

Automobile LOS

Segment #	Thru Mvmt Flow Rate	Adj. Sat. Flow Rate	v/c	Control Delay	Int. Approach LOS	Queue Ratio	Speed (mph)	Segment LOS
1 (to SW 24 Ave.)	994	3699	0.344	4.28	A	0.00	28.10	A
2 (to SW 22 Ave.)	975	3665	0.649	30.52	C	0.00	15.84	D
3 (to SW 19 Ave.)	1164	3720	0.348	1.08	A	0.00	31.86	A
4 (to SW 17 Ave.)	1164	3702	0.484	11.38	B	0.00	18.95	C
5 (to SR 933/SW 12 Ave.)	1202	3707	0.579	18.22	B	0.00	24.99	B
6 (to SR 7/SW 8 Ave.)	1107	3703	0.490	13.62	B	0.00	25.86	B
7 (to SW 5 Ave.)	1088	4600	0.382	11.69	B	0.00	24.53	B
8 (to SW 4 Ave.)	1145	3743	0.784	38.86	D	0.00	7.70	F
9 (to SW 3 Ave.)	681	4557	0.241	11.14	B	0.00	15.52	D
10 (to SW 2 Ave.)	2896	3930	1.417	247.38	F	0.00	1.64	F
11 (to SW 1 Ave.)	2631	3944	1.389	228.34	F	0.00	1.79	F
12 (to S. Miami Ave.)	2565	4862	1.015	41.33	D	0.00	8.25	F
13 (to US 1)	2347	1236	1.287	190.38	F	0.00	3.07	F

Arterial Length	**3.1458**	**Weighted g/C**	**0.45**	**FFS Delay**	**905.04**	**Threshold Delay**	**342.26**	**Auto Speed**	**###**	**Auto LOS**	**###**

Automobile Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1000 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1					
2					
3					
4					
*					
Lanes	**Hourly Volume In Both Directions**				
2					
4					
6					
8					
*					
Lanes	**Annual Average Daily Traffic**				
2					
4					
6					
8					
*					

Multimodal Segment Data

Segment #	Outside Lane Width	Pave Cond	Pave Shldr /Bike Lane	Side Path	Side Path Separation	Side walk	Sidewalk Roadway Separation	Sidewalk Roadway Protective Barrier	Bus Freq	Passenger Load Factor	Amenities	Bus Stop Type
1 (to SW 24 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
2 (to SW 22 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
3 (to SW 19 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
4 (to SW 17 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
5 (to SR 933/SW 12 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
6 (to SR 7/SW 8 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
7 (to SW 5 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
8 (to SW 4 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
9 (to SW 3 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
10 (to SW 2 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
11 (to SW 1 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
12 (to S. Miami Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
13 (to US 1)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical

Pedestrian SubSegment Data

	% of Segment			Sidewalk			Separation			Barrier		
Segment #	**1**	**2**	**3**	**1**	**2**	**3**	**1**	**2**	**3**	**1**	**2**	**3**
1 (to SW 24 Ave.)	100			Yes			Adjacent			No		
2 (to SW 22 Ave.)	100			Yes			Adjacent			No		
3 (to SW 19 Ave.)	100			Yes			Adjacent			No		
4 (to SW 17 Ave.)	100			Yes			Adjacent			No		
5 (to SR 933/SW 12 Ave.)	100			Yes			Adjacent			No		
6 (to SR 7/SW 8 Ave.)	100			Yes			Adjacent			No		
7 (to SW 5 Ave.)	100			Yes			Adjacent			No		
8 (to SW 4 Ave.)	100			Yes			Adjacent			No		
9 (to SW 3 Ave.)	100			Yes			Adjacent			No		
10 (to SW 2 Ave.)	100			Yes			Adjacent			No		
11 (to SW 1 Ave.)	100			Yes			Adjacent			No		
12 (to S. Miami Ave.)	100			Yes			Adjacent			No		
13 (to US 1)	100			Yes			Adjacent			No		

Multimodal LOS

	Bicycle Street		Bicycle Sidepath		Pedestrian					Bus	
Link #	**Score**	**LOS**	**Score**	**LOS**	**1**	**2**	**3**	**Score**	**LOS**	**Adj. Buses**	**LOS**

1 (to SW 24 Ave.)	3.19	C	N/A	N/A		2.33	B	5.36	B
2 (to SW 22 Ave.)	3.17	C	N/A	N/A		2.32	B	5.96	B
3 (to SW 19 Ave.)	3.31	C	N/A	N/A		2.48	B	5.36	B
4 (to SW 17 Ave.)	3.24	C	N/A	N/A		2.40	B	4.17	B
5 (to SR 933/SW 12 Ave.)	3.35	C	N/A	N/A		2.52	B	5.96	B
6 (to SR 7/SW 8 Ave.)	3.28	C	N/A	N/A		2.45	B	5.96	B
7 (to SW 5 Ave.)	3.26	C	N/A	N/A		2.42	B	5.36	B
8 (to SW 4 Ave.)	3.13	C	N/A	N/A		2.33	B	5.36	B
9 (to SW 3 Ave.)	2.79	C	N/A	N/A		1.97	A	4.36	B
10 (to SW 2 Ave.)	3.67	D	N/A	N/A		3.64	D	7.18	A
11 (to SW 1 Ave.)	3.63	D	N/A	N/A		3.44	C	7.54	A
12 (to S. Miami Ave.)	3.67	D	N/A	N/A		3.42	C	6.28	A
13 (to US 1)	3.69	D	N/A	N/A		3.29	C	7.54	A
	Bicycle LOS	**3.33**	**C**		**Pedestrian LOS**	**2.65**	**B**	**Bus LOS**	**5.81**	**B**

MultiModal Service Volume Tables

Bicycle

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	0	0	0	0	0
2	0	0	0	0	0
3	0	0	0	0	0
4	0	0	0	0	0
*	0	0	0	0	0
Lanes	**Hourly Volume In Both Directions**				
2	0	0	0	0	0
4	0	0	0	0	0
6	0	0	0	0	0
8	0	0	0	0	0
*	0	0	0	0	0
Lanes	**Annual Average Daily Traffic**				
2	0	0	0	0	0
4	0	0	0	0	0
6	0	0	0	0	0
8	0	0	0	0	0
*	0	0	0	0	0

Pedestrian

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	0	0	0	0	0
2	0	0	0	0	0
3	0	0	0	0	0
4	0	0	0	0	0
*	0	0	0	0	0
Lanes	**Hourly Volume In Both Directions**				
2	0	0	0	0	0
4	0	0	0	0	0
6	0	0	0	0	0
8	0	0	0	0	0
*	0	0	0	0	0
Lanes	**Annual Average Daily Traffic**				
2	0	0	0	0	0
4	0	0	0	0	0
6	0	0	0	0	0
8	0	0	0	0	0
*	0	0	0	0	0

Bus

A	B	C	D	E
Buses Per Hour In Peak Direction				
Buses in Study Hour in Peak Direction (Daily)				

*** Service Volumes for the specific facility being analyzed, based on # of lanes from the intersection and segment data screens.**
**** Cannot be achieved based on input data provided.**
***** Not applicable for that level of service letter grade. See generalized tables notes for more details.**
 # Under the given conditions, left turn lane storage is highly likely to overflow. The number of directional thru lanes should be reduced accordingly.
Facility weighted g/C exceeds normally acceptable upper range (0.5); verify that g/C inputs are correct.
Intersection capacity (ies) are exceeded for the full hour; an operational level analysis tool is more appropriate for this situation.

ARTPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst		**Arterial Name**	SR 90/SW 7 St.	**Study Period**	**Standard K**
Date Prepared	11/13/2014 12:41:23 PM	**From**	US 1	**Modal Analysis**	Multimodal
Agency		**To**	SR 9/SW 27 Ave.	**Program**	ARTPLAN 2012
Area Type	Large Urbanized	**Peak Direction**	Eastbound	**Version Date**	12/12/2012
Arterial Class	2				
File Name	G:\PROJECTS\57675_Jacobs-FDOT SR7-SW8th St to Tamiami\05 Project Wking Files\Calcs\Operational Analyses\ARTPLAN\3L Alt 3\SW 7 St Alt 3 2020.xap				
User Notes	3 Lanes Alternative 3, 2020				

Arterial Data

K	0.09	**PHF**	0.95	**Control Type**	CoordinatedActuated
D	0.999	**% Heavy Vehicles**	2	**Base Sat. Flow Rate**	1950

Automobile Intersection Data

Cross Street	Cycle Length	Thru g/C	Arr. Type	INT # Dir.Lanes	% Left Turns	% Right Turns	Left Turn Lanes	Left Turn Phasing	# Left Turn Lanes	LT Storage Length	Left g/C	Right Turn Lanes
S. Miami Ave.	130	0.55	3	3	40	0	No	None	N/A	N/A	N/A	No
SW 1 Ave.	130	0.31	3	3	0	20	No	None	N/A	N/A	N/A	No
SW 2 Ave.	130	0.59	3	3	22	16	No	None	N/A	N/A	N/A	No
SW 3 Ave.	130	0.55	3	3	10	9	No	None	N/A	N/A	N/A	No
SW 4 Ave.	130	0.43	3	2	0	7	No	None	N/A	N/A	N/A	No
SR 7/SW 8 Ave.	120	0.59	3	3	9	2	No	None	N/A	N/A	N/A	No
SR 933/SW 12 Ave.	120	0.5	3	3	8	4	No	None	N/A	N/A	N/A	No
SW 16 Ave.	120	0.73	3	3	0	5	No	None	N/A	N/A	N/A	No
SW 17 Ave.	120	0.51	3	3	6	5	No	None	N/A	N/A	N/A	No
SW 19 Ave.	120	0.67	3	3	6	5	No	None	N/A	N/A	N/A	No
SW 22 Ave.	120	0.47	3	3	6	3	No	None	N/A	N/A	N/A	No
Beacom Blvd.	120	0.55	3	2	8	2	No	None	N/A	N/A	N/A	No
SR 9/SW 27 Ave.	130	0.11	3	1	38	24	Yes	Protected	1	235	0.12	Yes

Automobile Segment Data

Segment #	Length	AADT	Hourly Vol.	SEG # Dir.Lanes	Posted Speed	Free Flow Speed	Median Type	On-Street Parking	Parking Activity
1 (to S. Miami Ave.)	966	18800	1690	3	30	35	None	No	N/A
2 (to SW 1 Ave.)	576	25500	2293	3	30	35	None	No	N/A

3 (to SW 2 Ave.)	781	24300	2185	3	30	35	None	No	N/A
4 (to SW 3 Ave.)	554	31100	2796	3	30	35	None	No	N/A
5 (to SW 4 Ave.)	533	34900	3138	3	30	35	None	No	N/A
6 (to SR 7/SW 8 Ave.)	2218	27600	2482	3	30	35	None	No	N/A
7 (to SR 933/SW 12 Ave.)	2313	27700	2491	3	30	35	None	No	N/A
8 (to SW 16 Ave.)	2196	28200	2535	3	30	35	None	No	N/A
9 (to SW 17 Ave.)	465	28200	2535	3	30	35	None	No	N/A
10 (to SW 19 Ave.)	1352	26100	2347	3	30	35	None	No	N/A
11 (to SW 22 Ave.)	1341	25500	2293	3	30	35	None	No	N/A
12 (to Beacom Blvd.)	2096	25500	2293	3	30	35	None	No	N/A
13 (to SR 9/SW 27 Ave.)	438	21600	1942	1	30	35	None	No	N/A

