



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 7th Street and SW 8th Street)

From SR 5/US-1/Brickell Avenue to SR 9/SW27th Avenue

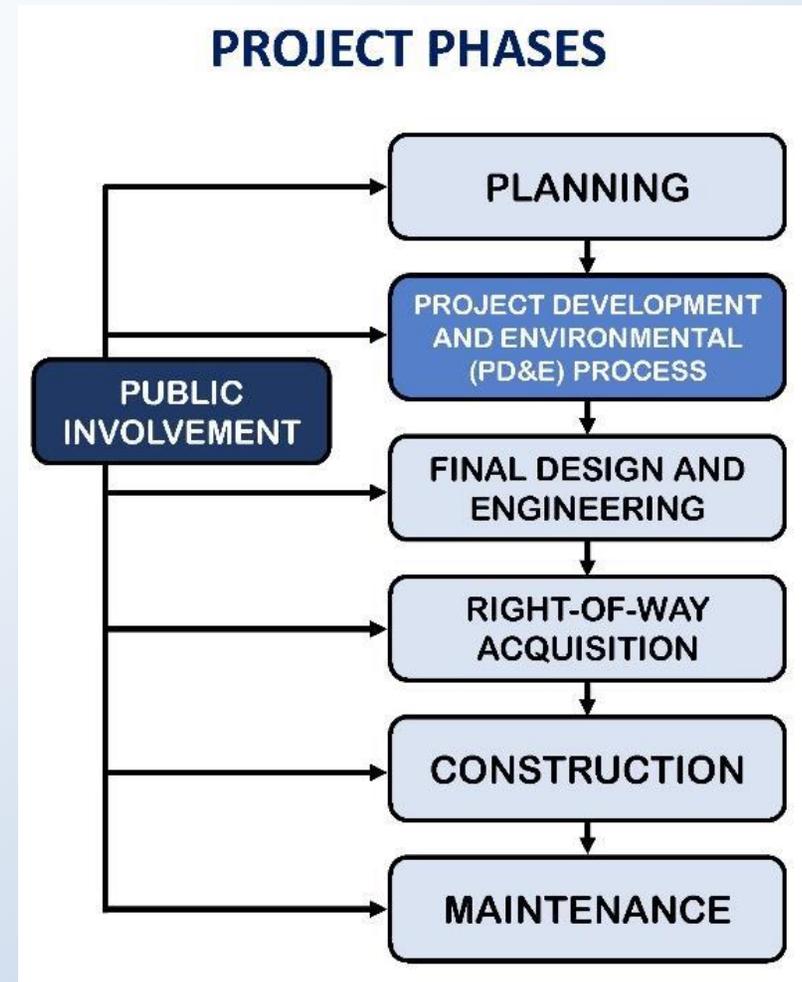
# October 11, 2016

# Agenda

- Introduce the Project
- Outline the Study Process
- Receive input from Stakeholders

# Project Development & Environment (PD&E) Study

The objective of a PD&E Study is to develop viable engineering solutions that address the purpose and need for the project, incorporate community and agency input, and minimize effects to the natural and social environment.



