

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



### **PAG Concerns**

- **✓** Facilitator
- ✓ Room set-up
- ✓ Copies of presentation
- ✓ Innovative solutions
- ✓ Evaluate construction impacts



# **Project Status**

- Traffic analysis
- Alternative analysis



### **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 3A Two lane One way + Shared parking
- Alternative 4 Three lane One way



### **Forecasted Traffic Volumes**

#### SW 8TH STREET AND SW 7TH STREET 2045 TRAFFIC FORECAST

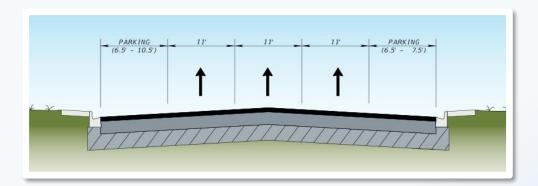
| Location     |                          | 2015<br>Existing Traffic | Design Alternatives - 2045 Forecast |                      |                      |  |
|--------------|--------------------------|--------------------------|-------------------------------------|----------------------|----------------------|--|
|              |                          |                          | Three Lanes<br>One Way              | Two Lanes<br>Two Way | Two Lanes<br>One Way |  |
| East of I-95 | SW 8 Street              | 21100                    | 23800                               | 20100                | 22000                |  |
|              | SW 7 Street              | 12000                    | 15300                               | 14500                | 13300                |  |
|              | Total SW 7 & 8 Street    | 33100                    | 39100                               | 34600                | 35300                |  |
|              | Total Increase from 2015 |                          | 18%                                 | 5%                   | 7%                   |  |
|              | Volume Difference        |                          | N/A                                 | 4500                 | 3800                 |  |
|              | (Traffic Diversion)      |                          | IV/A                                | 12%                  | 10%                  |  |
| West of I-95 | SW 8 Street              | 21300                    | 28400                               | 19400                | 22000                |  |
|              | SW 7 Street              | 17000                    | 24100                               | 16400                | 18400                |  |
|              | Total SW 7 & 8 Street    | 38300                    | 52500                               | 35800                | 40400                |  |
|              | Total Increase from 2015 |                          | 37%                                 | -6%                  | 5%                   |  |
|              | Volume Difference        |                          | NI/A                                | 16700                | 12100                |  |
|              | (Traffic Diversion)      |                          | N/A                                 | 32%                  | 23%                  |  |

**Diversion: Traffic that will seek alternate routes** 

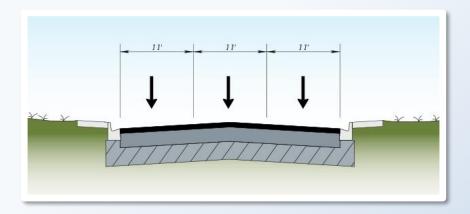


### **No Build Alternative**

#### **NO BUILD ALTERNATIVE – SW 8TH/SW 7TH STREET**



#### **SW 8th Street**



**SW 7th Street** 

#### NO EXPENDITURE OF FUNDS

#### **BENEFITS**

- Maintenance of traffic
- Environmental

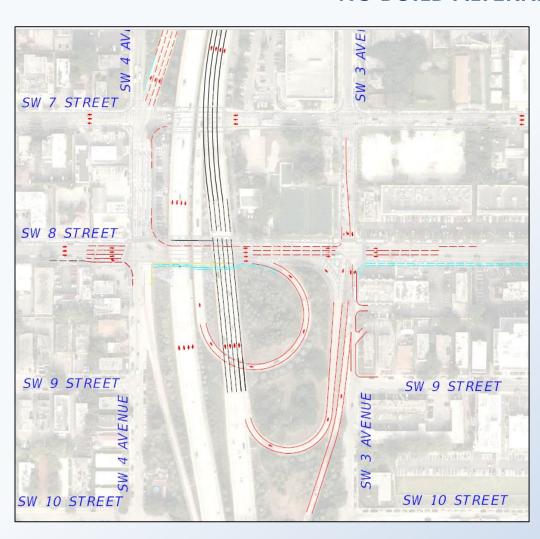
#### **CONCERNS - NO IMPROVEMENTS**

- Safety
- Multimodal level of service (LOS)
- Access improvements
- Complete streets



