



Financial Management Number:  
432639-6-22-01

Federal Aid Project Number:  
0202-054-P

Efficient Transportation  
Decision Making  
Number: 14230

# Project Development & Environment (PD&E) Study

## SR 90 (SW 8th Street and SW 7th Street)

From SR 9/SW 27<sup>th</sup> Avenue to SR 5/US-1/Brickell Avenue

**May 9, 2017**

# Project Status

- Safety Analysis
- Traffic Analysis
- Alternative Analysis

# Community Desires

- Wider Sidewalks
- Parking
- Bike Lanes
- Transit Only Lanes
- Safety Improvements



# Constrains

- State Historic Highways

SW 8th Street/Calle Ocho

From Brickell Avenue to the Palmetto Expressway (SW 74th Avenue)

- Right Of Way

- SW 8th Street/SW 7th Street

- I-95 Interchange

**No State Funds can be expended by any public agency to:**

- Cut or remove trees
- Alter the physical dimensions
- Erect, demolish or alter the appearance of any structure

**\*Does not prevent any Safety Improvements**



# Alternatives

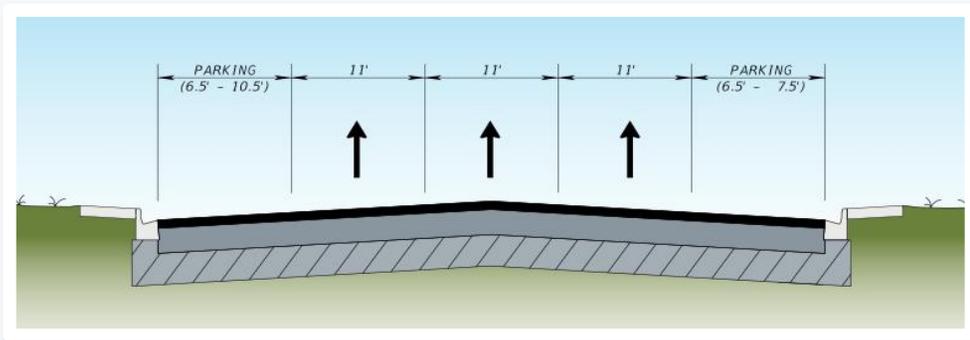
- **No Build**
- **Transportation Systems Management and Operations (TSM&O)**

## Build Alternatives

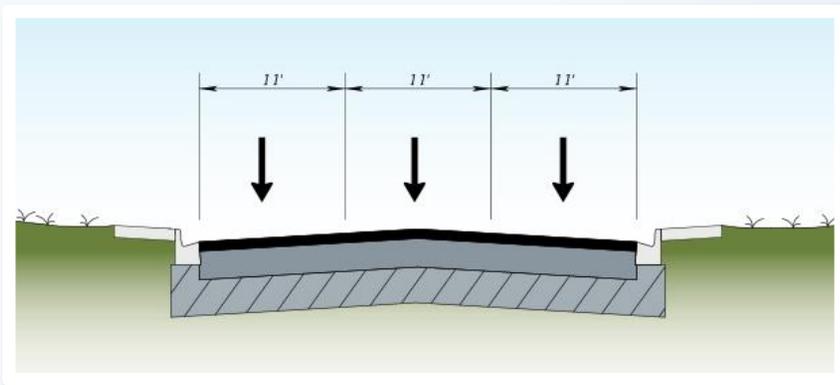
- **Alternative 1 Two Lane - Two Way + Turn lane**
- **Alternative 2 Two Lane - Two Way + Transit**
- **Alternative 2A Two Lane - Two Way + Bikes**
- **Alternative 3 Two Lane - One Way Alternative**
- **Alternative 4 Three Lane - One Way Alternative**