Automobile LOS

Segment #	Thru Mvmt Flow Rate	Adj. Sat. Flow Rate	v/c	Control Delay	Int. Approach LOS	Queue Ratio	Speed (mph)	Segment LOS
1 (to S. Miami Ave.)	1779	3694	0.390	17.28	B	0.00	17.56	C
2 (to SW 1 Ave.)	2414	4820	1.520	295.67	F	0.00	1.39	F
3 (to SW 2 Ave.)	2300	3871	1.007	34.42	C	0.00	10.67	E
4 (to SW 3 Ave.)	2943	3919	1.365	217.51	F	0.00	1.80	F
5 (to SW 4 Ave.)	3303	3255	2.360	-803.64	A	0.00	-0.51	F
6 (to SR 7/SW 8 Ave.)	2613	3926	1.128	88.32	F	0.00	11.34	E
7 (to SR 933/SW 12 Ave.)	2622	3922	1.337	197.31	F	0.00	6.52	F
8 (to SW 16 Ave.)	2668	4907	0.745	9.72	A	0.00	26.50	B
9 (to SW 17 Ave.)	2668	3926	1.333	196.81	F	0.00	1.70	F
10 (to SW 19 Ave.)	2471	3897	0.946	18.89	B	0.00	19.41	C
11 (to SW 22 Ave.)	2414	3895	1.319	188.53	F	0.00	4.36	F
12 (to Beacom Blvd.)	2414	2613	1.680	465.55	F	0.00	2.87	F
13 (to SR 9/SW 27 Ave.)	777	1224	1.624	346.74	F	#	NaN	F

Arterial Length	**3.1456**	**Weighted g/C**	**0.32**	**FFS Delay**	**NaN**	**Threshold Delay**	**NaN**	**Auto Speed**	**###**	**Auto LOS**	**###**

Automobile Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1000 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1					
2					
3					
4					
*					
Lanes	**Hourly Volume In Both Directions**				
2					
4					
6					
8					
*					
Lanes	**Annual Average Daily Traffic**				
2					
4					
6					
8					
*					

Multimodal Segment Data

Segment #	Outside Lane Width	Pave Cond	Pave Shldr /Bike Lane	Side Path	Side Path Separation	Side walk	Sidewalk Roadway Separation	Sidewalk Roadway Protective Barrier	Bus Freq	Passenger Load Factor	Amenities	Bus Stop Type
1 (to S. Miami Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
2 (to SW 1 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
3 (to SW 2 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
4 (to SW 3 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
5 (to SW 4 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
6 (to SR 7/SW 8 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
7 (to SR 933/SW 12 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
8 (to SW 16 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
9 (to SW 17 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
10 (to SW 19 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
11 (to SW 22 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
12 (to Beacom Blvd.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
13 (to SR 9/SW 27 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical

Pedestrian SubSegment Data

	% of Segment			Sidewalk			Separation			Barrier		
Segment #	**1**	**2**	**3**	**1**	**2**	**3**	**1**	**2**	**3**	**1**	**2**	**3**
1 (to S. Miami Ave.)	100			Yes			Adjacent			No		
2 (to SW 1 Ave.)	100			Yes			Adjacent			No		
3 (to SW 2 Ave.)	100			Yes			Adjacent			No		
4 (to SW 3 Ave.)	100			Yes			Adjacent			No		
5 (to SW 4 Ave.)	100			Yes			Adjacent			No		
6 (to SR 7/SW 8 Ave.)	100			Yes			Adjacent			No		
7 (to SR 933/SW 12 Ave.)	100			Yes			Adjacent			No		
8 (to SW 16 Ave.)	100			Yes			Adjacent			No		
9 (to SW 17 Ave.)	100			Yes			Adjacent			No		
10 (to SW 19 Ave.)	100			Yes			Adjacent			No		
11 (to SW 22 Ave.)	100			Yes			Adjacent			No		
12 (to Beacom Blvd.)	100			Yes			Adjacent			No		
13 (to SR 9/SW 27 Ave.)	100			Yes			Adjacent			No		

Multimodal LOS

	Bicycle	Bicycle	Pedestrian	Bus

	Street		Sidepath								
Link #	**Score**	**LOS**	**Score**	**LOS**	**1**	**2**	**3**	**Score**	**LOS**	**Adj. Buses**	**LOS**
1 (to S. Miami Ave.)	4.16	D	N/A	N/A				3.28	C	5.39	B
2 (to SW 1 Ave.)	3.90	D	N/A	N/A				2.95	C	6.82	A
3 (to SW 2 Ave.)	4.22	D	N/A	N/A				3.53	D	5.13	B
4 (to SW 3 Ave.)	4.27	E	N/A	N/A				4.07	D	7.18	A
5 (to SW 4 Ave.)	4.30	E	N/A	N/A				4.33	E	7.63	A
6 (to SR 7/SW 8 Ave.)	4.39	E	N/A	N/A				3.93	D	7.18	A
7 (to SR 933/SW 12 Ave.)	4.39	E	N/A	N/A				3.94	D	7.18	A
8 (to SW 16 Ave.)	4.39	E	N/A	N/A				3.97	D	5.99	B
9 (to SW 17 Ave.)	4.15	D	N/A	N/A				3.83	D	7.18	A
10 (to SW 19 Ave.)	4.34	E	N/A	N/A				3.81	D	5.39	B
11 (to SW 22 Ave.)	4.33	E	N/A	N/A				3.77	D	7.18	A
12 (to Beacom Blvd.)	4.35	E	N/A	N/A				3.79	D	8.98	A
13 (to SR 9/SW 27 Ave.)	NaN	F	N/A	N/A				NaN	F	0.00	F
	Bicycle LOS	**NaN**	**F**				**Pedestrian LOS**	**NaN**	**F**	**Bus LOS**	**6.67**	**A**

MultiModal Service Volume Tables

Bicycle

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	0	0	0	0	0
2	0	0	0	0	0
3	0	0	0	0	0
4	0	0	0	0	0
*	0	0	0	0	0
Lanes	**Hourly Volume In Both Directions**				
2	0	0	0	0	0
4	0	0	0	0	0
6	0	0	0	0	0
8	0	0	0	0	0
*	0	0	0	0	0
Lanes	**Annual Average Daily Traffic**				
2	0	0	0	0	0
4	0	0	0	0	0
6	0	0	0	0	0
8	0	0	0	0	0
*	0	0	0	0	0

Pedestrian

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	0	0	0	0	0
2	0	0	0	0	0
3	0	0	0	0	0
4	0	0	0	0	0
*	0	0	0	0	0
Lanes	**Hourly Volume In Both Directions**				
2	0	0	0	0	0
4	0	0	0	0	0
6	0	0	0	0	0
8	0	0	0	0	0
*	0	0	0	0	0
Lanes	**Annual Average Daily Traffic**				
2	0	0	0	0	0
4	0	0	0	0	0
6	0	0	0	0	0
8	0	0	0	0	0
*	0	0	0	0	0

Bus

A	B	C	D	E
Buses Per Hour In Peak Direction				
Buses in Study Hour in Peak Direction (Daily)				

*** Service Volumes for the specific facility being analyzed, based on # of lanes from the intersection and segment data screens.**
**** Cannot be achieved based on input data provided.**
***** Not applicable for that level of service letter grade. See generalized tables notes for more details.**
 # Under the given conditions, left turn lane storage is highly likely to overflow. The number of directional thru lanes should be reduced accordingly.
Facility weighted g/C exceeds normally acceptable upper range (0.5); verify that g/C inputs are correct.
Intersection capacity (ies) are exceeded for the full hour; an operational level analysis tool is more appropriate for this situation.

ARTPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst		**Arterial Name**	SW 8 St.	**Study Period**	**Standard K**
Date Prepared	11/13/2014 8:20:08 AM	**From**	SR 9/SW 27 Ave.	**Modal Analysis**	Multimodal
Agency		**To**	US 1	**Program**	ARTPLAN 2012
Area Type	Large Urbanized	**Peak Direction**	Westbound	**Version Date**	12/12/2012
Arterial Class	2				

File Name	G:\PROJECTS\57675_Jacobs-FDOT SR7-SW8th St to Tamiami\05 Project Wking Files\Calcs\Operational Analyses\ARTPLAN\3L Alt 3\SW 8 St Alt 3 2040.xap
User Notes	SW 8 St 3 Lanes Alt 3 2040

Arterial Data

K	0.09	**PHF**	0.95	**Control Type**	Pretimed
D	0.999	**% Heavy Vehicles**	2	**Base Sat. Flow Rate**	1950

Automobile Intersection Data

Cross Street	Cycle Length	Thru g/C	Arr. Type	INT # Dir.Lanes	% Left Turns	% Right Turns	Left Turn Lanes	Left Turn Phasing	# Left Turn Lanes	LT Storage Length	Left g/C	Right Turn Lanes
SW 24 Ave.	120	0.75	3	3	5	5	No	None	N/A	N/A	N/A	No
SW 22 Ave.	120	0.41	3	3	24	17	No	None	N/A	N/A	N/A	No
SW 19 Ave.	120	0.65	3	3	5	5	No	None	N/A	N/A	N/A	No
SW 17 Ave.	120	0.48	3	3	20	12	No	None	N/A	N/A	N/A	No
SR 933/SW 12 Ave.	120	0.56	3	3	20	12	No	None	N/A	N/A	N/A	No
SR 7/SW 8 Ave.	120	0.44	3	3	9	9	No	None	N/A	N/A	N/A	No
SW 5 Ave.	120	0.58	3	3	0	17	No	None	N/A	N/A	N/A	No
SW 4 Ave.	130	0.49	3	3	1	0	No	None	N/A	N/A	N/A	No
SW 3 Ave.	130	0.67	3	3	0	13	No	None	N/A	N/A	N/A	No
SW 2 Ave.	130	0.55	3	3	5	5	No	None	N/A	N/A	N/A	No
SW 1 Ave.	130	0.53	3	3	18	0	No	None	N/A	N/A	N/A	No
S. Miami Ave.	130	0.56	3	3	0	20	No	None	N/A	N/A	N/A	No
US 1	150	0.31	3	1	35	16	No	None	N/A	N/A	N/A	No