### **No Build Alternative**

#### **NO BUILD ALTERNATIVE - I-95**



#### **BENEFITS**

- Maintenance of traffic
- Environmental

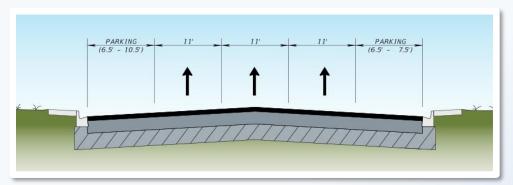
#### **CONCERNS - NO IMPROVEMENTS**

- Safety
- Multimodal level of service (LOS)
- Access improvements
- Complete streets

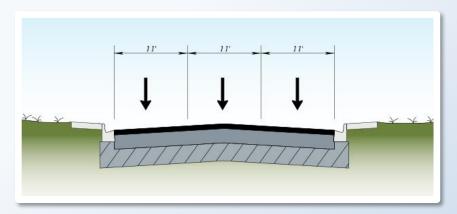


### **TSM&O Alternative**

# 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 (LOS)
   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

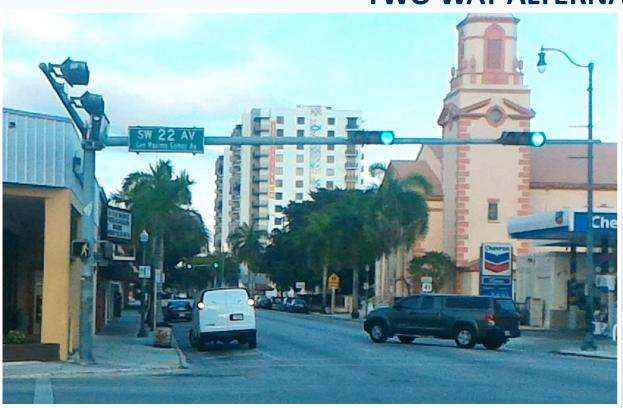
#### EVALUATE APPLICABILITY

- Adaptive Signal Control Technology (ASCT)
- Connected Vehicles Technology Signal Phase and Timing (SPaT)
- Information systems
- Transit ITS





# BUILD ALTERNATIVES – SW 8TH/SW 7TH STREET TWO WAY ALTERNATIVES





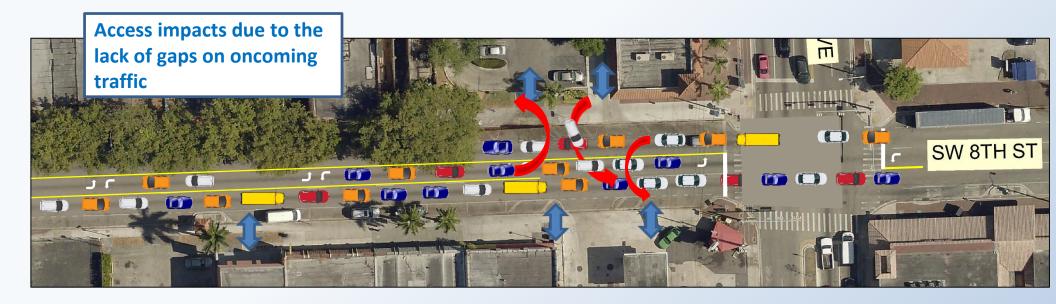


#### **NEW SIGNALS - CONCERNS**

- May require right-of-way
- Pedestrian accessibility
- Environmental impacts
- Utility conflicts
- Construction impacts



# BUILD ALTERNATIVES – SW 8TH/SW 7TH STREET TWO LANES - TWO WAY



#### **BENEFITS**

Access off peak hour

- Access peak hour
- Safety
- Traffic diversion
- Right-of-way

- **Environmental impacts**
- Construction impacts
- Parking



### ALTERNATIVE #1 TWO LANES - TWO WAY



Varies 65-75 Feet



- 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



#### **ALTERNATIVE #1 - TWO LANES - TWO WAY**



#### **BENEFITS**

- Access off peak hour
- No impacts to parking

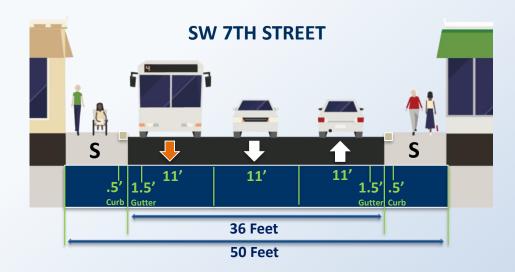
- Access peak hour
- Safety
- Traffic diversion
- Minor right-of-way
- Environmental impacts
- Construction impacts