# No Build Alternative

## NO BUILD ALTERNATIVE- SW 8TH/SW 7TH STREET



SW 8th Street



SW 7th Street

## NO EXPENDITURE OF FUNDS

### BENEFITS

- MAINTENANCE OF TRAFFIC
- ENVIRONMENTAL

### CONCERNS- NO IMPROVEMENTS

- SAFETY
- MULTIMODAL LEVEL OF SERVICE
- ACCESS IMPROVEMENTS
- COMPLETE STREETS

# No Build Alternative

## NO BUILD ALTERNATIVE – I-95



### BENEFITS

- MAINTENANCE OF TRAFFIC
- ENVIRONMENTAL

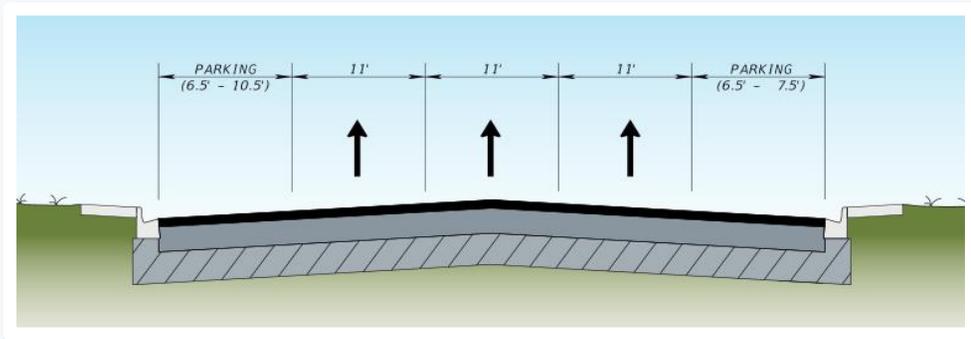
### CONCERNS- NO IMPROVEMENTS

- SAFETY
- MULTIMODAL LEVEL OF SERVICE
- ACCESS IMPROVEMENTS
- COMPLETE STREETS

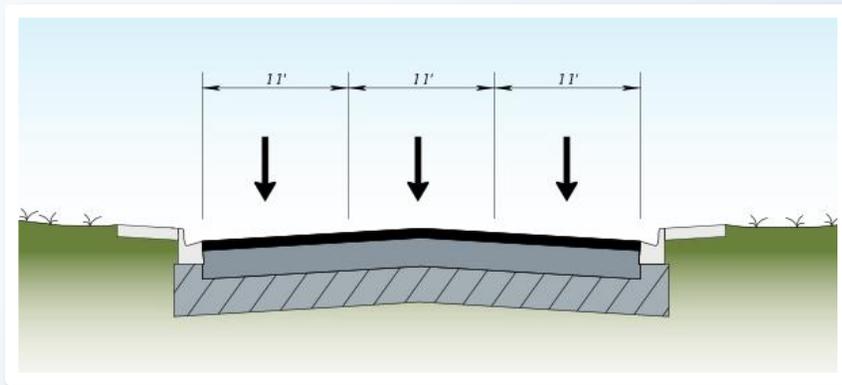
# TSM&O Alternative

## TRANSPORTATION SYSTEMS MANAGEMENT AND OPERATIONS (TSM&O) ALTERNATIVE –SW 8TH/SW 7TH STREET

### SW 8TH STREET



### SW 7TH STREET



### BENEFITS

- MINOR SAFETY IMPROVEMENTS
- MULTIMODAL LEVEL OF SERVICE  
Improvements to Automobiles
- MAINTENANCE OF TRAFFIC
- NO ENVIRONMENTAL IMPACTS

### CONCERNS

- NO ACCESS IMPROVEMENTS  
AT I-95

# TSM&O Alternative

## TSM&O ALTERNATIVE –SW 8TH/SW 7TH STREET

- Upgrade/New Signalization Elements
  - Next Generation Traffic Controller
  - Advanced Traffic Management System (ATMS)
  - Video Detection
  - Cabinets
- Upgrade/New ITS Elements
  - CCTV Cameras
  - Arterial Dynamic Message Signs (ADMS)
  - Travel Time System (TTS)
  - Fiber Optic Cable/Wireless Communications System
- Evaluate Applicability
  - Adaptive Signal Control Technology (ASCT)
  - Connected Vehicles Technology – Signal Phase and Timing (SPaT)
  - Information Systems
  - Transit ITS