Automobile Segment Data

Segment #	Length	AADT	Hourly Vol.	SEG # Dir.Lanes	Posted Speed	Free Flow Speed	Median Type	On-Street Parking	Parking Activity
1 (to SW 24 Ave.)	1361	12700	1142	3	30	35	None	Yes	Low
2 (to SW 22 Ave.)	1341	12500	1124	3	30	35	None	Yes	Low
3 (to SW 19 Ave.)	1890	14900	1340	3	30	35	None	Yes	Low
4 (to SW 17 Ave.)	813	14900	1340	3	30	35	None	Yes	Low
5 (to SR 933/SW 12 Ave.)	2656	15400	1385	3	30	35	None	Yes	Low
6 (to SR 7/SW 8 Ave.)	2313	14500	1304	3	30	35	None	Yes	Low
7 (to SW 5 Ave.)	1653	14900	1340	3	30	35	None	Yes	Low
8 (to SW 4 Ave.)	554	16900	1519	3	30	35	None	Yes	Low
9 (to SW 3 Ave.)	539	10800	971	3	30	35	None	Yes	Low
10 (to SW 2 Ave.)	576	44200	3974	3	30	35	None	Yes	Low
11 (to SW 1 Ave.)	581	40200	3614	3	30	35	None	Yes	Low
12 (to S. Miami Ave.)	655	38800	3489	3	30	35	None	Yes	Low
13 (to US 1)	898	34800	3129	3	30	35	None	Yes	Low

Automobile LOS

Segment #	Thru Mvmt Flow Rate	Adj. Sat. Flow Rate	v/c	Control Delay	Int. Approach LOS	Queue Ratio	Speed (mph)	Segment LOS
1 (to SW 24 Ave.)	1202	3725	0.430	5.98	A	0.00	26.66	B
2 (to SW 22 Ave.)	1183	3692	0.782	34.45	C	0.00	14.83	D
3 (to SW 19 Ave.)	1411	3753	0.578	12.31	B	0.00	24.97	B
4 (to SW 17 Ave.)	1411	3734	0.787	28.92	C	0.00	12.13	E
5 (to SR 933/SW 12 Ave.)	1458	3741	0.696	20.05	C	0.00	24.26	B
6 (to SR 7/SW 8 Ave.)	1373	3737	0.835	33.20	C	0.00	19.61	C
7 (to SW 5 Ave.)	1411	4652	0.523	15.51	B	0.00	22.56	B
8 (to SW 4 Ave.)	1599	3809	0.857	33.67	C	0.00	8.49	F
9 (to SW 3 Ave.)	1022	4616	0.331	9.21	A	0.00	16.70	D
10 (to SW 2 Ave.)	4183	3930	1.935	217.81	F	0.00	1.84	F
11 (to SW 1 Ave.)	3804	3944	1.820	773.93	F	0.00	0.55	F
12 (to S. Miami Ave.)	3673	4862	1.349	208.66	F	0.00	2.15	F
13 (to US 1)	3294	1233	1.231	163.92	F	0.00	3.49	F

Arterial Length	**3.1458**	**Weighted g/C**	**0.43**	**FFS Delay**	**1619.46**	**Threshold Delay**	**1056.68**	**Auto Speed**	**###**	**Auto LOS**	**###**

Automobile Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1000 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1					
2					
3					
4					
*					
Lanes	**Hourly Volume In Both Directions**				
2					
4					
6					
8					
*					
Lanes	**Annual Average Daily Traffic**				
2					
4					
6					
8					
*					

Multimodal Segment Data

Segment #	Outside Lane Width	Pave Cond	Pave Shldr /Bike Lane	Side Path	Side Path Separation	Side walk	Sidewalk Roadway Separation	Sidewalk Roadway Protective Barrier	Bus Freq	Passenger Load Factor	Amenities	Bus Stop Type
1 (to SW 24 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
2 (to SW 22 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
3 (to SW 19 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
4 (to SW 17 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
5 (to SR 933/SW 12 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
6 (to SR 7/SW 8 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
7 (to SW 5 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
8 (to SW 4 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
9 (to SW 3 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
10 (to SW 2 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
11 (to SW 1 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
12 (to S. Miami Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
13 (to US 1)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical

Pedestrian SubSegment Data

	% of Segment			Sidewalk			Separation			Barrier		
Segment #	**1**	**2**	**3**	**1**	**2**	**3**	**1**	**2**	**3**	**1**	**2**	**3**
1 (to SW 24 Ave.)	100			Yes			Adjacent			No		
2 (to SW 22 Ave.)	100			Yes			Adjacent			No		
3 (to SW 19 Ave.)	100			Yes			Adjacent			No		
4 (to SW 17 Ave.)	100			Yes			Adjacent			No		
5 (to SR 933/SW 12 Ave.)	100			Yes			Adjacent			No		
6 (to SR 7/SW 8 Ave.)	100			Yes			Adjacent			No		
7 (to SW 5 Ave.)	100			Yes			Adjacent			No		
8 (to SW 4 Ave.)	100			Yes			Adjacent			No		
9 (to SW 3 Ave.)	100			Yes			Adjacent			No		
10 (to SW 2 Ave.)	100			Yes			Adjacent			No		
11 (to SW 1 Ave.)	100			Yes			Adjacent			No		
12 (to S. Miami Ave.)	100			Yes			Adjacent			No		
13 (to US 1)	100			Yes			Adjacent			No		

Multimodal LOS

	Bicycle Street		Bicycle Sidepath		Pedestrian					Bus	
Link #	**Score**	**LOS**	**Score**	**LOS**	**1**	**2**	**3**	**Score**	**LOS**	**Adj. Buses**	**LOS**

1 (to SW 24 Ave.)	3.32	C	N/A	N/A	2.49	B	5.36	B
2 (to SW 22 Ave.)	3.31	C	N/A	N/A	2.47	B	5.96	B
3 (to SW 19 Ave.)	3.45	C	N/A	N/A	2.66	B	5.96	B
4 (to SW 17 Ave.)	3.37	C	N/A	N/A	2.59	B	5.36	B
5 (to SR 933/SW 12 Ave.)	3.49	C	N/A	N/A	2.71	B	5.96	B
6 (to SR 7/SW 8 Ave.)	3.44	C	N/A	N/A	2.64	B	5.96	B
7 (to SW 5 Ave.)	3.45	C	N/A	N/A	2.65	B	5.96	B
8 (to SW 4 Ave.)	3.36	C	N/A	N/A	2.67	B	5.36	B
9 (to SW 3 Ave.)	3.04	C	N/A	N/A	2.23	B	4.17	B
10 (to SW 2 Ave.)	3.78	D	N/A	N/A	4.59	E	6.10	A
11 (to SW 1 Ave.)	3.76	D	N/A	N/A	4.31	E	6.10	A
12 (to S. Miami Ave.)	3.80	D	N/A	N/A	4.23	D	7.18	A
13 (to US 1)	3.83	D	N/A	N/A	3.99	D	7.18	A
	Bicycle LOS	**3.48**	**C**		**Pedestrian LOS**	**3.02**	**C**	**Bus LOS**	**5.92**	**B**

MultiModal Service Volume Tables

Bicycle

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	0	0	0	0	0
2	0	0	0	0	0
3	0	0	0	0	0
4	0	0	0	0	0
*	0	0	0	0	0
Lanes	**Hourly Volume In Both Directions**				
2	0	0	0	0	0
4	0	0	0	0	0
6	0	0	0	0	0
8	0	0	0	0	0
*	0	0	0	0	0
Lanes	**Annual Average Daily Traffic**				
2	0	0	0	0	0
4	0	0	0	0	0
6	0	0	0	0	0
8	0	0	0	0	0
*	0	0	0	0	0

Pedestrian

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	0	0	0	0	0
2	0	0	0	0	0
3	0	0	0	0	0
4	0	0	0	0	0
*	0	0	0	0	0
Lanes	**Hourly Volume In Both Directions**				
2	0	0	0	0	0
4	0	0	0	0	0
6	0	0	0	0	0
8	0	0	0	0	0
*	0	0	0	0	0
Lanes	**Annual Average Daily Traffic**				
2	0	0	0	0	0
4	0	0	0	0	0
6	0	0	0	0	0
8	0	0	0	0	0
*	0	0	0	0	0

Bus

A	B	C	D	E
Buses Per Hour In Peak Direction				
Buses in Study Hour in Peak Direction (Daily)				

*** Service Volumes for the specific facility being analyzed, based on # of lanes from the intersection and segment data screens.**
**** Cannot be achieved based on input data provided.**
***** Not applicable for that level of service letter grade. See generalized tables notes for more details.**
 # Under the given conditions, left turn lane storage is highly likely to overflow. The number of directional thru lanes should be reduced accordingly.
Facility weighted g/C exceeds normally acceptable upper range (0.5); verify that g/C inputs are correct.
Intersection capacity (ies) are exceeded for the full hour; an operational level analysis tool is more appropriate for this situation.

ARTPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst		**Arterial Name**	SR 90/SW 7 St.	**Study Period**	**Standard K**
Date Prepared	11/13/2014 12:41:23 PM	**From**	US 1	**Modal Analysis**	Multimodal
Agency		**To**	SR 9/SW 27 Ave.	**Program**	ARTPLAN 2012
Area Type	Large Urbanized	**Peak Direction**	Eastbound	**Version Date**	12/12/2012
Arterial Class	2				
File Name	G:\PROJECTS\57675_Jacobs-FDOT SR7-SW8th St to Tamiami\05 Project Wking Files\Calcs\Operational Analyses\ARTPLAN\3L Alt 3\SW 7 St Alt 3 2040.xap				
User Notes	3 Lanes Alternative 3, 2040				

Arterial Data

K	0.09	**PHF**	0.95	**Control Type**	Pretimed
D	0.999	**% Heavy Vehicles**	2	**Base Sat. Flow Rate**	1950

Automobile Intersection Data

Cross Street	Cycle Length	Thru g/C	Arr. Type	INT # Dir.Lanes	% Left Turns	% Right Turns	Left Turn Lanes	Left Turn Phasing	# Left Turn Lanes	LT Storage Length	Left g/C	Right Turn Lanes
S. Miami Ave.	150	0.57	3	3	40	0	No	None	N/A	N/A	N/A	No
SW 1 Ave.	150	0.46	3	3	0	20	No	None	N/A	N/A	N/A	No
SW 2 Ave.	150	0.58	3	3	22	16	No	None	N/A	N/A	N/A	No
SW 3 Ave.	150	0.55	3	3	10	9	No	None	N/A	N/A	N/A	No
SW 4 Ave.	150	0.43	3	2	0	7	No	None	N/A	N/A	N/A	No
SR 7/SW 8 Ave.	120	0.53	3	3	9	2	No	None	N/A	N/A	N/A	No
SR 933/SW 12 Ave.	120	0.48	3	3	8	4	No	None	N/A	N/A	N/A	No
SW 16 Ave.	120	0.73	3	3	0	5	No	None	N/A	N/A	N/A	No
SW 17 Ave.	120	0.51	3	3	6	5	No	None	N/A	N/A	N/A	No
SW 19 Ave.	120	0.62	3	3	6	5	No	None	N/A	N/A	N/A	No
SW 22 Ave.	120	0.47	3	3	6	3	No	None	N/A	N/A	N/A	No
Beacom Blvd.	120	0.52	3	2	8	2	No	None	N/A	N/A	N/A	No
SR 9/SW 27 Ave.	130	0.11	3	1	38	24	Yes	Protected	1	235	0.12	Yes