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



Varies 65-75 Feet

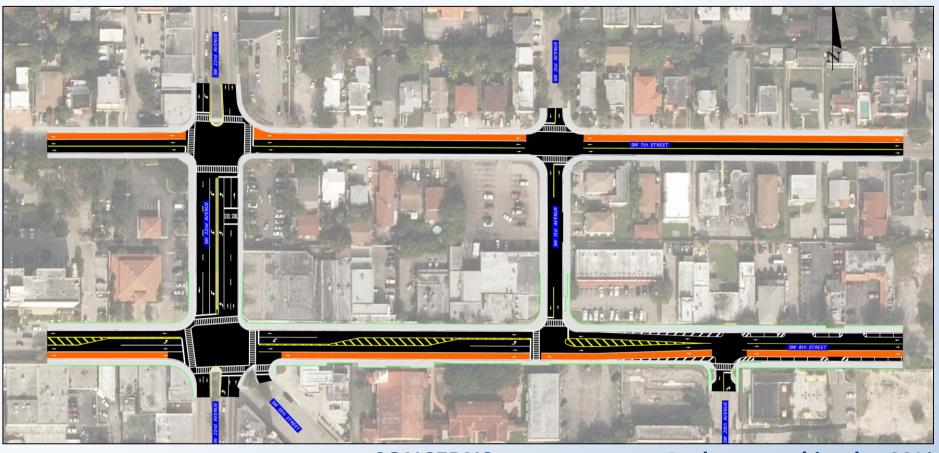


- 2 through lanes +1 transit only lane
- Traffic flow: Two-way
- Maintains pavement width
- Parking: Reduces number of spaces
- Sidewalk: Not modified
- Improvements at I-95

Requires change in the historic designation law



#### **ALTERNATIVE #2 - TWO LANES - TWO WAY + TRANSIT WITH LEFT TURNS**



#### **BENEFITS**

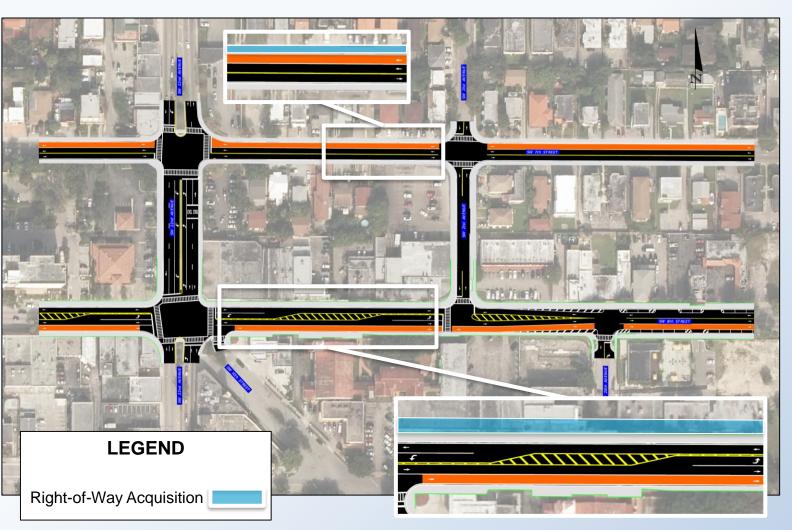
- Access off peak hour
- Improves transit operations

- Access peak hour
- Safety
- Traffic diversion

- Reduces parking by 60%
- Minor right-of-way
- Environmental impacts
- Construction impacts