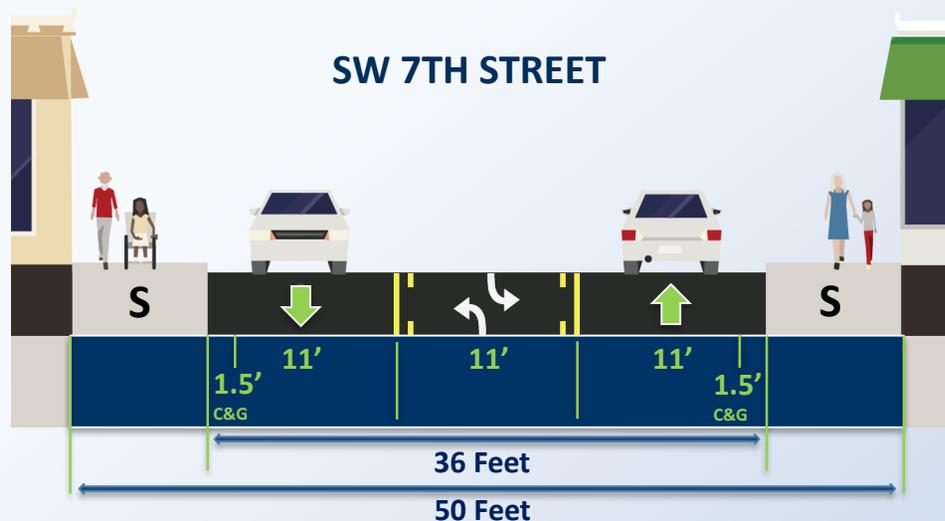
# Build Alternatives

## ALTERNATIVE #1 TWO LANES - TWO WAY ALTERNATIVE



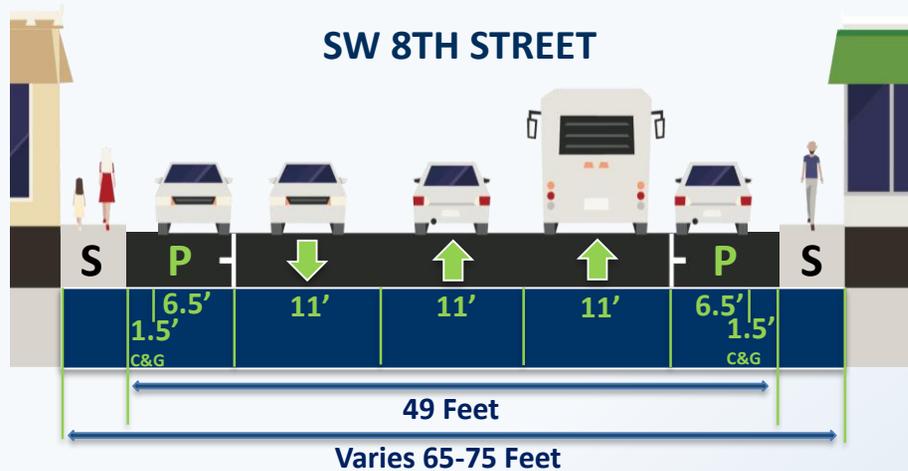
- 2 through lanes + 1 Two Way Left Turn Lane
- Traffic flow: Two-way
- Maintains pavement width
- Parking: Not modified
- Sidewalk: Not modified
- Improvements at I-95

*Requires change in the historic designation law*

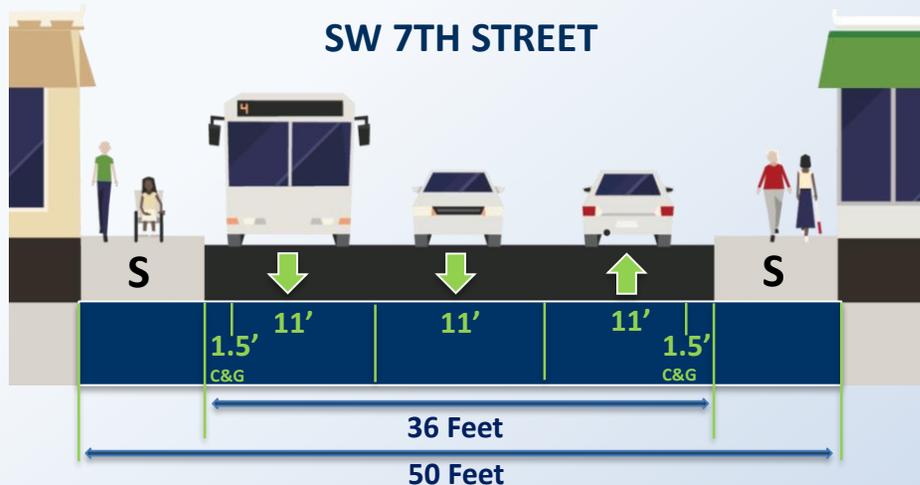


# Build Alternatives

## ALTERNATIVE #2 TWO LANES - TWO WAY + TRANSIT



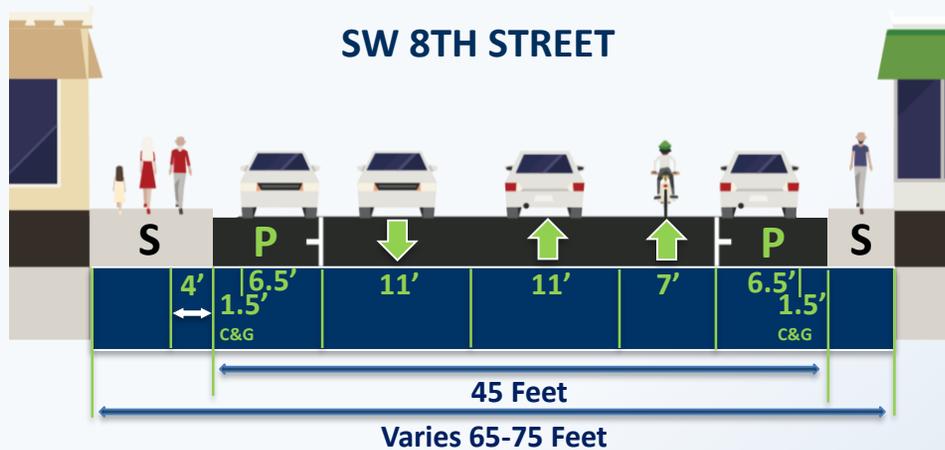
- 2 through lanes + 1 transit only lane
- Traffic flow: Two-way
- Maintains pavement width
- Parking: Not modified
- Sidewalk: Not modified
- Improvements at I-95



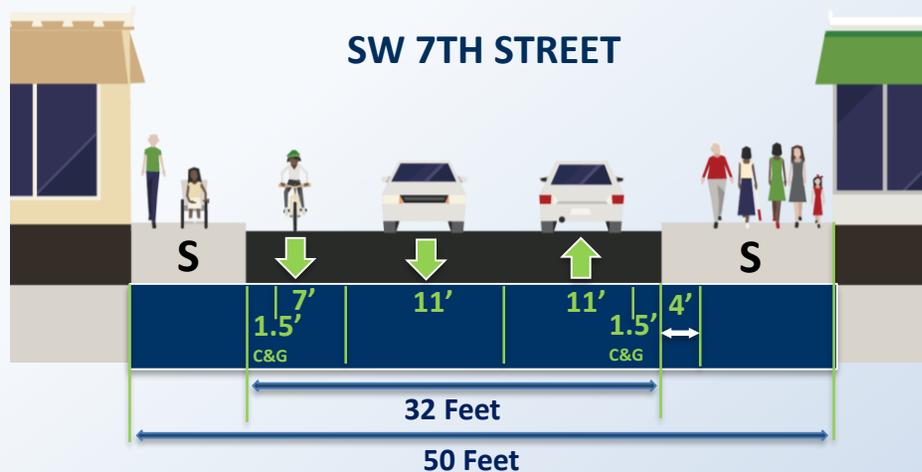
*Requires change in the historic designation law*