# PD&E Study Process



# Study Area



From SR 5/US-1/Brickell Avenue to SR 9/SW27th Avenue

# Study Area

## SIX NEIGHBORHOODS

West Flagler

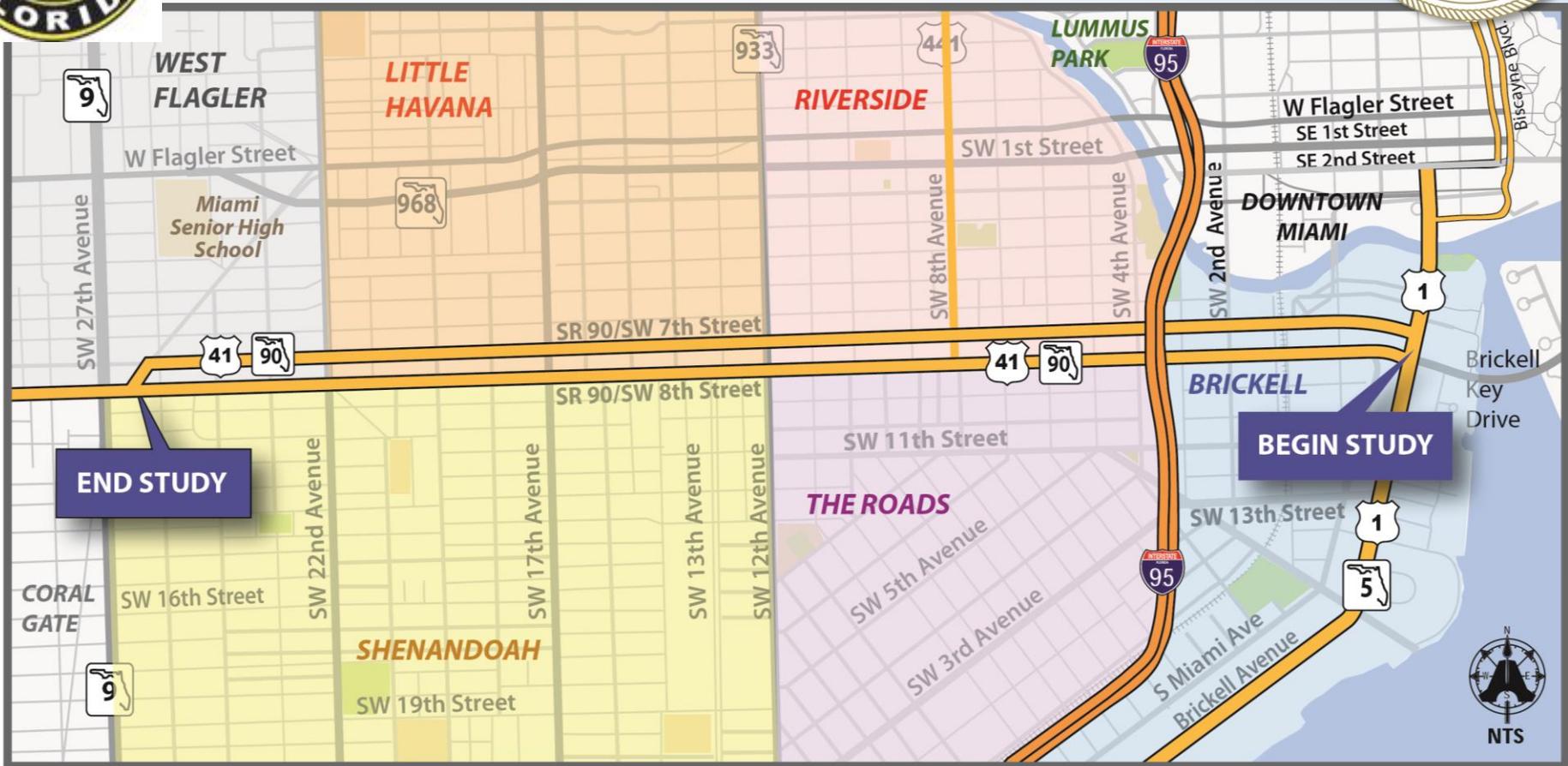
Shenandoah

Little Havana

The Roads

Brickell

Riverside



# Study Area

## STATE HISTORIC HIGHWAYS

- SW 8th Street/Calle Ocho  
From Brickell Avenue to the Palmetto Expressway (SW 74th Avenue)
- Brickell Avenue  
From the Miami River south to SE 25th Road



# Purpose and Need

- Safety

- Improve Safety

Crash data between 2010 and 2013 indicates:

3,008 crashes occurred on the project corridor

1,249 crashes along SW 7th Street

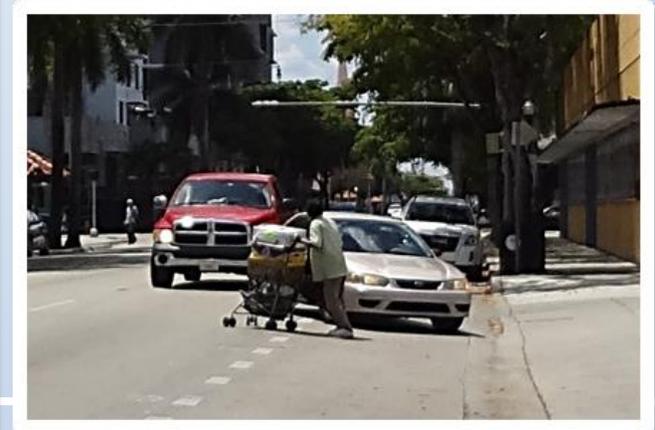
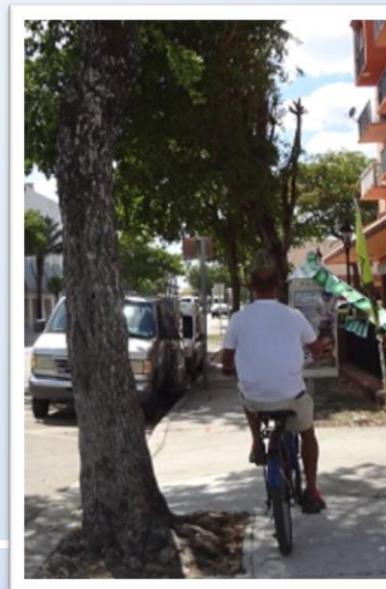
1,759 crashes along SW 8th Street

7 crashes resulted in 7 fatalities

(4 involving a pedestrian)