#### **ALTERNATIVE #2 - TWO LANES - TWO WAY + TRANSIT WITH LEFT TURNS**



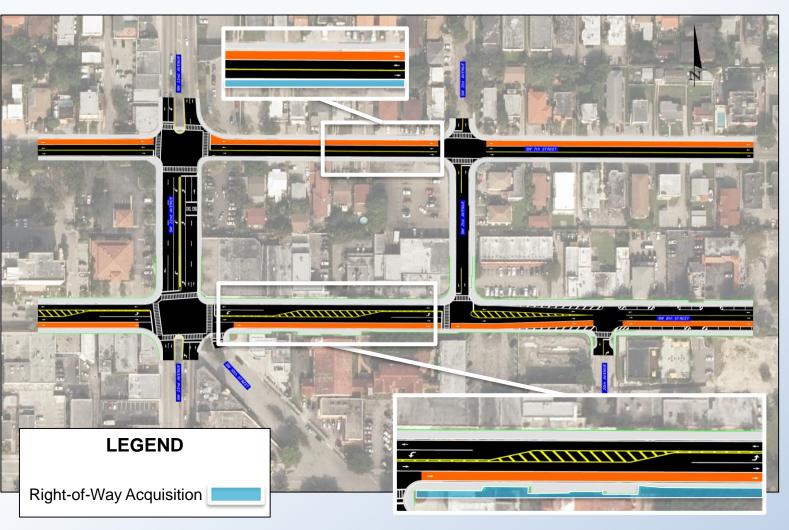
#### **BENEFITS**

- Access off peak hour
- No impacts to parking
- Improves transit operations

- Access peak hour
- Safety
- Right-of-way business/ residential impacts
- Environmental impacts
- Traffic diversion
- Construction impacts



#### **ALTERNATIVE #2 - TWO LANES - TWO WAY + TRANSIT WITH LEFT TURNS**



#### **BENEFITS**

- Access off peak hour
- No impacts to parking
- Improves transit operations

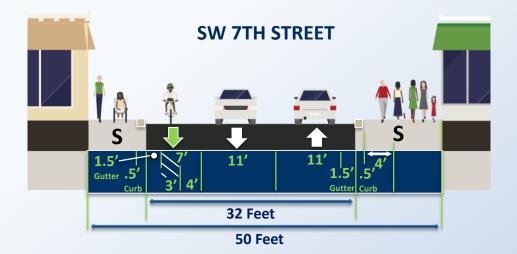
- Access peak hour
- Safety
- Right-of-way business/ residential impacts
- Environmental impacts
- Traffic diversion
- Construction impacts



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



Varies 65-75 Feet



- 2 through lanes +1 bike lane
- Traffic flow: Two-way
- Narrows pavement width
- Parking: Reduces number of spaces
- Sidewalk: Wider
- Improvements at I-95

Requires change in the historic designation law





Little Havana Bicycle/Pedestrian Mobility
Plan prepared for the City of Miami and the
Miami-Dade Transportation Planning
Organization (TPO) in June 2016

### RECOMMENDED BICYCLE LANE CORRIDORS

| Corridor            | Limits                                |  |  |
|---------------------|---------------------------------------|--|--|
| SW 1st Street       | SW 6th Avenue to South River Drive    |  |  |
| SW 6th Street       | SW 27th Avenue to SW 4th Avenue       |  |  |
| SW 3rd Avenue       | South Dixie Highway to SW 12th Avenue |  |  |
| SW 22nd Avenue      | West Flagler Street to SW 22nd Street |  |  |
| SW 22nd Avenue Road | SW 8th Street to West Flagler Street  |  |  |
| SW 17th Avenue      | West Flagler Street to SW 1st Avenue  |  |  |