# Build Alternatives

## ALTERNATIVE #2A TWO LANES - TWO WAY + BIKE



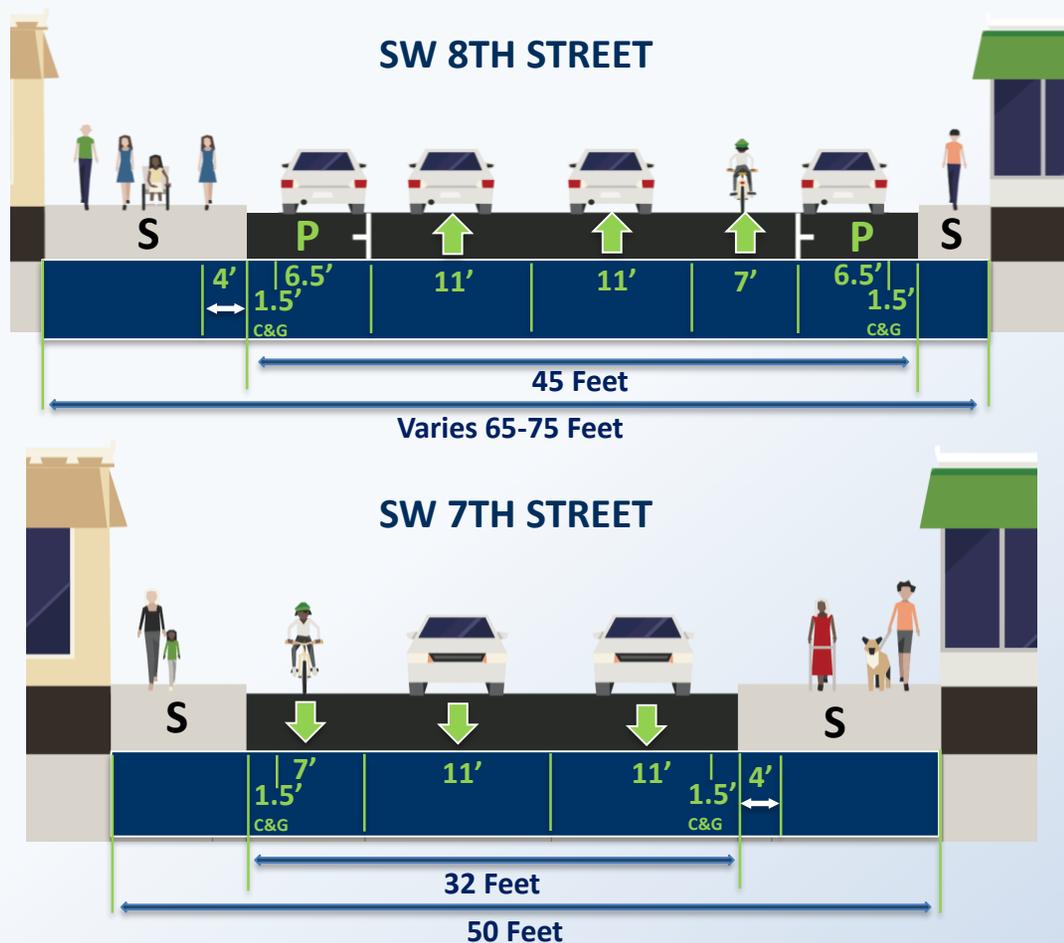
- 2 through lanes + 1 bike lane
- Traffic flow: Two-way
- Narrows pavement width
- Parking: Not modified
- Sidewalk: Wider
- Improvements at I-95



*Requires change in the historic designation law*

# Build Alternatives

## ALTERNATIVE #3 TWO LANES - ONE WAY ALTERNATIVE

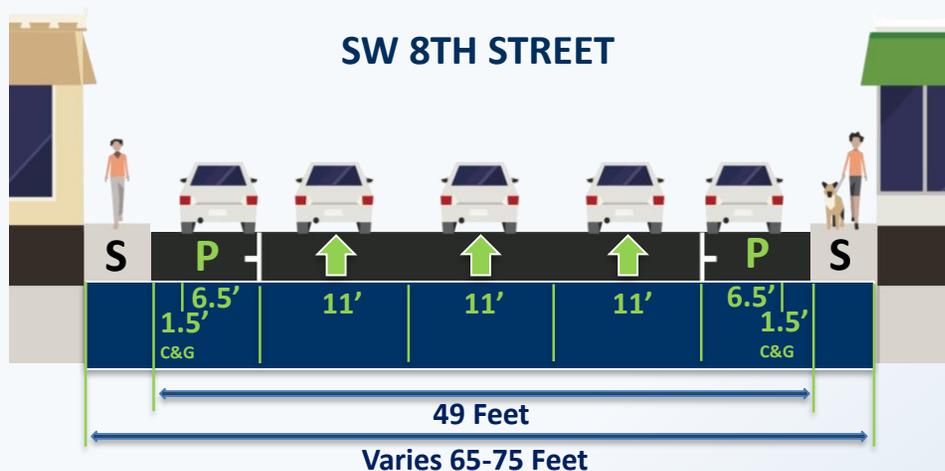


- 2 through lanes + 1 bike lane
- Traffic flow: One-way
- Narrows pavement width
- Parking: Not modified
- Sidewalk: Wider
- Improvements at I-95