531 collisions resulting in

779 injuries



# Purpose and Need

- Transportation

- Improve traffic operations and multimodal level of service

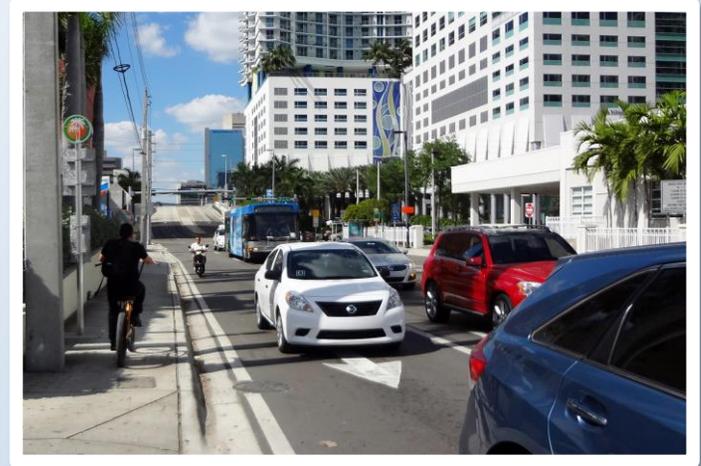
Substantial growth in transportation demand is anticipated through 2040 – 0.89% to 1.9% annually.

Note: Multimodal level of service (LOS) is a measure used to evaluate all modes of transportation (automobile, pedestrian, bicycle, and transit) in order to assess the efficiency of the transportation facility. A LOS A being the best and LOS F being the worst.



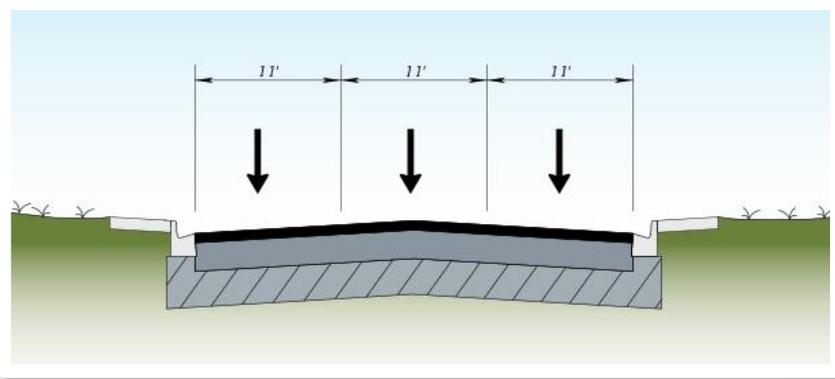
# Purpose and Need

- Social Demands and Economic Development
  - Improve access to urban central business districts
- Modal Interrelationships
  - Improve multimodal connectivity

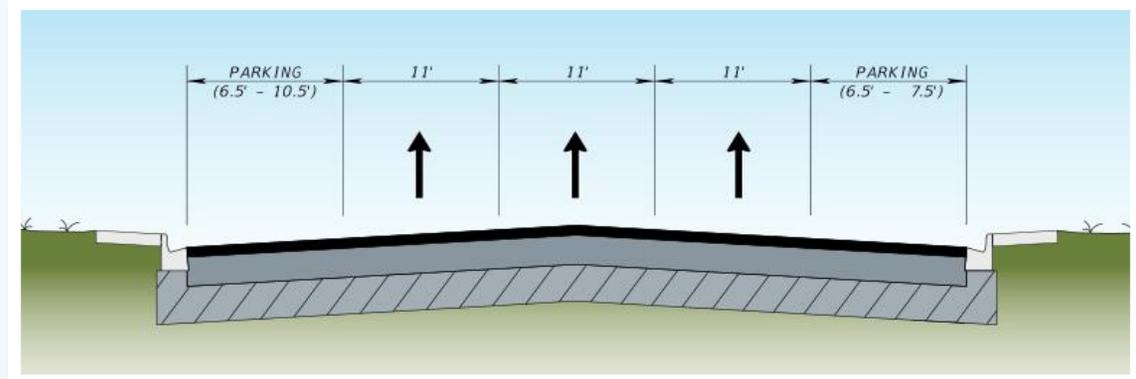


# EXISTING CONDITIONS

## ROADWAY



SW 7th Street



SW 8th Street



# EXISTING CONDITIONS

## STRUCTURES

- I-95 southbound over Miami River - 870356
  - I-95 northbound over Miami River - 870453
  - I-95 northbound over SW 1st Avenue - 870451
- 
- Pre-stressed AASHTO beams
  - No loading restrictions
  - High sufficiency rating



# Planned and Current Projects

## ■ Planned Projects

- I-95 PD&E Projects - US -1 to Broward County Line  
PD&E begin in years 2018 and 2019

## ■ Current Projects

### Construction

- FM 433493-1-52-01: SR 933/SW 12th Avenue from  
SW 6th Street to SW 8th Street- End Construction Winter 2017
- FM 433283-1-52-01 & 433491-1-52-01: SR 9/SW 27<sup>th</sup> Avenue from  
SW 10th Street to NW 1st Street- End Construction Fall 2017