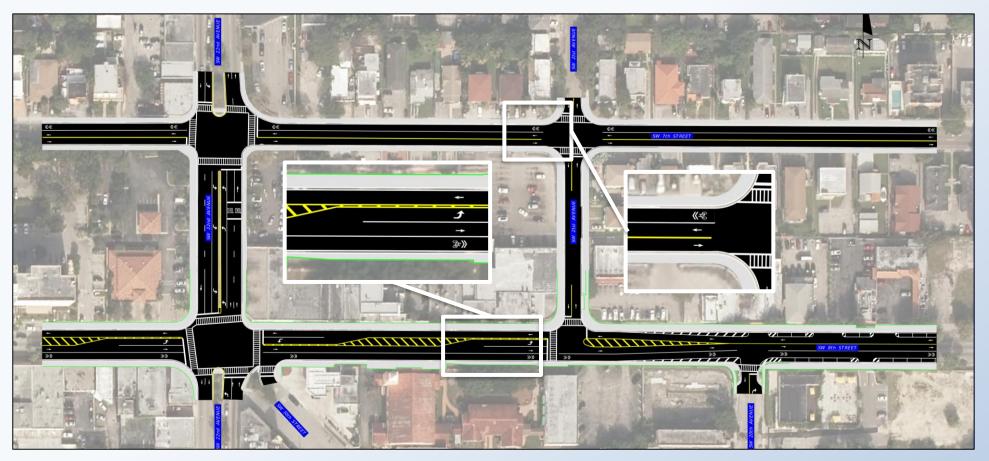
#### **WIDER SIDEWALKS - CONCERNS**

- Drainage impacts
- Utility conflicts
- Construction impacts





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



#### **BENEFITS**

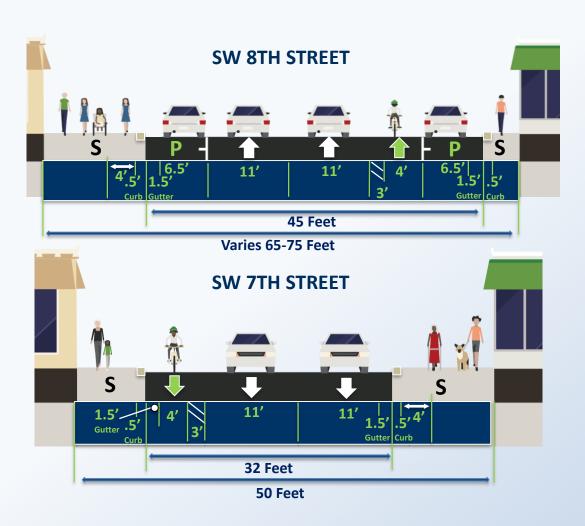
- Access off peak hour
- Wider sidewalks
- Improvements to bikes

- Access peak hour
- Safety
- Traffic diversion

- Drainage
- Construction impacts
- Reduces parking by 60%
- Environmental impacts



### ALTERNATIVE #3 TWO LANES - ONE WAY



- 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



#### **ALTERNATIVE #3 - TWO LANES - ONE WAY**



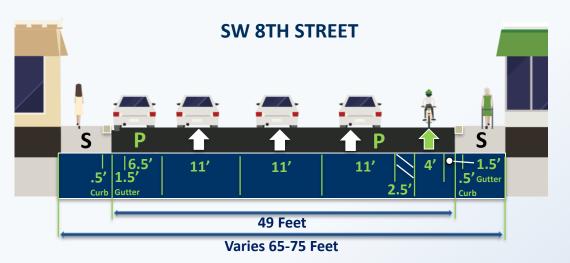
#### **BENEFITS**

- No impacts to parking
- Wider sidewalks
- Improvements to bikes

- Safety
- Traffic diversion
- Drainage
- Utility impacts
- Construction impacts



### ALTERNATIVE #3A THREE LANES - SHARED PARKING AND TRAVEL LANE





- 2 through lanes +
   1 bike lane on SW 8<sup>th</sup> Street
- Traffic flow: One-way
- Maintains pavement width
- Parking: Allowed during off peak hour
- Sidewalk: Not modified
- Improvements at I-95