*Requires change in the historic designation law*

# Build Alternatives

## ALTERNATIVE #4 THREE LANES - ONE WAY ALTERNATIVE

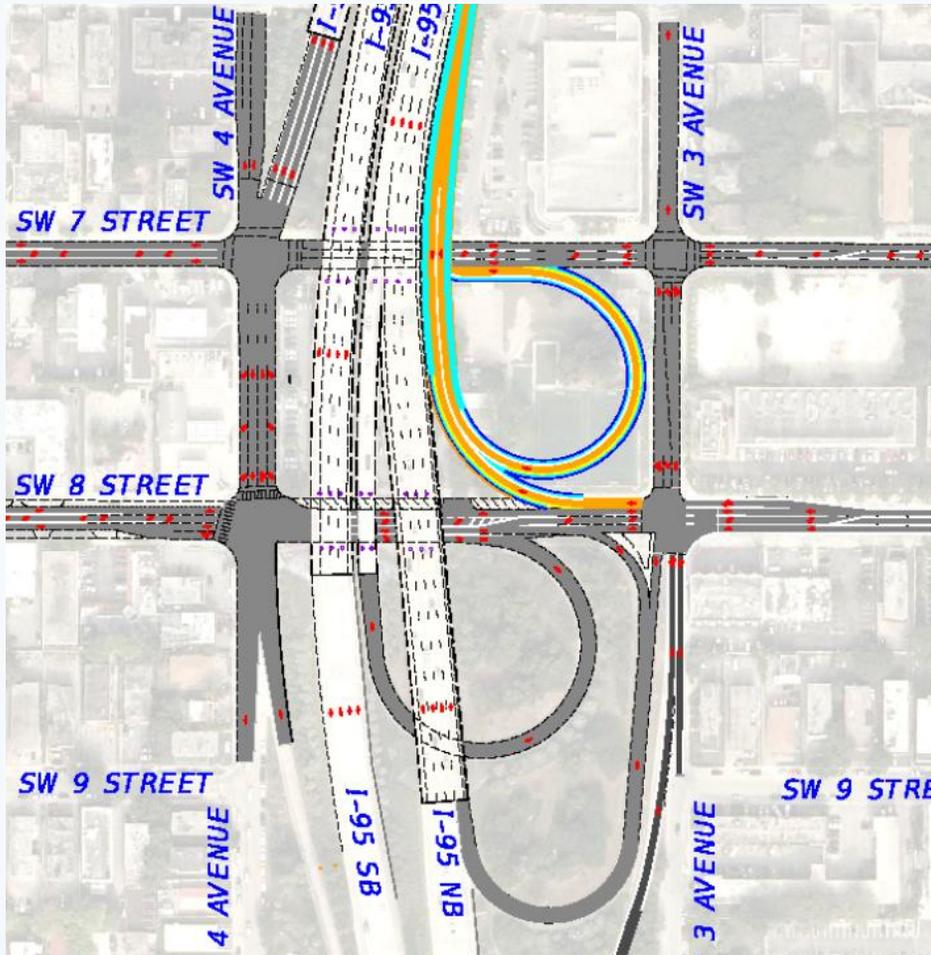


- 3 through lanes
- Traffic flow: One-way
- Maintains pavement width
- Parking: Not modified
- Sidewalk: Not modified
- Improvements at I-95