### Design

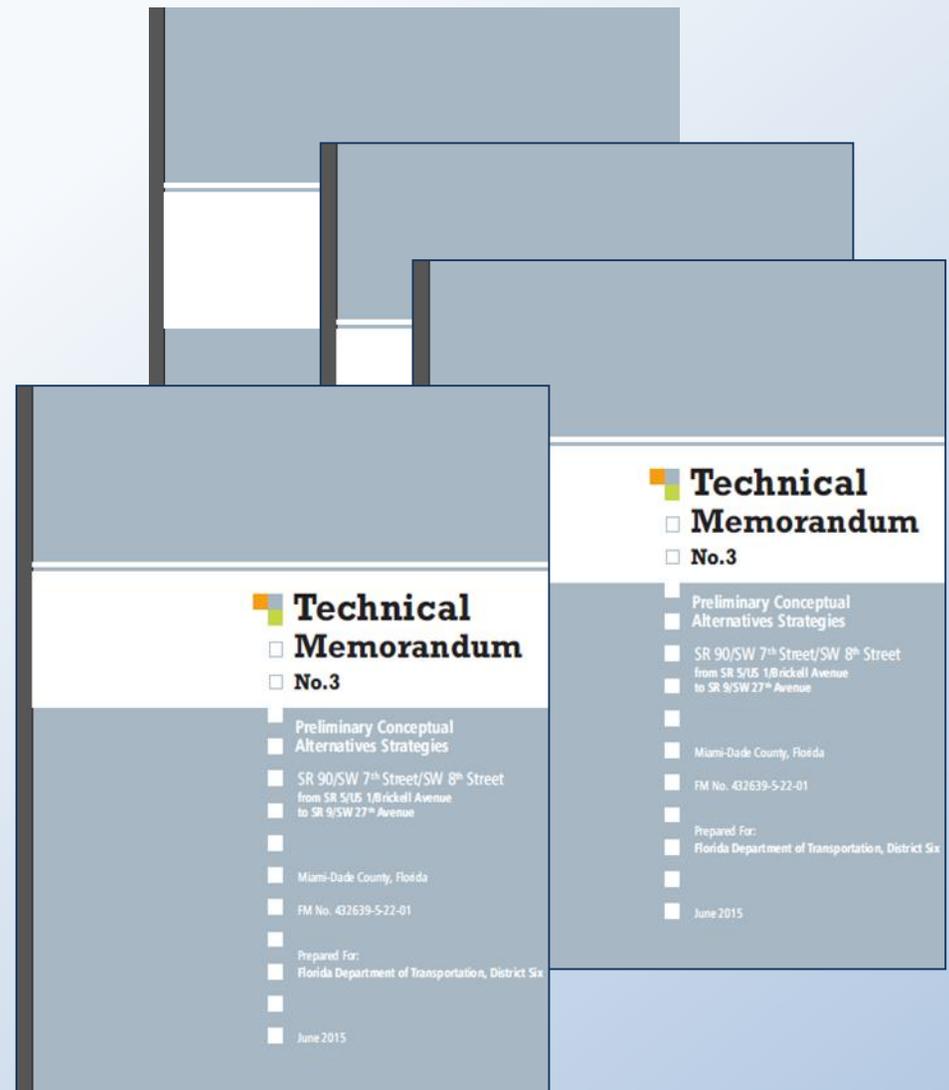
- FM 437475-1-52-01: SR90/SW 8th Street from  
SW 27Avenue to SW 3rd Avenue  
Pedestrian Safety Improvements- Begin Construction Fall 2017