### ALTERNATIVE #3A THREE LANES - SHARED PARKING AND TRAVEL LANE

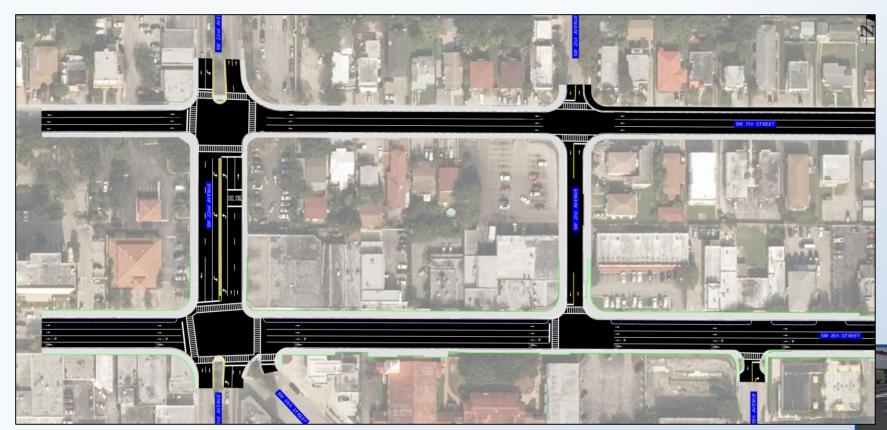




Arlington, VA

Las Olas Boulevard, Ft. Lauderdale, FL

#### **ALTERNATIVE #3A - THREE LANES - SHARED PARKING AND TRAVEL LANE**



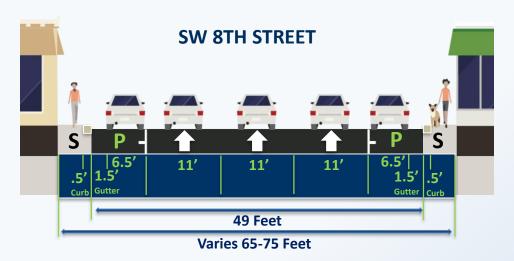
#### **BENEFITS**

- Travel lane during peak hour
- Improvements to bikes
- No right-of-way Impacts

- Reduces parking by 50% during peak hour
- Pedestrian mid-block crossings



### ALTERNATIVE #4 THREE LANES - ONE WAY





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



#### **ALTERNATIVE #4 - THREE LANES - ONE WAY**



#### **BENEFITS**

- No impacts to parking
- Minor construction impacts

No right-of-way impacts

#### **CONCERNS**

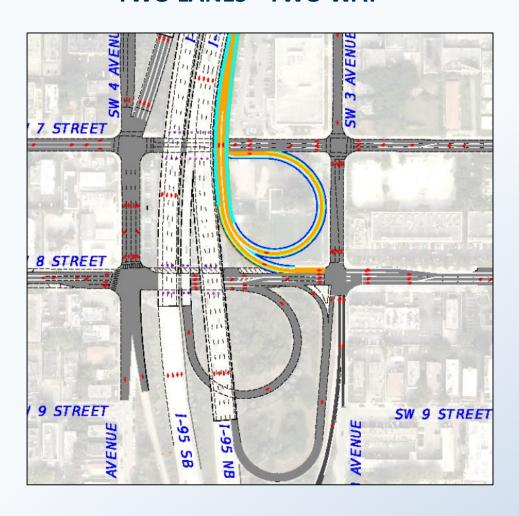
 No improvements to bikes or transit







### ALTERNATIVE #1 TWO LANES - TWO WAY

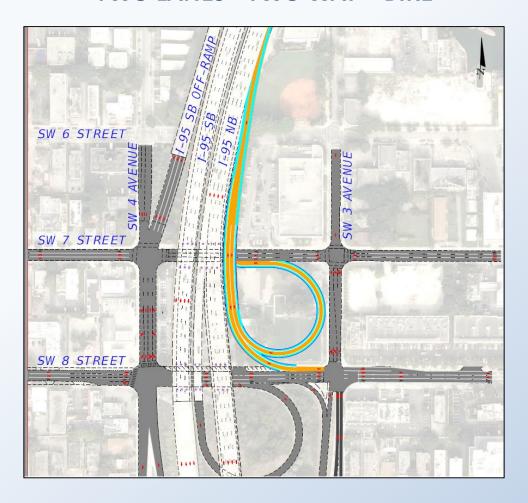


### ALTERNATIVE #2 TWO LANES - TWO WAY + TRANSIT





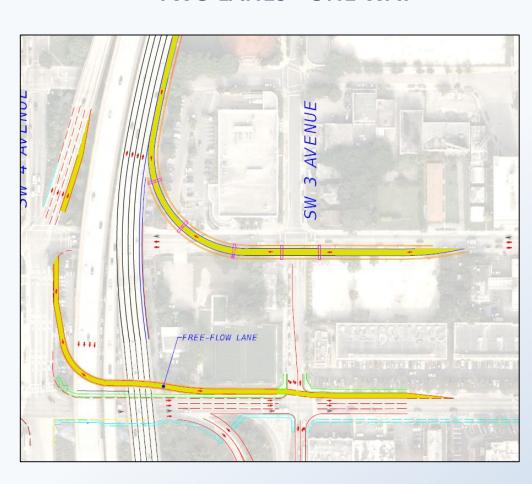
### ALTERNATIVE #2A TWO LANES - TWO WAY + BIKE