Automobile Segment Data

Segment #	Length	AADT	Hourly Vol.	SEG # Dir.Lanes	Posted Speed	Free Flow Speed	Median Type	On-Street Parking	Parking Activity
1 (to S. Miami Ave.)	966	26500	2383	3	30	35	None	No	N/A
2 (to SW 1 Ave.)	576	36400	3273	3	30	35	None	No	N/A

3 (to SW 2 Ave.)	781	35200	3165	3	30	35	None	No	N/A
4 (to SW 3 Ave.)	554	44000	3956	3	30	35	None	No	N/A
5 (to SW 4 Ave.)	533	48100	4325	3	30	35	None	No	N/A
6 (to SR 7/SW 8 Ave.)	2218	37200	3345	3	30	35	None	No	N/A
7 (to SR 933/SW 12 Ave.)	2313	34300	3084	3	30	35	None	No	N/A
8 (to SW 16 Ave.)	2196	34200	3075	3	30	35	None	No	N/A
9 (to SW 17 Ave.)	465	34200	3075	3	30	35	None	No	N/A
10 (to SW 19 Ave.)	1352	32200	2895	3	30	35	None	No	N/A
11 (to SW 22 Ave.)	1341	32200	2895	3	30	35	None	No	N/A
12 (to Beacom Blvd.)	2096	31200	2805	3	30	35	None	No	N/A
13 (to SR 9/SW 27 Ave.)	438	26200	2356	1	30	35	None	No	N/A

Automobile LOS

Segment #	Thru Mvmt Flow Rate	Adj. Sat. Flow Rate	v/c	Control Delay	Int. Approach LOS	Queue Ratio	Speed (mph)	Segment LOS
1 (to S. Miami Ave.)	2508	3839	0.715	24.68	C	0.00	14.65	D
2 (to SW 1 Ave.)	3445	4862	1.540	319.69	F	0.00	1.29	F
3 (to SW 2 Ave.)	3332	3900	1.473	303.65	F	0.00	1.77	F
4 (to SW 3 Ave.)	4164	3919	1.932	176.27	F	0.00	2.17	F
5 (to SW 4 Ave.)	4553	3255	3.253	952.95	F	0.00	0.42	F
6 (to SR 7/SW 8 Ave.)	3521	3939	1.687	434.26	F	0.00	3.20	F
7 (to SR 933/SW 12 Ave.)	3246	3933	1.720	416.92	F	0.00	3.45	F
8 (to SW 16 Ave.)	3237	4913	0.903	13.24	B	0.00	24.53	B
9 (to SW 17 Ave.)	3237	3930	1.615	359.03	F	0.00	0.96	F
10 (to SW 19 Ave.)	3047	3930	1.251	151.65	F	0.00	5.26	F
11 (to SW 22 Ave.)	3047	3936	1.647	366.20	F	0.00	2.40	F
12 (to Beacom Blvd.)	2953	2613	2.173	421.88	F	0.00	3.14	F
13 (to SR 9/SW 27 Ave.)	942	1210	0.864	63.83	E	#	NaN	F

Arterial Length	**3.1456**	**Weighted g/C**	**0.32**	**FFS Delay**	**NaN**	**Threshold Delay**	**NaN**	**Auto Speed**	**###**	**Auto LOS**	**###**

Automobile Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1000 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1					
2					
3					
4					
*					
Lanes	**Hourly Volume In Both Directions**				
2					
4					
6					
8					
*					
Lanes	**Annual Average Daily Traffic**				
2					
4					
6					
8					
*					

Multimodal Segment Data

Segment #	Outside Lane Width	Pave Cond	Pave Shldr /Bike Lane	Side Path	Side Path Separation	Side walk	Sidewalk Roadway Separation	Sidewalk Roadway Protective Barrier	Bus Freq	Passenger Load Factor	Amenities	Bus Stop Type
1 (to S. Miami Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
2 (to SW 1 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
3 (to SW 2 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
4 (to SW 3 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
5 (to SW 4 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
6 (to SR 7/SW 8 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
7 (to SR 933/SW 12 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
8 (to SW 16 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
9 (to SW 17 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
10 (to SW 19 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
11 (to SW 22 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
12 (to Beacom Blvd.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
13 (to SR 9/SW 27 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical

Pedestrian SubSegment Data

	% of Segment			Sidewalk			Separation			Barrier		
Segment #	**1**	**2**	**3**	**1**	**2**	**3**	**1**	**2**	**3**	**1**	**2**	**3**
1 (to S. Miami Ave.)	100			Yes			Adjacent			No		
2 (to SW 1 Ave.)	100			Yes			Adjacent			No		
3 (to SW 2 Ave.)	100			Yes			Adjacent			No		
4 (to SW 3 Ave.)	100			Yes			Adjacent			No		
5 (to SW 4 Ave.)	100			Yes			Adjacent			No		
6 (to SR 7/SW 8 Ave.)	100			Yes			Adjacent			No		
7 (to SR 933/SW 12 Ave.)	100			Yes			Adjacent			No		
8 (to SW 16 Ave.)	100			Yes			Adjacent			No		
9 (to SW 17 Ave.)	100			Yes			Adjacent			No		
10 (to SW 19 Ave.)	100			Yes			Adjacent			No		
11 (to SW 22 Ave.)	100			Yes			Adjacent			No		
12 (to Beacom Blvd.)	100			Yes			Adjacent			No		
13 (to SR 9/SW 27 Ave.)	100			Yes			Adjacent			No		

Multimodal LOS

	Bicycle	Bicycle	Pedestrian	Bus

	Street		Sidepath								
Link #	**Score**	**LOS**	**Score**	**LOS**	**1**	**2**	**3**	**Score**	**LOS**	**Adj. Buses**	**LOS**
1 (to S. Miami Ave.)	4.32	E	N/A	N/A				3.81	D	5.39	B
2 (to SW 1 Ave.)	4.22	D	N/A	N/A				3.75	D	7.18	A
3 (to SW 2 Ave.)	4.40	E	N/A	N/A				4.39	E	6.10	A
4 (to SW 3 Ave.)	4.38	E	N/A	N/A				4.96	E	6.10	A
5 (to SW 4 Ave.)	4.37	E	N/A	N/A				5.24	F	3.95	C
6 (to SR 7/SW 8 Ave.)	4.50	E	N/A	N/A				4.59	E	7.63	A
7 (to SR 933/SW 12 Ave.)	4.47	E	N/A	N/A				4.39	E	7.63	A
8 (to SW 16 Ave.)	4.47	E	N/A	N/A				4.38	E	5.09	B
9 (to SW 17 Ave.)	4.22	D	N/A	N/A				4.25	E	6.10	A
10 (to SW 19 Ave.)	4.43	E	N/A	N/A				4.23	D	7.18	A
11 (to SW 22 Ave.)	4.43	E	N/A	N/A				4.23	D	7.18	A
12 (to Beacom Blvd.)	4.44	E	N/A	N/A				4.18	D	8.98	A
13 (to SR 9/SW 27 Ave.)	NaN	F	N/A	N/A				NaN	F	0.00	F
	Bicycle LOS	**NaN**	**F**				**Pedestrian LOS**	**NaN**	**F**	**Bus LOS**	**6.69**	**A**

MultiModal Service Volume Tables

Bicycle

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	0	0	0	0	0
2	0	0	0	0	0
3	0	0	0	0	0
4	0	0	0	0	0
*	0	0	0	0	0
Lanes	**Hourly Volume In Both Directions**				
2	0	0	0	0	0
4	0	0	0	0	0
6	0	0	0	0	0
8	0	0	0	0	0
*	0	0	0	0	0
Lanes	**Annual Average Daily Traffic**				
2	0	0	0	0	0
4	0	0	0	0	0
6	0	0	0	0	0
8	0	0	0	0	0
*	0	0	0	0	0

Pedestrian

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	0	0	0	0	0
2	0	0	0	0	0
3	0	0	0	0	0
4	0	0	0	0	0
*	0	0	0	0	0
Lanes	**Hourly Volume In Both Directions**				
2	0	0	0	0	0
4	0	0	0	0	0
6	0	0	0	0	0
8	0	0	0	0	0
*	0	0	0	0	0
Lanes	**Annual Average Daily Traffic**				
2	0	0	0	0	0
4	0	0	0	0	0
6	0	0	0	0	0
8	0	0	0	0	0
*	0	0	0	0	0

Bus

A	B	C	D	E
Buses Per Hour In Peak Direction				
Buses in Study Hour in Peak Direction (Daily)				

*** Service Volumes for the specific facility being analyzed, based on # of lanes from the intersection and segment data screens.**
**** Cannot be achieved based on input data provided.**
***** Not applicable for that level of service letter grade. See generalized tables notes for more details.**
 # Under the given conditions, left turn lane storage is highly likely to overflow. The number of directional thru lanes should be reduced accordingly.
Facility weighted g/C exceeds normally acceptable upper range (0.5); verify that g/C inputs are correct.
Intersection capacity (ies) are exceeded for the full hour; an operational level analysis tool is more appropriate for this situation.

ARTPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst		**Arterial Name**	SR 90/SW 8 St.	**Study Period**	**Standard K**
Date Prepared	11/13/2014 8:20:08 AM	**From**	SR 9/SW 27 Ave.	**Modal Analysis**	Multimodal
Agency		**To**	US 1	**Program**	ARTPLAN 2012
Area Type	Large Urbanized	**Peak Direction**	Eastbound	**Version Date**	12/12/2012
Arterial Class	2				

File Name	G:\PROJECTS\57675_Jacobs-FDOT SR7-SW8th St to Tamiami\05 Project Wking Files\Calcs\Operational Analyses\ARTPLAN\3L Alt 4\SW 8 St Alt 4 2020.xap
User Notes	3 Lanes Alternative 4, 2020

Arterial Data

K	0.09	**PHF**	0.95	**Control Type**	Pretimed
D	0.999	**% Heavy Vehicles**	2	**Base Sat. Flow Rate**	1950

Automobile Intersection Data

Cross Street	Cycle Length	Thru g/C	Arr. Type	INT # Dir.Lanes	% Left Turns	% Right Turns	Left Turn Lanes	Left Turn Phasing	# Left Turn Lanes	LT Storage Length	Left g/C	Right Turn Lanes
SW 24 Ave.	120	0.73	3	3	3	3	No	None	N/A	N/A	N/A	No
SW 22 Ave.	120	0.54	3	3	6	4	No	None	N/A	N/A	N/A	No
SW 19 Ave.	120	0.66	3	3	5	1	No	None	N/A	N/A	N/A	No
SW 17 Ave.	120	0.5	3	3	10	4	No	None	N/A	N/A	N/A	No
SR 933/SW 12 Ave.	120	0.4	3	3	8	5	No	None	N/A	N/A	N/A	No
SR 7/SW 8 Ave.	120	0.6	3	3	7	3	No	None	N/A	N/A	N/A	No
SW 5 Ave.	120	0.62	3	3	6	6	No	None	N/A	N/A	N/A	No
SW 4 Ave.	130	0.65	3	3	0	5	No	None	N/A	N/A	N/A	No
SW 3 Ave.	130	0.43	3	3	7	0	No	None	N/A	N/A	N/A	No
SW 2 Ave.	130	0.57	3	3	15	10	No	None	N/A	N/A	N/A	No
SW 1 Ave.	130	0.5	3	3	0	20	No	None	N/A	N/A	N/A	No
S. Miami Ave.	130	0.65	3	3	13	0	No	None	N/A	N/A	N/A	No
US 1	150	0.28	3	2	40	20	Yes	Protected	2	1000	0.25	No