# Planning Study

## ■ Feasibility Study-

Completed June 2015

SR 90 from SR 5/Brickell Avenue to  
SR 9/SW 27th Avenue

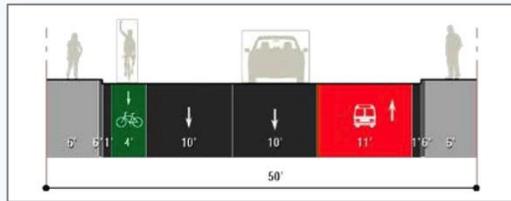


# Feasibility Study

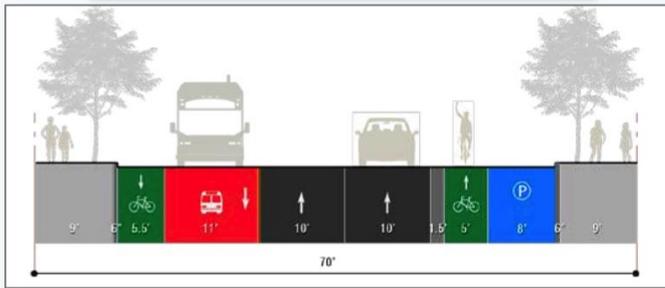
## PRELIMINARY BUILD SCENARIOS – SW 7TH/SW 8TH STREETS

### 2 Lanes + Transit

SW 7<sup>TH</sup>  
Street



SW 8<sup>TH</sup>  
Street

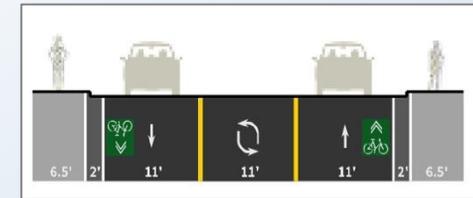


➡ Mixed Traffic  
Flow Direction

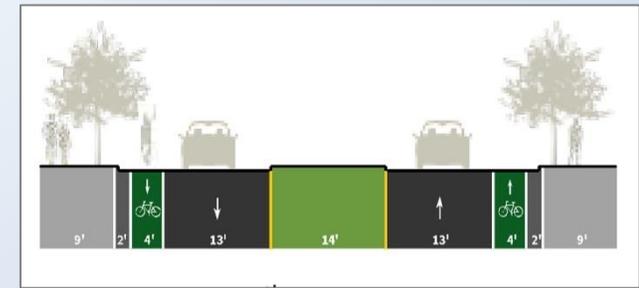
➡ Transit Flow  
Direction

### 2 Way

SW 7<sup>TH</sup>  
Street



SW 8<sup>TH</sup>  
Street



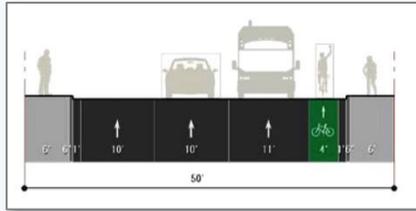
➡ Mixed Traffic  
Flow Direction

# Feasibility Study

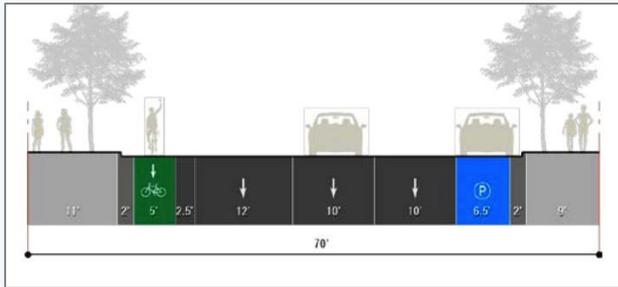
## PRELIMINARY BUILD SCENARIOS – SW 7<sup>TH</sup>/SW 8<sup>TH</sup> STREETS

### 3 Lanes Reversed

SW 7<sup>TH</sup>  
Street



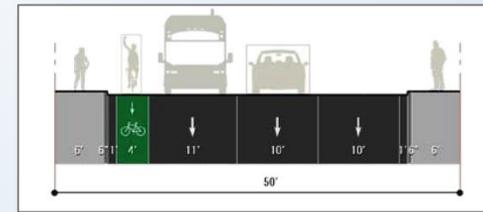
SW 8<sup>TH</sup>  
Street



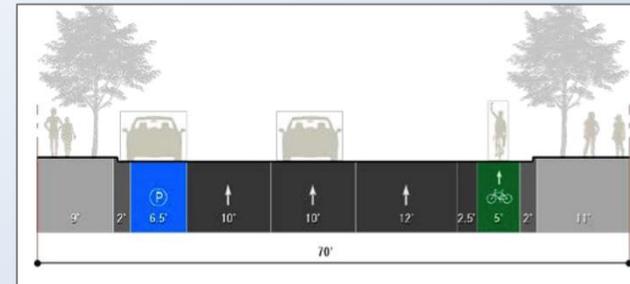
➡ Mixed Traffic Flow Direction

### 3 Lane Alternative

SW 7<sup>TH</sup>  
Street



SW 8<sup>TH</sup>  
Street



➡ Mixed Traffic Flow Direction

# Feasibility Study

## PRELIMINARY BUILD SCENARIOS – I-95 INTERCHANGE

### Alternative 1



### Alternative 2



### Alternative 3



### Alternative 4



# PD&E Study

## STUDY COMPONENTS

- Engineering
- Environmental
- Public Involvement



# Engineering – Complete Streets

A street where the entire right-of-way is planned, designed and operated for all modes of transportation and all users regardless of age and ability.