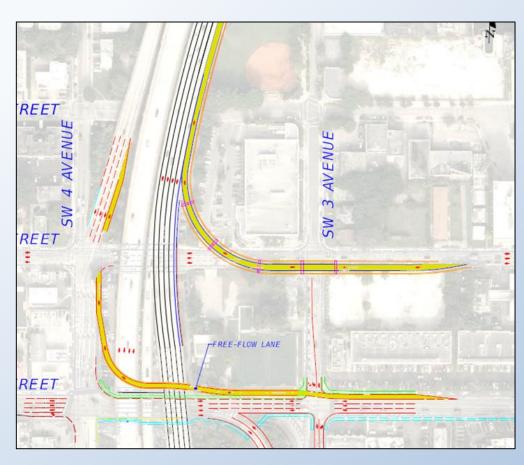




### ALTERNATIVE #3 TWO LANES - ONE WAY

### ALTERNATIVE #3A & #4 THREE LANES - ONE WAY



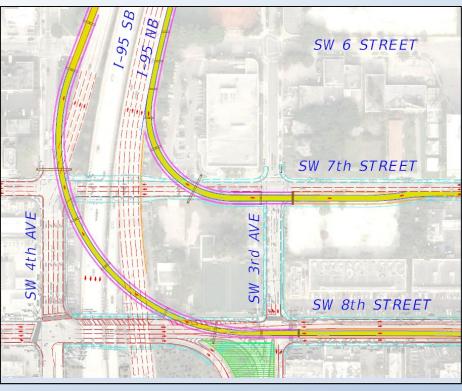




### ALTERNATIVE #3 TWO LANES - ONE WAY

### ALTERNATIVE #3A & #4 THREE LANES - ONE WAY







# **Alternative Analysis**

#### **SAMPLE EVALUATION MATRIX**

| Criteria                 | No Build | Alt. #1 | Alt. #2 | Alt. #2A | Alt. #3 | Alt. #3A | Alt. #4 |
|--------------------------|----------|---------|---------|----------|---------|----------|---------|
| Safety                   |          |         |         |          |         |          |         |
| <b>ŤŤŤ</b>               |          |         |         |          |         |          |         |
| <b>\$</b> 0              |          |         |         |          |         |          |         |
| <b>%</b>                 |          |         |         |          |         |          |         |
|                          |          |         |         |          |         |          |         |
| Environmental<br>Impacts |          |         |         |          |         |          |         |
| Community<br>Input       |          |         |         |          |         |          |         |
| Parking                  |          |         |         |          |         |          |         |
| Access                   |          |         |         |          |         |          |         |
| Construction<br>Impacts  |          |         |         |          |         |          |         |

+ Enhanced

No Improvements/No Impacts

Impacts



# **Next Steps**

Alternatives Public Workshop

September 2017

Selection of Recommended Alternative

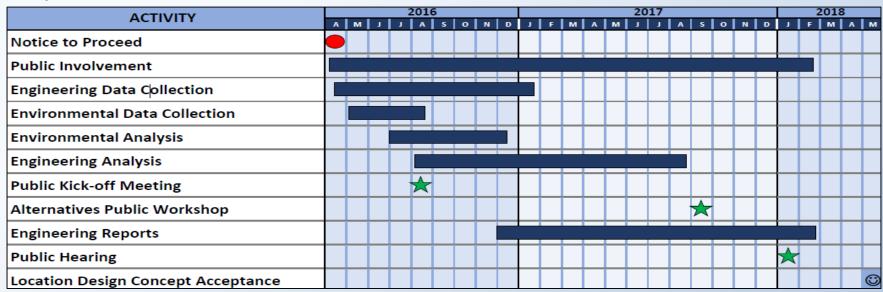
October 2017

Public Hearing

January 2018

Location Design Concept Acceptance (LDCA)

May 2018





### **Questions / Comments**

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www.fdotmiamidade.com/CalleOchoStudy.html



ONE TEXT OR CALL COULD