# Build Alternatives

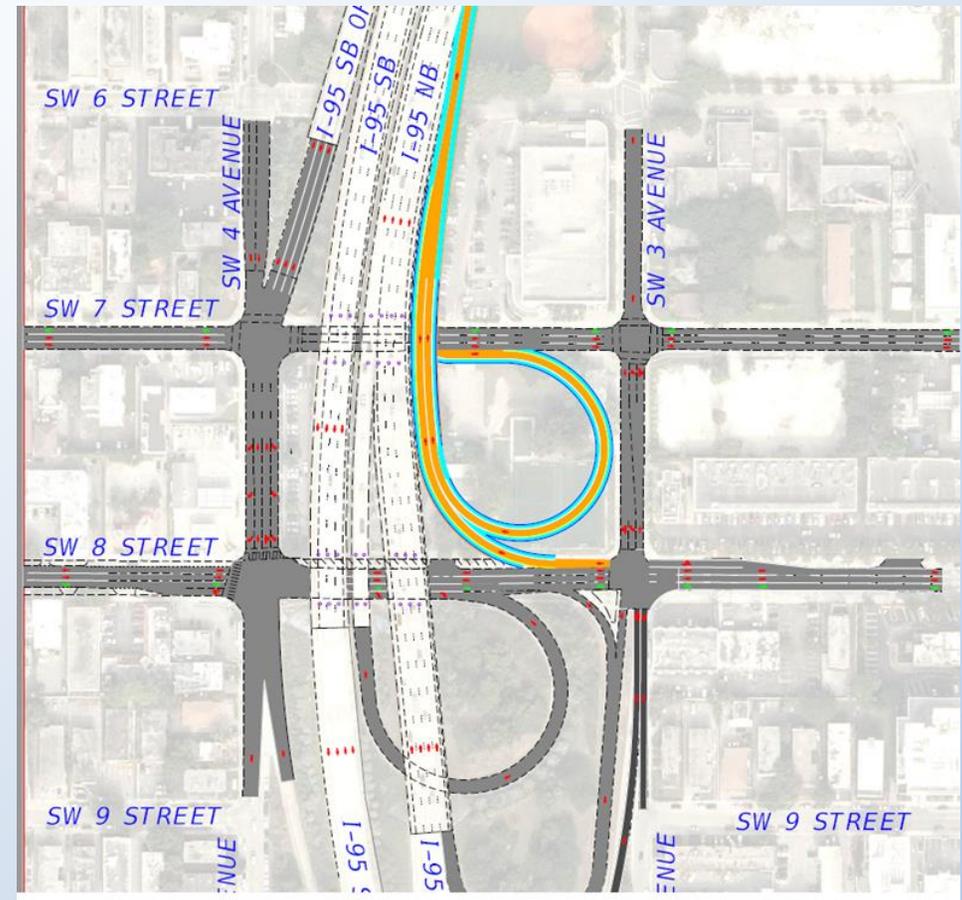
## ALTERNATIVE #1

### TWO LANES - TWO WAY ALTERNATIVE



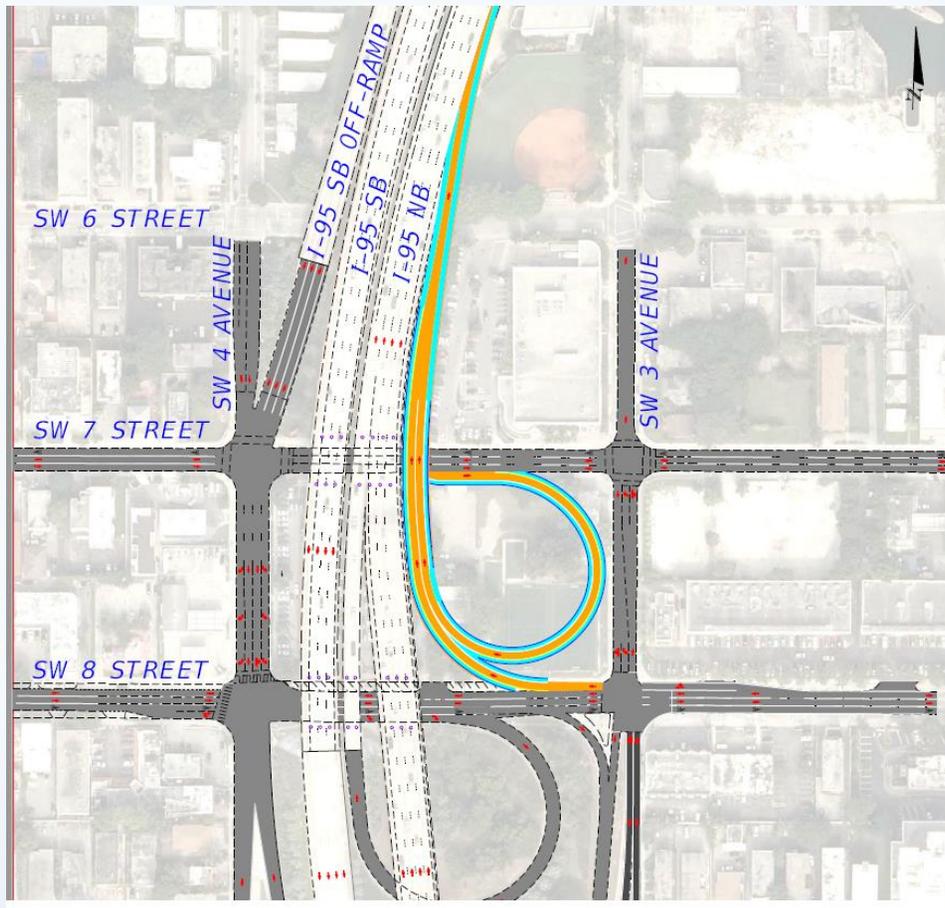