Automobile Segment Data

Segment #	Length	AADT	Hourly Vol.	SEG # Dir.Lanes	Posted Speed	Free Flow Speed	Median Type	On-Street Parking	Parking Activity
1 (to SW 24 Ave.)	1361	19700	1771	3	30	35	None	Yes	Low
2 (to SW 22 Ave.)	1341	20000	1798	3	30	35	None	Yes	Low
3 (to SW 19 Ave.)	1890	22300	2005	3	30	35	None	Yes	Low
4 (to SW 17 Ave.)	813	22300	2005	3	30	35	None	Yes	Low

5 (to SR 933/SW 12 Ave.)	2656	25200	2266	3	30	35	None	Yes	Low
6 (to SR 7/SW 8 Ave.)	2313	24700	2221	3	30	35	None	Yes	Low
7 (to SW 5 Ave.)	1653	24300	2185	3	30	35	None	Yes	Low
8 (to SW 4 Ave.)	554	25900	2329	3	30	35	None	Yes	Low
9 (to SW 3 Ave.)	539	26800	2410	3	30	35	None	Yes	Low
10 (to SW 2 Ave.)	576	33600	3021	3	30	35	None	Yes	Low
11 (to SW 1 Ave.)	581	28100	2526	3	30	35	None	Yes	Low
12 (to S. Miami Ave.)	655	29600	2661	3	30	35	None	Yes	Low
13 (to US 1)	898	22800	2050	3	30	35	None	Yes	Low

Automobile LOS

Segment #	Thru Mvmt Flow Rate	Adj. Sat. Flow Rate	v/c	Control Delay	Int. Approach LOS	Queue Ratio	Speed (mph)	Segment LOS
1 (to SW 24 Ave.)	1864	3819	0.669	9.44	A	0.00	23.99	B
2 (to SW 22 Ave.)	1893	3820	0.918	30.96	C	0.00	15.52	D
3 (to SW 19 Ave.)	2111	3858	0.829	16.25	B	0.00	22.89	B
4 (to SW 17 Ave.)	2111	3850	1.096	80.95	F	0.00	5.86	F
5 (to SR 933/SW 12 Ave.)	2385	3885	1.535	296.88	F	0.00	5.22	F
6 (to SR 7/SW 8 Ave.)	2338	3884	1.003	30.47	C	0.00	19.90	C
7 (to SW 5 Ave.)	2300	3871	0.958	22.79	C	0.00	19.45	C
8 (to SW 4 Ave.)	2452	4905	0.769	16.27	B	0.00	12.99	E
9 (to SW 3 Ave.)	2537	3944	1.496	284.05	F	0.00	1.36	F
10 (to SW 2 Ave.)	3180	3917	1.424	255.12	F	0.00	1.60	F
11 (to SW 1 Ave.)	2659	4862	1.094	78.81	E	0.00	4.59	F
12 (to S. Miami Ave.)	2801	3944	1.093	69.88	E	0.00	5.56	F
13 (to US 1)	1295	3069	0.812	51.13	D	0.70	8.91	F

Arterial Length	**3.1458**	**Weighted g/C**	**0.43**	**FFS Delay**	**1309.55**	**Threshold Delay**	**746.78**	**Auto Speed**	**###**	**Auto LOS**	**###**

Automobile Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1000 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1					
2					
3					
4					
*					
Lanes	**Hourly Volume In Both Directions**				
2					
4					
6					
8					
*					
Lanes	**Annual Average Daily Traffic**				
2					
4					
6					
8					
*					

Multimodal Segment Data

Segment #	Outside Lane Width	Pave Cond	Pave Shldr /Bike Lane	Side Path	Side Path Separation	Side walk	Sidewalk Roadway Separation	Sidewalk Roadway Protective Barrier	Bus Freq	Passenger Load Factor	Amenities	Bus Stop Type
1 (to SW 24 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
2 (to SW 22 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
3 (to SW 19 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
4 (to SW 17 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
5 (to SR 933/SW 12 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
6 (to SR 7/SW 8 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
7 (to SW 5 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
8 (to SW 4 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
9 (to SW 3 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
10 (to SW 2 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
11 (to SW 1 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
12 (to S. Miami Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
13 (to US 1)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical

Pedestrian SubSegment Data

	% of Segment			Sidewalk			Separation			Barrier		
Segment #	**1**	**2**	**3**	**1**	**2**	**3**	**1**	**2**	**3**	**1**	**2**	**3**
1 (to SW 24 Ave.)	100			Yes			Adjacent			No		
2 (to SW 22 Ave.)	100			Yes			Adjacent			No		
3 (to SW 19 Ave.)	100			Yes			Adjacent			No		
4 (to SW 17 Ave.)	100			Yes			Adjacent			No		
5 (to SR 933/SW 12 Ave.)	100			Yes			Adjacent			No		
6 (to SR 7/SW 8 Ave.)	100			Yes			Adjacent			No		
7 (to SW 5 Ave.)	100			Yes			Adjacent			No		
8 (to SW 4 Ave.)	100			Yes			Adjacent			No		
9 (to SW 3 Ave.)	100			Yes			Adjacent			No		
10 (to SW 2 Ave.)	100			Yes			Adjacent			No		
11 (to SW 1 Ave.)	100			Yes			Adjacent			No		
12 (to S. Miami Ave.)	100			Yes			Adjacent			No		
13 (to US 1)	100			Yes			Adjacent			No		

Multimodal LOS

	Bicycle Street		Bicycle Sidepath		Pedestrian					Bus	
Link #	**Score**	**LOS**	**Score**	**LOS**	**1**	**2**	**3**	**Score**	**LOS**	**Adj. Buses**	**LOS**

1 (to SW 24 Ave.)	3.64	D	N/A	N/A	2.97	C	5.39	B
2 (to SW 22 Ave.)	3.64	D	N/A	N/A	2.99	C	5.99	B
3 (to SW 19 Ave.)	3.71	D	N/A	N/A	3.17	C	5.99	B
4 (to SW 17 Ave.)	3.63	D	N/A	N/A	3.10	C	5.99	B
5 (to SR 933/SW 12 Ave.)	3.78	D	N/A	N/A	3.39	C	9.43	A
6 (to SR 7/SW 8 Ave.)	3.77	D	N/A	N/A	3.35	C	6.28	A
7 (to SW 5 Ave.)	3.75	D	N/A	N/A	3.31	C	5.99	B
8 (to SW 4 Ave.)	3.58	D	N/A	N/A	3.30	C	4.40	B
9 (to SW 3 Ave.)	3.58	D	N/A	N/A	3.36	C	7.54	A
10 (to SW 2 Ave.)	3.70	D	N/A	N/A	3.85	D	7.18	A
11 (to SW 1 Ave.)	3.64	D	N/A	N/A	3.47	C	6.28	A
12 (to S. Miami Ave.)	3.70	D	N/A	N/A	3.59	D	5.99	B
13 (to US 1)	3.65	D	N/A	N/A	3.15	C	5.99	B
	Bicycle LOS	**3.70**	**D**		**Pedestrian LOS**	**3.29**	**C**	**Bus LOS**	**6.59**	**A**

MultiModal Service Volume Tables

Bicycle

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	0	0	0	0	0
2	0	0	0	0	0
3	0	0	0	0	0
4	0	0	0	0	0
*	0	0	0	0	0
Lanes	**Hourly Volume In Both Directions**				
2	0	0	0	0	0
4	0	0	0	0	0
6	0	0	0	0	0
8	0	0	0	0	0
*	0	0	0	0	0
Lanes	**Annual Average Daily Traffic**				
2	0	0	0	0	0
4	0	0	0	0	0
6	0	0	0	0	0
8	0	0	0	0	0
*	0	0	0	0	0

Pedestrian

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	0	0	0	0	0
2	0	0	0	0	0
3	0	0	0	0	0
4	0	0	0	0	0
*	0	0	0	0	0
Lanes	**Hourly Volume In Both Directions**				
2	0	0	0	0	0
4	0	0	0	0	0
6	0	0	0	0	0
8	0	0	0	0	0
*	0	0	0	0	0
Lanes	**Annual Average Daily Traffic**				
2	0	0	0	0	0
4	0	0	0	0	0
6	0	0	0	0	0
8	0	0	0	0	0
*	0	0	0	0	0

Bus

A	B	C	D	E
Buses Per Hour In Peak Direction				
Buses in Study Hour in Peak Direction (Daily)				

*** Service Volumes for the specific facility being analyzed, based on # of lanes from the intersection and segment data screens.**
**** Cannot be achieved based on input data provided.**
***** Not applicable for that level of service letter grade. See generalized tables notes for more details.**
 # Under the given conditions, left turn lane storage is highly likely to overflow. The number of directional thru lanes should be reduced accordingly.
Facility weighted g/C exceeds normally acceptable upper range (0.5); verify that g/C inputs are correct.
Intersection capacity (ies) are exceeded for the full hour; an operational level analysis tool is more appropriate for this situation.

ARTPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst		**Arterial Name**	WB SR 90/SW 7 St.	**Study Period**	**Standard K**
Date Prepared	11/13/2014 12:41:23 PM	**From**	US 1	**Modal Analysis**	Multimodal
Agency		**To**	SR 9/SW 27 Ave.	**Program**	ARTPLAN 2012
Area Type	Large Urbanized	**Peak Direction**	Westbound	**Version Date**	12/12/2012
Arterial Class	2				

File Name	G:\PROJECTS\57675_Jacobs-FDOT SR7-SW8th St to Tamiami\05 Project Wking Files\Calcs\Operational Analyses\ARTPLAN\3L Alt 4\SW 7 St Alt 4 2020.xap
User Notes	3 Lanes Alternative 4, 2020

Arterial Data

K	0.09	**PHF**	0.95	**Control Type**	CoordinatedActuated
D	0.999	**% Heavy Vehicles**	2	**Base Sat. Flow Rate**	1950

Automobile Intersection Data

Cross Street	Cycle Length	Thru g/C	Arr. Type	INT # Dir.Lanes	% Left Turns	% Right Turns	Left Turn Lanes	Left Turn Phasing	# Left Turn Lanes	LT Storage Length	Left g/C	Right Turn Lanes
S. Miami Ave.	130	0.53	3	3	0	20	No	None	N/A	N/A	N/A	No
SW 1 Ave.	130	0.44	3	3	20	0	No	None	N/A	N/A	N/A	No
SW 2 Ave.	130	0.51	3	3	9	10	No	None	N/A	N/A	N/A	No
SW 3 Ave.	130	0.68	3	3	3	18	No	None	N/A	N/A	N/A	No
SW 4 Ave.	130	0.5	3	2	30	0	Yes	ProtPerm	2	1000	0.25	No
SR 7/SW 8 Ave.	120	0.61	3	3	7	11	No	None	N/A	N/A	N/A	No
SR 933/SW 12 Ave.	120	0.42	3	3	9	8	No	None	N/A	N/A	N/A	No
SW 16 Ave.	120	0.75	3	3	8	8	No	None	N/A	N/A	N/A	No
SW 17 Ave.	120	0.47	3	3	11	11	No	None	N/A	N/A	N/A	No
SW 19 Ave.	120	0.75	3	3	5	2	No	None	N/A	N/A	N/A	No
SW 22 Ave.	120	0.49	3	3	18	13	No	None	N/A	N/A	N/A	No
Beacom Blvd.	120	0.49	3	2	44	0	Yes	ProtPerm	1	1000	0.25	No
SR 9/SW 27 Ave.	130	0.2	3	1	38	24	Yes	Protected	2	438	0.25	Yes