- ADA accessible sidewalks with frequent and safe crossings
- Bicycle lanes
- Pedestrian lighting and accessible pedestrian signals
- Special bus lanes
- Comfortable and accessible public transportation stops
- Landscape curb extensions
- Roundabouts
- On-street parking

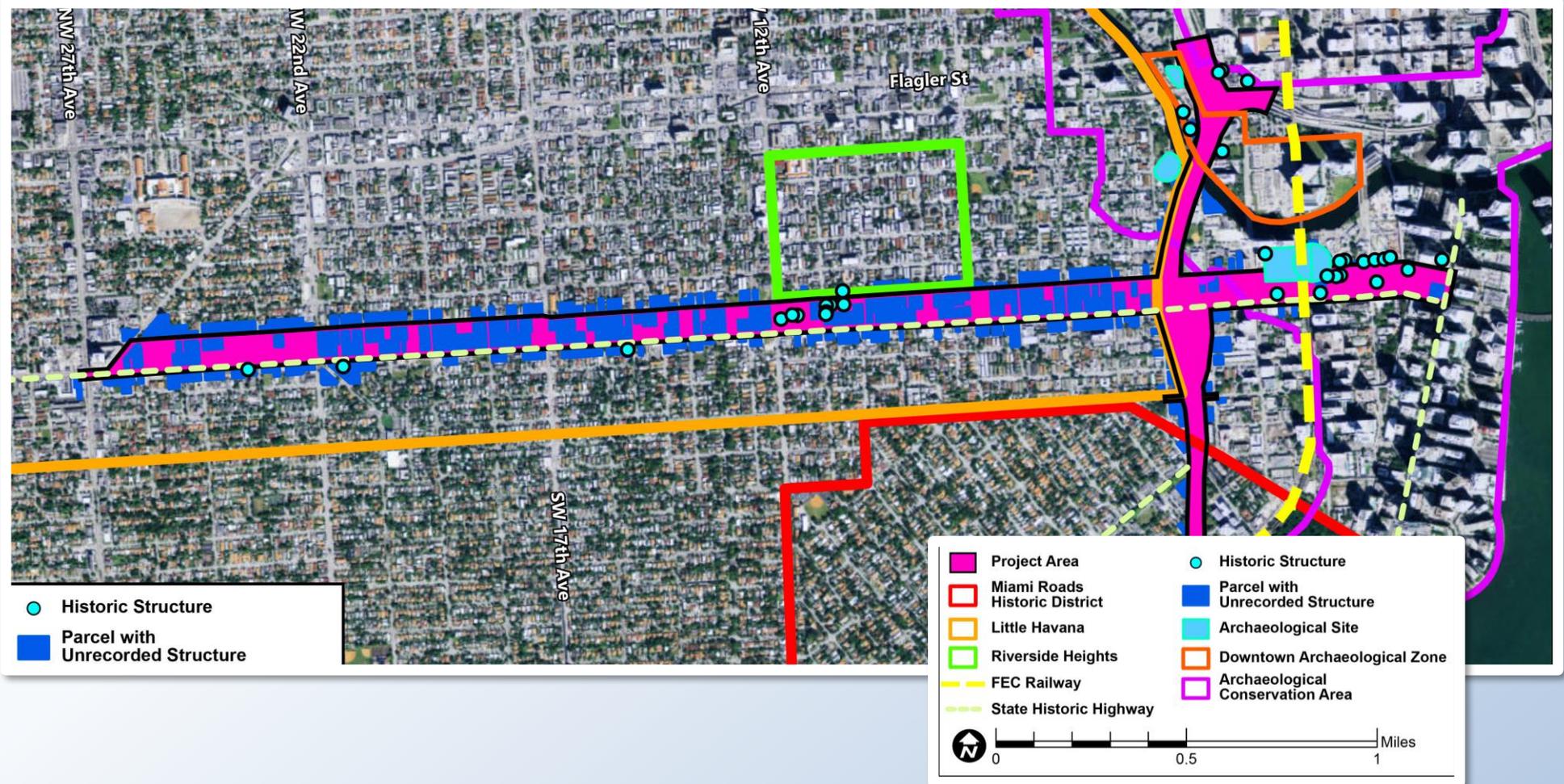


# Environmental Analysis

- **CULTURAL RESOURCES**
- **PHYSICAL EFFECTS**  
Contamination, Air Quality, Noise
- **NATURAL RESOURCES**  
Water Quality and Wetlands



# Environmental- Cultural Resources



# Environmental- Cultural Resources

## CULTURAL RESOURCES

### Historic Resources within the Area of Potential Effect

- 33 previously recorded buildings
- One previously recorded historic District: Miami Roads
- Two potential historic districts: Riverside Heights/Little Havana
- Over 400 unrecorded historic buildings
- National Register – eligible FEC railway
- Two state historic highways: Calle Ocho and Brickell Avenue