## ALTERNATIVE #2

### TWO LANES - TWO WAY + TRANSIT



# Build Alternatives

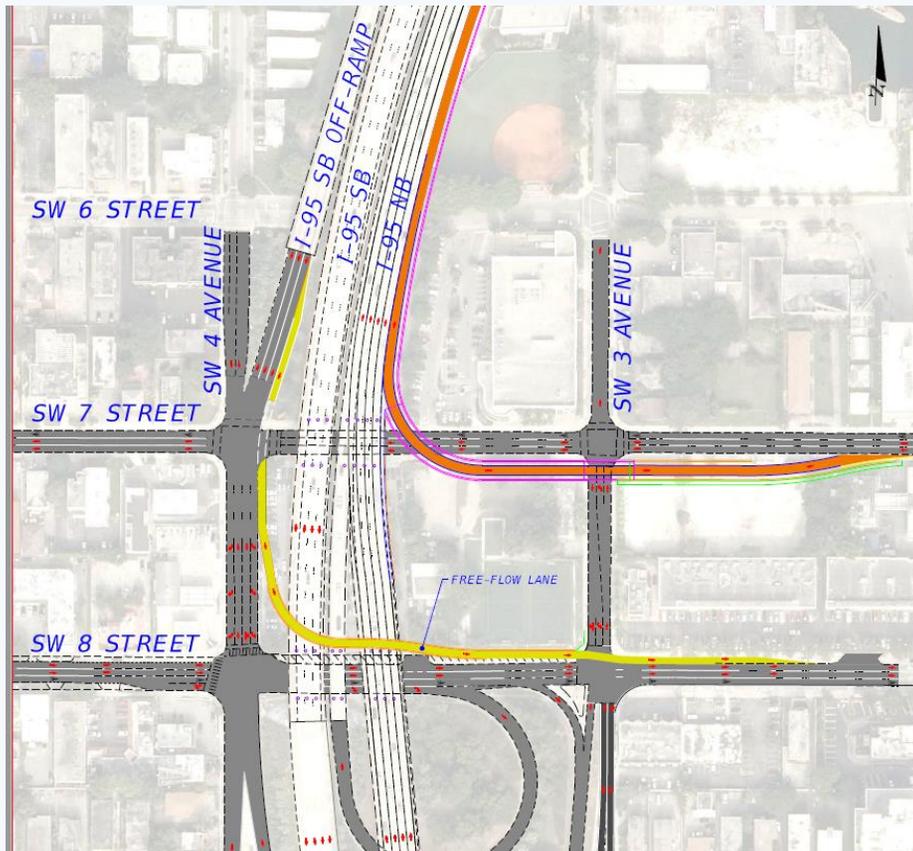
## ALTERNATIVE #2A TWO LANES - TWO WAY + BIKE