Automobile Segment Data

Segment #	Length	AADT	Hourly Vol.	SEG # Dir.Lanes	Posted Speed	Free Flow Speed	Median Type	On-Street Parking	Parking Activity
1 (to S. Miami Ave.)	966	18500	1663	3	30	35	Restrictive	No	N/A
2 (to SW 1 Ave.)	576	22500	2023	3	30	35	Restrictive	No	N/A

3 (to SW 2 Ave.)	781	23800	2140	3	30	35	Restrictive	No	N/A
4 (to SW 3 Ave.)	554	22800	2050	3	30	35	Restrictive	No	N/A
5 (to SW 4 Ave.)	533	14900	1340	3	30	35	Restrictive	No	N/A
6 (to SR 7/SW 8 Ave.)	2218	15600	1403	3	30	35	Restrictive	No	N/A
7 (to SR 933/SW 12 Ave.)	2313	16600	1493	3	30	35	Restrictive	No	N/A
8 (to SW 16 Ave.)	2196	16600	1493	3	30	35	Restrictive	No	N/A
9 (to SW 17 Ave.)	465	18000	1618	3	30	35	Restrictive	No	N/A
10 (to SW 19 Ave.)	1352	18000	1618	3	30	35	Restrictive	No	N/A
11 (to SW 22 Ave.)	1341	18200	1636	3	30	35	Restrictive	No	N/A
12 (to Beacom Blvd.)	2096	15600	1403	3	30	35	Restrictive	No	N/A
13 (to SR 9/SW 27 Ave.)	438	13500	1214	1	30	35	Restrictive	No	N/A

Automobile LOS

Segment #	Thru Mvmt Flow Rate	Adj. Sat. Flow Rate	v/c	Control Delay	Int. Approach LOS	Queue Ratio	Speed (mph)	Segment LOS
1 (to S. Miami Ave.)	1751	4971	0.664	23.10	C	0.00	15.33	D
2 (to SW 1 Ave.)	2129	3958	0.725	31.81	C	0.00	9.16	F
3 (to SW 2 Ave.)	2253	4084	1.082	77.55	E	0.00	5.94	F
4 (to SW 3 Ave.)	2158	4046	0.784	14.48	B	0.00	14.11	D
5 (to SW 4 Ave.)	987	3310	0.597	24.00	C	0.17	10.47	E
6 (to SR 7/SW 8 Ave.)	1477	3943	0.614	15.51	B	0.00	24.90	B
7 (to SR 933/SW 12 Ave.)	1572	3964	0.944	43.30	D	0.00	17.54	C
8 (to SW 16 Ave.)	1572	3964	0.529	6.36	A	0.00	29.06	A
9 (to SW 17 Ave.)	1703	3974	0.912	36.55	D	0.00	7.13	F
10 (to SW 19 Ave.)	1703	3999	0.568	6.76	A	0.00	26.22	B
11 (to SW 22 Ave.)	1722	3970	0.880	32.42	C	0.00	15.36	D
12 (to Beacom Blvd.)	827	3268	0.517	21.32	C	#	22.36	B
13 (to SR 9/SW 27 Ave.)	486	1328	1.829	450.72	F	0.53	0.73	F

Arterial Length	**3.1456**	**Weighted g/C**	**0.38**	**FFS Delay**	**836.57**	**Threshold Delay**	**273.83**	**Auto Speed**	**###**	**Auto LOS**	**###**

Automobile Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1000 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1					
2					
3					
4					
*					
Lanes	**Hourly Volume In Both Directions**				
2					
4					
6					
8					
*					
Lanes	**Annual Average Daily Traffic**				
2					
4					
6					
8					
*					

Multimodal Segment Data

Segment #	Outside Lane Width	Pave Cond	Pave Shldr /Bike Lane	Side Path	Side Path Separation	Side walk	Sidewalk Roadway Separation	Sidewalk Roadway Protective Barrier	Bus Freq	Passenger Load Factor	Amenities	Bus Stop Type
1 (to S. Miami Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
2 (to SW 1 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
3 (to SW 2 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
4 (to SW 3 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
5 (to SW 4 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
6 (to SR 7/SW 8 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
7 (to SR 933/SW 12 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
8 (to SW 16 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
9 (to SW 17 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
10 (to SW 19 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
11 (to SW 22 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
12 (to Beacom Blvd.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
13 (to SR 9/SW 27 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical

Pedestrian SubSegment Data

	% of Segment			Sidewalk			Separation			Barrier		
Segment #	**1**	**2**	**3**	**1**	**2**	**3**	**1**	**2**	**3**	**1**	**2**	**3**
1 (to S. Miami Ave.)	100			Yes			Adjacent			No		
2 (to SW 1 Ave.)	100			Yes			Adjacent			No		
3 (to SW 2 Ave.)	100			Yes			Adjacent			No		
4 (to SW 3 Ave.)	100			Yes			Adjacent			No		
5 (to SW 4 Ave.)	100			Yes			Adjacent			No		
6 (to SR 7/SW 8 Ave.)	100			Yes			Adjacent			No		
7 (to SR 933/SW 12 Ave.)	100			Yes			Adjacent			No		
8 (to SW 16 Ave.)	100			Yes			Adjacent			No		
9 (to SW 17 Ave.)	100			Yes			Adjacent			No		
10 (to SW 19 Ave.)	100			Yes			Adjacent			No		
11 (to SW 22 Ave.)	100			Yes			Adjacent			No		
12 (to Beacom Blvd.)	100			Yes			Adjacent			No		
13 (to SR 9/SW 27 Ave.)	100			Yes			Adjacent			No		

Multimodal LOS

	Bicycle	Bicycle	Pedestrian	Bus

	Street		Sidepath								
Link #	**Score**	**LOS**	**Score**	**LOS**	**1**	**2**	**3**	**Score**	**LOS**	**Adj. Buses**	**LOS**
1 (to S. Miami Ave.)	4.15	D	N/A	N/A				3.26	C	5.66	B
2 (to SW 1 Ave.)	4.15	D	N/A	N/A				3.47	C	5.66	B
3 (to SW 2 Ave.)	3.94	D	N/A	N/A				2.96	C	6.28	A
4 (to SW 3 Ave.)	4.14	D	N/A	N/A				3.48	C	4.40	B
5 (to SW 4 Ave.)	3.87	D	N/A	N/A				2.92	C	4.40	B
6 (to SR 7/SW 8 Ave.)	4.06	D	N/A	N/A				3.10	C	6.28	A
7 (to SR 933/SW 12 Ave.)	4.11	D	N/A	N/A				3.17	C	6.28	A
8 (to SW 16 Ave.)	4.11	D	N/A	N/A				3.17	C	6.28	A
9 (to SW 17 Ave.)	3.94	D	N/A	N/A				3.11	C	5.66	B
10 (to SW 19 Ave.)	4.16	D	N/A	N/A				3.25	C	5.66	B
11 (to SW 22 Ave.)	4.16	D	N/A	N/A				3.26	C	6.28	A
12 (to Beacom Blvd.)	4.06	D	N/A	N/A				3.09	C	6.28	A
13 (to SR 9/SW 27 Ave.)	4.23	D	N/A	N/A				4.68	E	6.10	A
	Bicycle LOS	**4.09**	**D**				**Pedestrian LOS**	**3.24**	**C**	**Bus LOS**	**6.01**	**A**

MultiModal Service Volume Tables

Bicycle

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	0	0	0	0	0
2	0	0	0	0	0
3	0	0	0	0	0
4	0	0	0	0	0
*	0	0	0	0	0
Lanes	**Hourly Volume In Both Directions**				
2	0	0	0	0	0
4	0	0	0	0	0
6	0	0	0	0	0
8	0	0	0	0	0
*	0	0	0	0	0
Lanes	**Annual Average Daily Traffic**				
2	0	0	0	0	0
4	0	0	0	0	0
6	0	0	0	0	0
8	0	0	0	0	0
*	0	0	0	0	0

Pedestrian

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	0	0	0	0	0
2	0	0	0	0	0
3	0	0	0	0	0
4	0	0	0	0	0
*	0	0	0	0	0
Lanes	**Hourly Volume In Both Directions**				
2	0	0	0	0	0
4	0	0	0	0	0
6	0	0	0	0	0
8	0	0	0	0	0
*	0	0	0	0	0
Lanes	**Annual Average Daily Traffic**				
2	0	0	0	0	0
4	0	0	0	0	0
6	0	0	0	0	0
8	0	0	0	0	0
*	0	0	0	0	0

Bus

A	B	C	D	E
Buses Per Hour In Peak Direction				
Buses in Study Hour in Peak Direction (Daily)				

*** Service Volumes for the specific facility being analyzed, based on # of lanes from the intersection and segment data screens.**
**** Cannot be achieved based on input data provided.**
***** Not applicable for that level of service letter grade. See generalized tables notes for more details.**
 # Under the given conditions, left turn lane storage is highly likely to overflow. The number of directional thru lanes should be reduced accordingly.
Facility weighted g/C exceeds normally acceptable upper range (0.5); verify that g/C inputs are correct.
Intersection capacity (ies) are exceeded for the full hour; an operational level analysis tool is more appropriate for this situation.

ARTPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst		**Arterial Name**	SR 90/SW 8 St.	**Study Period**	**Standard K**
Date Prepared	11/13/2014 8:20:08 AM	**From**	SR 9/SW 27 Ave.	**Modal Analysis**	Multimodal
Agency		**To**	US 1	**Program**	ARTPLAN 2012
Area Type	Large Urbanized	**Peak Direction**	Eastbound	**Version Date**	12/12/2012
Arterial Class	2				

File Name	G:\PROJECTS\57675_Jacobs-FDOT SR7-SW8th St to Tamiami\05 Project Wking Files\Calcs\Operational Analyses\ARTPLAN\3L Alt 4\SW 8 St Alt 4 2040.xap
User Notes	3 Lanes Alternative 4, 2040

Arterial Data

K	0.09	**PHF**	0.95	**Control Type**	Pretimed
D	0.999	**% Heavy Vehicles**	2	**Base Sat. Flow Rate**	1950

Automobile Intersection Data

Cross Street	Cycle Length	Thru g/C	Arr. Type	INT # Dir.Lanes	% Left Turns	% Right Turns	Left Turn Lanes	Left Turn Phasing	# Left Turn Lanes	LT Storage Length	Left g/C	Right Turn Lanes
SW 24 Ave.	120	0.7	3	3	3	3	No	None	N/A	N/A	N/A	No
SW 22 Ave.	120	0.54	3	3	6	4	No	None	N/A	N/A	N/A	No
SW 19 Ave.	120	0.87	3	3	5	1	No	None	N/A	N/A	N/A	No
SW 17 Ave.	120	0.49	3	3	10	4	No	None	N/A	N/A	N/A	No
SR 933/SW 12 Ave.	120	0.47	3	3	8	5	No	None	N/A	N/A	N/A	No
SR 7/SW 8 Ave.	120	0.57	3	3	7	3	No	None	N/A	N/A	N/A	No
SW 5 Ave.	120	0.54	3	3	6	6	No	None	N/A	N/A	N/A	No
SW 4 Ave.	150	0.64	3	3	0	5	No	None	N/A	N/A	N/A	No
SW 3 Ave.	150	0.45	3	3	7	0	No	None	N/A	N/A	N/A	No
SW 2 Ave.	150	0.45	3	3	15	10	No	None	N/A	N/A	N/A	No
SW 1 Ave.	150	0.55	3	3	0	20	No	None	N/A	N/A	N/A	No
S. Miami Ave.	150	0.45	3	3	13	0	No	None	N/A	N/A	N/A	No
US 1	150	0.28	3	2	40	20	Yes	Protected	2	1000	0.25	No

Automobile Segment Data

Segment #	Length	AADT	Hourly Vol.	SEG # Dir.Lanes	Posted Speed	Free Flow Speed	Median Type	On-Street Parking	Parking Activity
1 (to SW 24 Ave.)	1361	24000	2158	3	30	35	None	Yes	Low
2 (to SW 22 Ave.)	1341	24600	2212	3	30	35	None	Yes	Low
3 (to SW 19 Ave.)	1890	27400	2464	3	30	35	None	Yes	Low
4 (to SW 17 Ave.)	813	27400	2464	3	30	35	None	Yes	Low

5 (to SR 933/SW 12 Ave.)	2656	30900	2778	3	30	35	None	Yes	Low
6 (to SR 7/SW 8 Ave.)	2313	30300	2724	3	30	35	None	Yes	Low
7 (to SW 5 Ave.)	1653	30500	2742	3	30	35	None	Yes	Low
8 (to SW 4 Ave.)	554	35100	3156	3	30	35	None	Yes	Low
9 (to SW 3 Ave.)	539	37200	3345	3	30	35	None	Yes	Low
10 (to SW 2 Ave.)	576	46200	4154	3	30	35	None	Yes	Low
11 (to SW 1 Ave.)	581	40500	3641	3	30	35	None	Yes	Low
12 (to S. Miami Ave.)	655	42300	3803	3	30	35	None	Yes	Low
13 (to US 1)	898	33000	2967	3	30	35	None	Yes	Low

Automobile LOS

Segment #	Thru Mvmt Flow Rate	Adj. Sat. Flow Rate	v/c	Control Delay	Int. Approach LOS	Queue Ratio	Speed (mph)	Segment LOS
1 (to SW 24 Ave.)	2272	3875	0.837	14.51	B	0.00	21.13	C
2 (to SW 22 Ave.)	2328	3880	1.111	85.30	F	0.00	8.21	F
3 (to SW 19 Ave.)	2594	3926	0.759	3.14	A	0.00	29.12	A
4 (to SW 17 Ave.)	2594	3918	1.351	206.17	F	0.00	2.62	F
5 (to SR 933/SW 12 Ave.)	2924	3930	1.583	328.42	F	0.00	4.78	F
6 (to SR 7/SW 8 Ave.)	2867	3936	1.278	166.35	F	0.00	7.42	F
7 (to SW 5 Ave.)	2886	3928	1.361	210.57	F	0.00	4.70	F
8 (to SW 4 Ave.)	3322	4913	1.057	56.40	E	0.00	5.75	F
9 (to SW 3 Ave.)	3521	3944	1.984	654.44	F	0.00	0.61	F
10 (to SW 2 Ave.)	4373	3917	2.481	471.67	F	0.00	0.89	F
11 (to SW 1 Ave.)	3833	4862	1.433	266.88	F	0.00	1.54	F
12 (to S. Miami Ave.)	4003	3944	2.255	-950.17	A	0.00	-0.52	F
13 (to US 1)	1874	3007	0.459	44.77	D	#	9.65	F

Arterial Length	**3.1458**	**Weighted g/C**	**0.42**	**FFS Delay**	**1633.88**	**Threshold Delay**	**1071.11**	**Auto Speed**	**###**	**Auto LOS**	**###**

Automobile Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1000 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1					
2					
3					
4					
*					
Lanes	**Hourly Volume In Both Directions**				
2					
4					
6					
8					
*					
Lanes	**Annual Average Daily Traffic**				
2					
4					
6					
8					
*					

Multimodal Segment Data

Segment #	Outside Lane Width	Pave Cond	Pave Shldr /Bike Lane	Side Path	Side Path Separation	Side walk	Sidewalk Roadway Separation	Sidewalk Roadway Protective Barrier	Bus Freq	Passenger Load Factor	Amenities	Bus Stop Type
1 (to SW 24 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
2 (to SW 22 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
3 (to SW 19 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
4 (to SW 17 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
5 (to SR 933/SW 12 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
6 (to SR 7/SW 8 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
7 (to SW 5 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
8 (to SW 4 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
9 (to SW 3 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
10 (to SW 2 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
11 (to SW 1 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
12 (to S. Miami Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
13 (to US 1)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical

Pedestrian SubSegment Data

	% of Segment			Sidewalk			Separation			Barrier		
Segment #	**1**	**2**	**3**	**1**	**2**	**3**	**1**	**2**	**3**	**1**	**2**	**3**
1 (to SW 24 Ave.)	100			Yes			Adjacent			No		
2 (to SW 22 Ave.)	100			Yes			Adjacent			No		
3 (to SW 19 Ave.)	100			Yes			Adjacent			No		
4 (to SW 17 Ave.)	100			Yes			Adjacent			No		
5 (to SR 933/SW 12 Ave.)	100			Yes			Adjacent			No		
6 (to SR 7/SW 8 Ave.)	100			Yes			Adjacent			No		
7 (to SW 5 Ave.)	100			Yes			Adjacent			No		
8 (to SW 4 Ave.)	100			Yes			Adjacent			No		
9 (to SW 3 Ave.)	100			Yes			Adjacent			No		
10 (to SW 2 Ave.)	100			Yes			Adjacent			No		
11 (to SW 1 Ave.)	100			Yes			Adjacent			No		
12 (to S. Miami Ave.)	100			Yes			Adjacent			No		
13 (to US 1)	100			Yes			Adjacent			No		

Multimodal LOS

	Bicycle Street		Bicycle Sidepath		Pedestrian					Bus	
Link #	**Score**	**LOS**	**Score**	**LOS**	**1**	**2**	**3**	**Score**	**LOS**	**Adj. Buses**	**LOS**

1 (to SW 24 Ave.)	3.73	D	N/A	N/A	3.27	C	5.39	B
2 (to SW 22 Ave.)	3.74	D	N/A	N/A	3.31	C	7.54	A
3 (to SW 19 Ave.)	3.80	D	N/A	N/A	3.53	D	5.39	B
4 (to SW 17 Ave.)	3.71	D	N/A	N/A	3.46	C	7.54	A
5 (to SR 933/SW 12 Ave.)	3.87	D	N/A	N/A	3.78	D	8.98	A
6 (to SR 7/SW 8 Ave.)	3.85	D	N/A	N/A	3.73	D	7.18	A
7 (to SW 5 Ave.)	3.84	D	N/A	N/A	3.73	D	7.18	A
8 (to SW 4 Ave.)	3.70	D	N/A	N/A	3.95	D	5.99	B
9 (to SW 3 Ave.)	3.71	D	N/A	N/A	4.09	D	7.18	A
10 (to SW 2 Ave.)	3.78	D	N/A	N/A	4.73	E	6.10	A
11 (to SW 1 Ave.)	3.77	D	N/A	N/A	4.33	E	6.10	A
12 (to S. Miami Ave.)	3.82	D	N/A	N/A	4.48	E	7.63	A
13 (to US 1)	3.81	D	N/A	N/A	3.86	D	5.99	B
	Bicycle LOS	**3.80**	**D**		**Pedestrian LOS**	**3.78**	**D**	**Bus LOS**	**6.98**	**A**

MultiModal Service Volume Tables

Bicycle

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	0	0	0	0	0
2	0	0	0	0	0
3	0	0	0	0	0
4	0	0	0	0	0
*	0	0	0	0	0
Lanes	**Hourly Volume In Both Directions**				
2	0	0	0	0	0
4	0	0	0	0	0
6	0	0	0	0	0
8	0	0	0	0	0
*	0	0	0	0	0
Lanes	**Annual Average Daily Traffic**				
2	0	0	0	0	0
4	0	0	0	0	0
6	0	0	0	0	0
8	0	0	0	0	0
*	0	0	0	0	0

Pedestrian

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	0	0	0	0	0
2	0	0	0	0	0
3	0	0	0	0	0
4	0	0	0	0	0
*	0	0	0	0	0
Lanes	**Hourly Volume In Both Directions**				
2	0	0	0	0	0
4	0	0	0	0	0
6	0	0	0	0	0
8	0	0	0	0	0
*	0	0	0	0	0
Lanes	**Annual Average Daily Traffic**				
2	0	0	0	0	0
4	0	0	0	0	0
6	0	0	0	0	0
8	0	0	0	0	0
*	0	0	0	0	0

Bus

A	B	C	D	E
Buses Per Hour In Peak Direction				
Buses in Study Hour in Peak Direction (Daily)				

*** Service Volumes for the specific facility being analyzed, based on # of lanes from the intersection and segment data screens.**
**** Cannot be achieved based on input data provided.**
***** Not applicable for that level of service letter grade. See generalized tables notes for more details.**
 # Under the given conditions, left turn lane storage is highly likely to overflow. The number of directional thru lanes should be reduced accordingly.
Facility weighted g/C exceeds normally acceptable upper range (0.5); verify that g/C inputs are correct.
Intersection capacity (ies) are exceeded for the full hour; an operational level analysis tool is more appropriate for this situation.

ARTPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst		**Arterial Name**	WB SR 90/SW 7 St.	**Study Period**	**Standard K**
Date Prepared	11/13/2014 12:41:23 PM	**From**	US 1	**Modal Analysis**	Multimodal
Agency		**To**	SR 9/SW 27 Ave.	**Program**	ARTPLAN 2012
Area Type	Large Urbanized	**Peak Direction**	Westbound	**Version Date**	12/12/2012
Arterial Class	2				
File Name	G:\PROJECTS\57675_Jacobs-FDOT SR7-SW8th St to Tamiami\05 Project Wking Files\Calcs\Operational Analyses\ARTPLAN\3L Alt 4\SW 7 St Alt 4 2040.xap				
User Notes	3 Lanes Alternative 4, 2020				

Arterial Data

K	0.09	**PHF**	0.95	**Control Type**	CoordinatedActuated
D	0.999	**% Heavy Vehicles**	2	**Base Sat. Flow Rate**	1950

Automobile Intersection Data

Cross Street	Cycle Length	Thru g/C	Arr. Type	INT # Dir.Lanes	% Left Turns	% Right Turns	Left Turn Lanes	Left Turn Phasing	# Left Turn Lanes	LT Storage Length	Left g/C	Right Turn Lanes
S. Miami Ave.	150	0.56	3	3	0	20	No	None	N/A	N/A	N/A	No
SW 1 Ave.	150	0.61	3	3	20	0	No	None	N/A	N/A	N/A	No
SW 2 Ave.	150	0.57	3	3	9	10	No	None	N/A	N/A	N/A	No
SW 3 Ave.	150	0.66	3	3	3	18	No	None	N/A	N/A	N/A	No
SW 4 Ave.	150	0.52	3	2	30	0	Yes	ProtPerm	2	1000	0.25	No
SR 7/SW 8 Ave.	120	0.58	3	3	7	11	No	None	N/A	N/A	N/A	No
SR 933/SW 12 Ave.	120	0.44	3	3	9	8	No	None	N/A	N/A	N/A	No
SW 16 Ave.	120	0.75	3	3	8	8	No	None	N/A	N/A	N/A	No
SW 17 Ave.	120	0.47	3	3	11	11	No	None	N/A	N/A	N/A	No
SW 19 Ave.	120	0.72	3	3	5	2	No	None	N/A	N/A	N/A	No
SW 22 Ave.	120	0.49	3	3	18	13	No	None	N/A	N/A	N/A	No
Beacom Blvd.	120	0.49	3	2	44	0	Yes	ProtPerm	1	1000	0.25	No
SR 9/SW 27 Ave.	130	0.22	3	1	38	24	Yes	Protected	2	438	0.25	Yes

Automobile Segment Data

Segment #	Length	AADT	Hourly Vol.	SEG # Dir.Lanes	Posted Speed	Free Flow Speed	Median Type	On-Street Parking	Parking Activity
1 (to S. Miami Ave.)	966	25600	2302	3	30	35	Restrictive	No	N/A
2 (to SW 1 Ave.)	576	30800	2769	3	30	35	Restrictive	No	N/A

3 (to SW 2 Ave.)	781	33300	2994	3	30	35	Restrictive	No	N/A
4 (to SW 3 Ave.)	554	25200	2266	3	30	35	Restrictive	No	N/A
5 (to SW 4 Ave.)	533	21500	1933	3	30	35	Restrictive	No	N/A
6 (to SR 7/SW 8 Ave.)	2218	20800	1870	3	30	35	Restrictive	No	N/A
7 (to SR 933/SW 12 Ave.)	2313	21300	1915	3	30	35	Restrictive	No	N/A
8 (to SW 16 Ave.)	2196	21300	1915	3	30	35	Restrictive	No	N/A
9 (to SW 17 Ave.)	465	23000	2068	3	30	35	Restrictive	No	N/A
10 (to SW 19 Ave.)	1352	23000	2068	3	30	35	Restrictive	No	N/A
11 (to SW 22 Ave.)	1341	23300	2095	3	30	35	Restrictive	No	N/A
12 (to Beacom Blvd.)	2096	19700	1771	3	30	35	Restrictive	No	N/A
13 (to SR 9/SW 27 Ave.)	438	16200	1457	1	30	35	Restrictive	No	N/A

Automobile LOS

Segment #	Thru Mvmt Flow Rate	Adj. Sat. Flow Rate	v/c	Control Delay	Int. Approach LOS	Queue Ratio	Speed (mph)	Segment LOS
1 (to S. Miami Ave.)	2423	5118	0.845	28.99	C	0.00	13.45	D
2 (to SW 1 Ave.)	2915	4152	1.151	108.40	F	0.00	3.49	F
3 (to SW 2 Ave.)	3152	4123	1.341	212.63	F	0.00	2.46	F
4 (to SW 3 Ave.)	2385	4100	0.881	21.17	C	0.00	11.49	E
5 (to SW 4 Ave.)	1424	3439	0.796	30.86	C	0.29	8.85	F
6 (to SR 7/SW 8 Ave.)	1968	4012	0.846	22.86	C	0.00	22.04	B
7 (to SR 933/SW 12 Ave.)	2016	4027	1.138	102.91	F	0.00	10.61	E
8 (to SW 16 Ave.)	2016	4027	0.667	7.62	A	0.00	28.05	A
9 (to SW 17 Ave.)	2177	4042	1.146	106.93	F	0.00	2.96	F
10 (to SW 19 Ave.)	2177	4068	0.743	10.28	B	0.00	23.66	B
11 (to SW 22 Ave.)	2205	4041	1.114	90.35	F	0.00	7.92	F
12 (to Beacom Blvd.)	1044	3305	0.645	22.99	C	#	21.63	C
13 (to SR 9/SW 27 Ave.)	583	1343	1.973	516.41	F	0.70	0.64	F

Arterial Length	**3.1456**	**Weighted g/C**	**0.40**	**FFS Delay**	**1341.53**	**Threshold Delay**	**778.79**	**Auto Speed**	**###**	**Auto LOS**	**###**

Automobile Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1000 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1					
2					
3					
4					
*					
Lanes	**Hourly Volume In Both Directions**				
2					
4					
6					
8					
*					
Lanes	**Annual Average Daily Traffic**				
2					
4					
6					
8					
*					

Multimodal Segment Data

Segment #	Outside Lane Width	Pave Cond	Pave Shldr /Bike Lane	Side Path	Side Path Separation	Side walk	Sidewalk Roadway Separation	Sidewalk Roadway Protective Barrier	Bus Freq	Passenger Load Factor	Amenities	Bus Stop Type
1 (to S. Miami Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
2 (to SW 1 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
3 (to SW 2 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
4 (to SW 3 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
5 (to SW 4 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
6 (to SR 7/SW 8 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
7 (to SR 933/SW 12 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
8 (to SW 16 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
9 (to SW 17 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
10 (to SW 19 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
11 (to SW 22 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
12 (to Beacom Blvd.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical
13 (to SR 9/SW 27 Ave.)	Typical	Typical	No	No	N/A	Yes	Adjacent	No	6	0.7	Fair	Typical

Pedestrian SubSegment Data

	% of Segment			Sidewalk			Separation			Barrier		
Segment #	**1**	**2**	**3**	**1**	**2**	**3**	**1**	**2**	**3**	**1**	**2**	**3**
1 (to S. Miami Ave.)	100			Yes			Adjacent			No		
2 (to SW 1 Ave.)	100			Yes			Adjacent			No		
3 (to SW 2 Ave.)	100			Yes			Adjacent			No		
4 (to SW 3 Ave.)	100			Yes			Adjacent			No		
5 (to SW 4 Ave.)	100			Yes			Adjacent			No		
6 (to SR 7/SW 8 Ave.)	100			Yes			Adjacent			No		
7 (to SR 933/SW 12 Ave.)	100			Yes			Adjacent			No		
8 (to SW 16 Ave.)	100			Yes			Adjacent			No		
9 (to SW 17 Ave.)	100			Yes			Adjacent			No		
10 (to SW 19 Ave.)	100			Yes			Adjacent			No		
11 (to SW 22 Ave.)	100			Yes			Adjacent			No		
12 (to Beacom Blvd.)	100			Yes			Adjacent			No		
13 (to SR 9/SW 27 Ave.)	100			Yes			Adjacent			No		

Multimodal LOS

	Bicycle	Bicycle	Pedestrian	Bus

	Street		Sidepath								
Link #	**Score**	**LOS**	**Score**	**LOS**	**1**	**2**	**3**	**Score**	**LOS**	**Adj. Buses**	**LOS**
1 (to S. Miami Ave.)	4.30	E	N/A	N/A				3.75	D	5.39	B
2 (to SW 1 Ave.)	4.28	E	N/A	N/A				4.05	D	5.99	B
3 (to SW 2 Ave.)	4.38	E	N/A	N/A				4.26	E	6.10	A
4 (to SW 3 Ave.)	4.19	D	N/A	N/A				3.65	D	4.19	B
5 (to SW 4 Ave.)	4.10	D	N/A	N/A				3.38	C	5.66	B
6 (to SR 7/SW 8 Ave.)	4.26	E	N/A	N/A				3.46	C	6.28	A
7 (to SR 933/SW 12 Ave.)	4.27	E	N/A	N/A				3.50	C	7.54	A
8 (to SW 16 Ave.)	4.27	E	N/A	N/A				3.50	C	6.28	A
9 (to SW 17 Ave.)	4.07	D	N/A	N/A				3.46	C	6.28	A
10 (to SW 19 Ave.)	4.29	E	N/A	N/A				3.59	D	5.39	B
11 (to SW 22 Ave.)	4.29	E	N/A	N/A				3.62	D	7.18	A
12 (to Beacom Blvd.)	4.24	D	N/A	N/A				3.38	C	6.28	A
13 (to SR 9/SW 27 Ave.)	4.24	D	N/A	N/A				5.25	F	3.95	C
	Bicycle LOS	**4.26**	**E**				**Pedestrian LOS**	**3.65**	**D**	**Bus LOS**	**6.22**	**A**

MultiModal Service Volume Tables

Bicycle

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	0	0	0	0	0
2	0	0	0	0	0
3	0	0	0	0	0
4	0	0	0	0	0
*	0	0	0	0	0
Lanes	**Hourly Volume In Both Directions**				
2	0	0	0	0	0
4	0	0	0	0	0
6	0	0	0	0	0
8	0	0	0	0	0
*	0	0	0	0	0
Lanes	**Annual Average Daily Traffic**				
2	0	0	0	0	0
4	0	0	0	0	0
6	0	0	0	0	0
8	0	0	0	0	0
*	0	0	0	0	0

Pedestrian

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	0	0	0	0	0
2	0	0	0	0	0
3	0	0	0	0	0
4	0	0	0	0	0
*	0	0	0	0	0
Lanes	**Hourly Volume In Both Directions**				
2	0	0	0	0	0
4	0	0	0	0	0
6	0	0	0	0	0
8	0	0	0	0	0
*	0	0	0	0	0
Lanes	**Annual Average Daily Traffic**				
2	0	0	0	0	0
4	0	0	0	0	0
6	0	0	0	0	0
8	0	0	0	0	0
*	0	0	0	0	0

Bus

A	B	C	D	E
Buses Per Hour In Peak Direction				
Buses in Study Hour in Peak Direction (Daily)				

*** Service Volumes for the specific facility being analyzed, based on # of lanes from the intersection and segment data screens.**
**** Cannot be achieved based on input data provided.**
***** Not applicable for that level of service letter grade. See generalized tables notes for more details.**
 # Under the given conditions, left turn lane storage is highly likely to overflow. The number of directional thru lanes should be reduced accordingly.
Facility weighted g/C exceeds normally acceptable upper range (0.5); verify that g/C inputs are correct.
Intersection capacity (ies) are exceeded for the full hour; an operational level analysis tool is more appropriate for this situation.