# Environmental

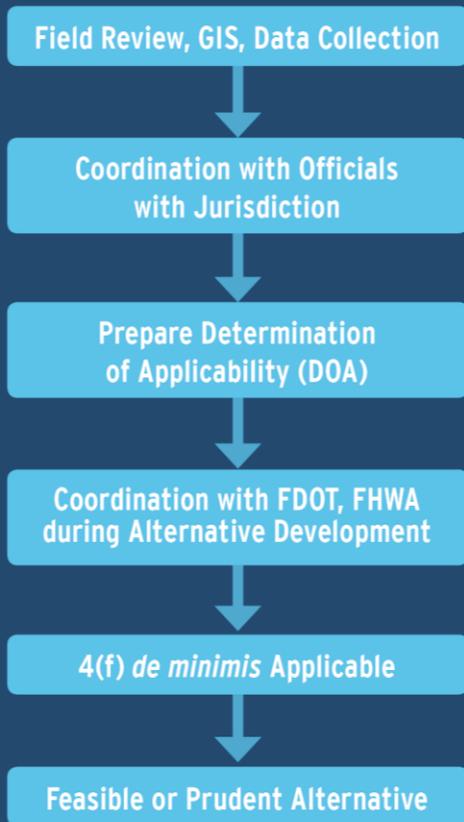
## Potential Section 4(f) Resources

Section 4(f) is part of federal law that requires special effort be made to protect publicly owned parks and recreational lands.

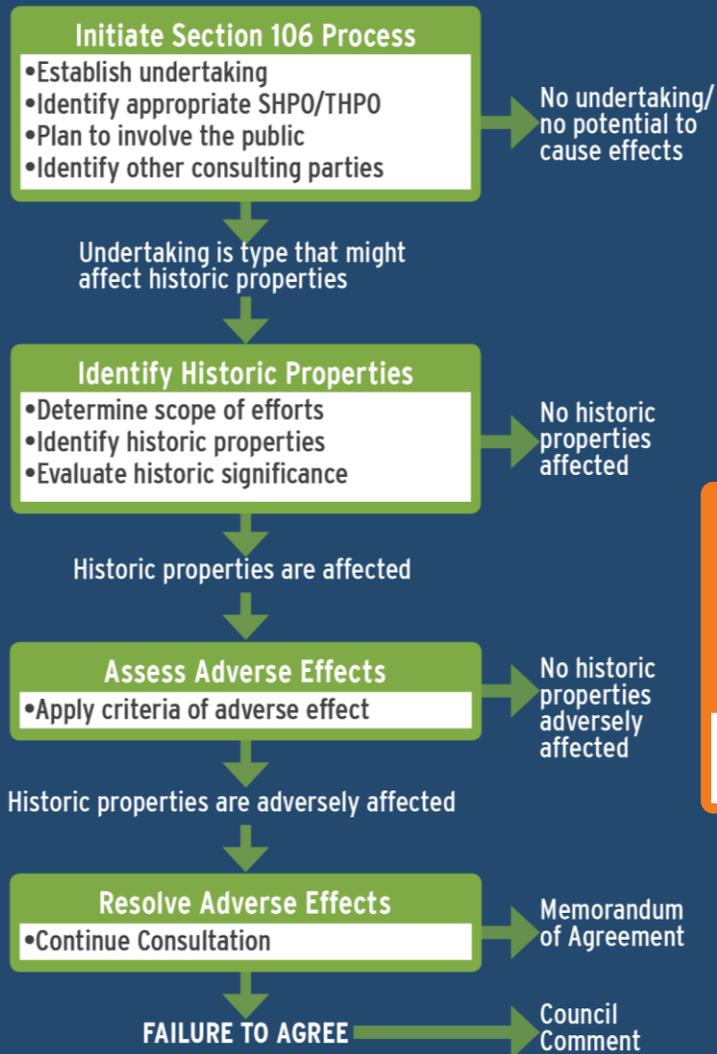


# Environmental

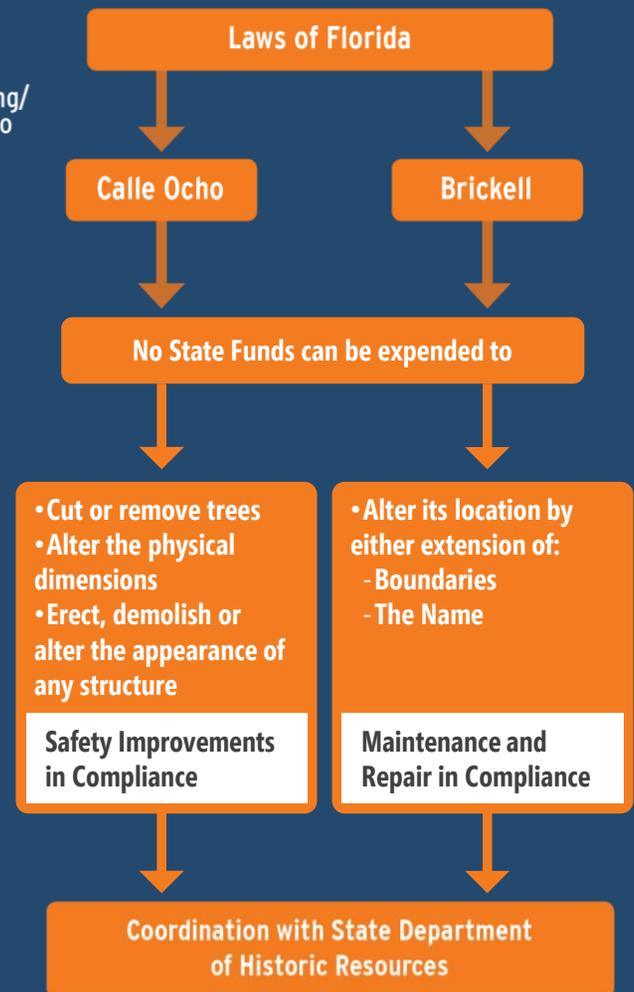
## 4(F)