# Build Alternatives

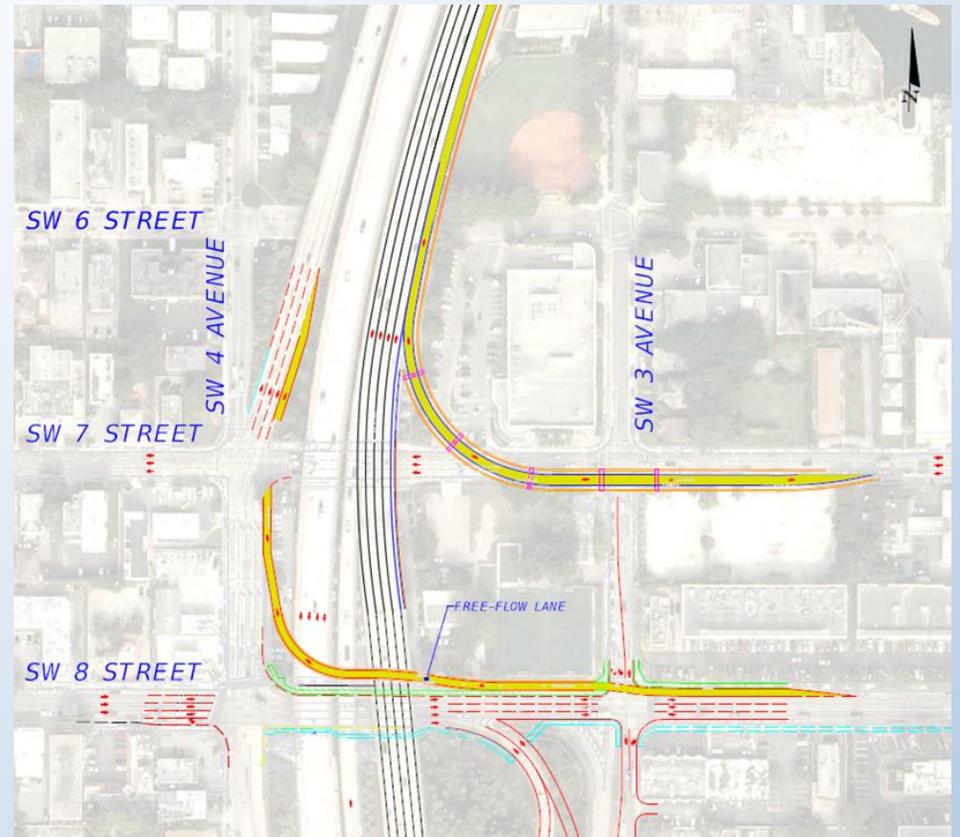
## ALTERNATIVE #3

### TWO LANES - ONE WAY ALTERNATIVE



## ALTERNATIVE #4

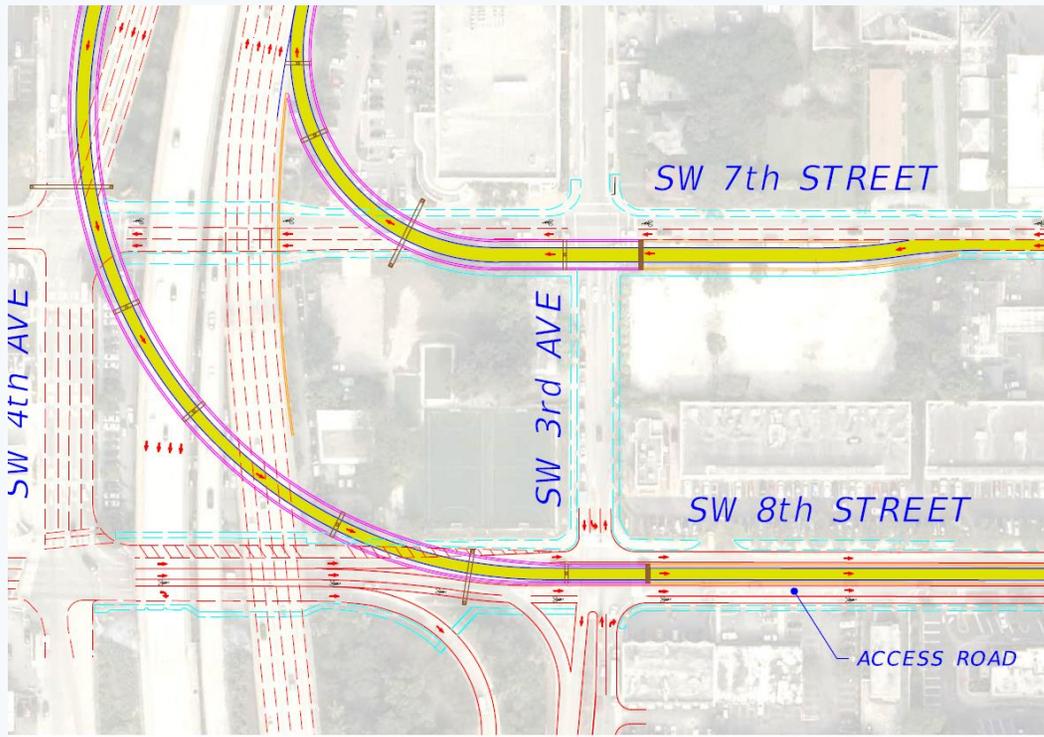
### THREE LANES - ONE WAY ALTERNATIVE



# Build Alternatives

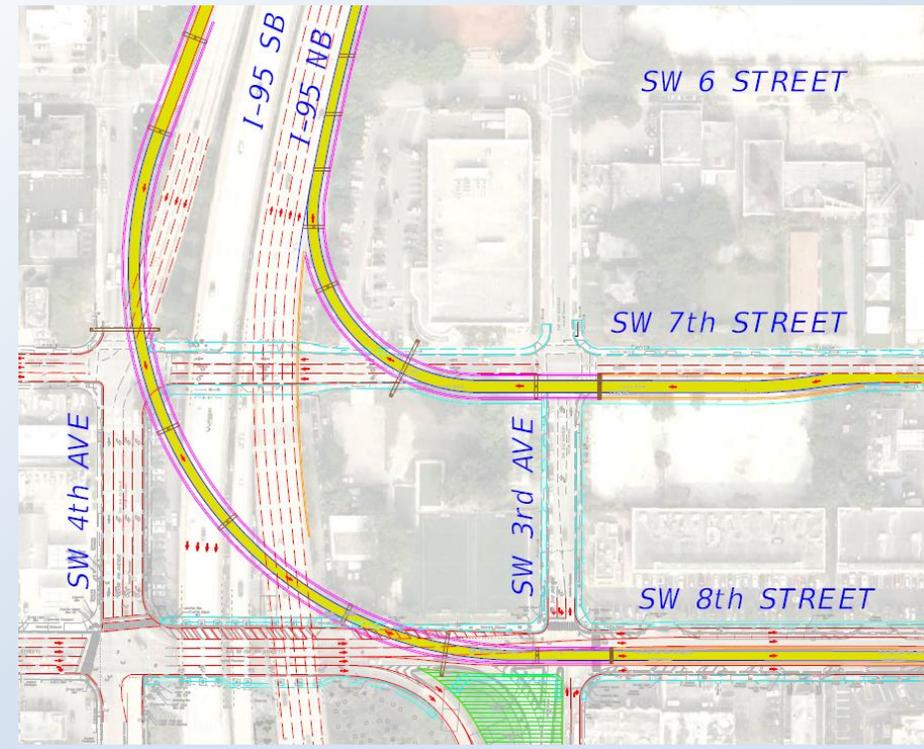
## ALTERNATIVE #3

### TWO LANES - ONE WAY ALTERNATIVE



## ALTERNATIVE #4

### THREE LANES - ONE WAY ALTERNATIVE



# Alternative Analysis

## EVALUATION MATRIX

	Alt. #1	Alt. #2	Alt. #2A	Alt. #3	Alt. #4
					
					
					
					
Safety					
Contamination					
Community Input					
Access					
Cost					



Meets Needs



Partially Meets Needs



Does Not Meet Needs



# Questions / Comments

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