## SECTION 106 PROCESS



## HISTORIC HIGHWAYS



# Environmental - Physical Effects

## CONTAMINATION IMPACT ASSESSMENT

Potential contamination sites:

- Gas stations, dry cleaners, light industry
- Typical for dense complex urban environment

Main area of concern: I-95 Interchange

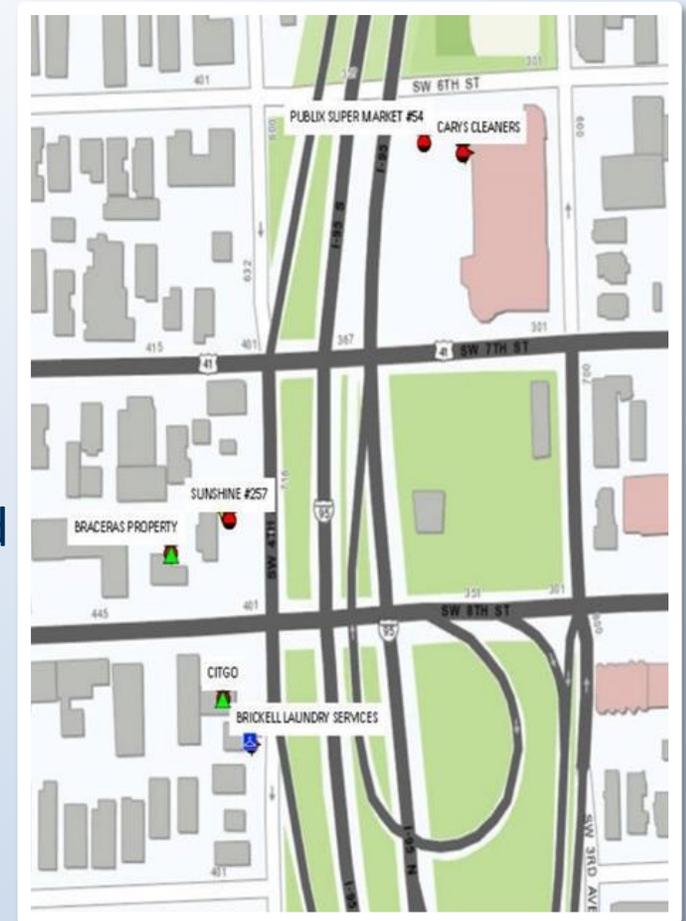
- Subsurface construction may impact soil and/or groundwater
- Evaluate underground utility work, stormwater pond locations, ROW acquisition

## AIR QUALITY

- Air Quality Technical Memorandum

## NOISE

- Noise Study Report



# Environmental – Natural Resources

## WATER QUALITY

- Biscayne Bay is a sole source aquifer

## SPECIAL DESIGNATIONS

- Biscayne Bay Aquatic Preserve;  
Outstanding Florida Waters

(Note: Includes Miami River in vicinity of project – ETDM Moderate Degree of Effect, due primarily to proximity to Biscayne Bay)



## WETLANDS AND ESSENTIAL FISH HABITAT

- No direct impacts expected

## WILDLIFE AND HABITAT

- Assessment of wildlife and habitat will be conducted

# Public Involvement

## MEETINGS

- Elected Officials/Agencies/Public Kick-off Meeting
- Project Advisory Team (PAT)
- Alternatives Public Workshop
- Public Hearing



## PROJECT WEBSITE

- [www.fdotmiamidade.com/CalleOchoStudy.com](http://www.fdotmiamidade.com/CalleOchoStudy.com)



# Questions / Comments

**Bao-Ying Wang, P.E.**  
**Project Manager**

**Consultant Management Office**

**Florida Department of Transportation – District Six**

**1000 NW 111 Avenue, Room 6251**

**Miami, Florida 33172**

**Phone: 305-470-5211**

**Email: BaoYing.Wang@dot.state.fl.us**



**Vilma Croft, P.E.**

**Project Manager**

**HNTB Corporation**

**Phone: 305-222-1457**

**Email: VCroft@hntb.com**



**[www.fdotmiamidade.com/CalleOchoStudy.com](http://www.fdotmiamidade.com/CalleOchoStudy.com)**