Florida Department of Transportation District Four

I-95 AT SOUTHERN BOULEVARD (SR 80) Project Development and Environment Study

Palm Beach MPO Update

Palm Beach County, Florida
Financial Project ID No.: 435516-1-22-02
ETDM No.: 14183
SR 9 (I-95) Interchange Master Plan
Palm Beach County

- Completed in December 2014

- Evaluated 17 interchanges, determined existing and potential future deficiencies
  - From Linton Boulevard to Northlake Boulevard
  - Coordinated with Local Agencies and MPO

- Identified operational and safety needs
  - Developed short-term improvements and long-term conceptual design alternatives

- Facilitated programming of interchange studies and projects through the SIS program which focuses state resources on transportation facilities most critical to statewide travel
Study Area

Location:

- I-95 at Southern Boulevard (SR 80) Interchange
- West Palm Beach, Glen Ridge, Cloud Lake
- Southern Boulevard from Australian Avenue to Parker Avenue
Purpose and Need for the Study

- Established during the ETDM process with agency input
- Enhance overall traffic operations at the interchange
- Improve capacity and meet future travel demand resulting from population and employment growth
- Emergency Evacuation
- Consistent with local transportation plans
Purpose and Need for the Study

- Growth expected from approved developments:
  - 14,000 homes
  - 150,000+ new trips
  - 30,000 anticipated to utilize SR 80
Adjacent Studies

- **SR 80 Corridor Action Plan** (www.sr80actionplan.com)
  - Develop a long term Action Plan for the 45-mile segment from US 27 to I-95
  - Complete by Winter 2017

- **I-95 Managed Lanes Master Plan** (www.95express.com/PBC-Planning-Study)
  - Identify long term capacity needs along I-95
  - Evaluate managed lane concepts
  - Complete by Spring 2018

Coordination with both studies is on-going and will continue throughout the process
Current Year (2015) Traffic

- **Peak HR: 1341 veh/hr**
  - LOS: D
  - Delay: 37 sec/veh
  - Queue length: >350 ft

- **Peak HR: 1410 veh/hr**
  - LOS: E
  - Delay: 61 sec/veh
  - Queue length: >900 ft

- **Peak HR: 1279 veh/hr**
  - LOS: C
  - Delay: 24 sec/veh
  - Queue length: >1100 ft

- **Peak HR: 1226 veh/hr**
  - LOS: F
  - Delay: 88 sec/veh
  - Queue length: >600 ft

**LOS D = Acceptable**

**LOS E & F = Failing**
Design Year (2040) Traffic – No Build

Peak HR: 1625 veh/hr
LOS: F
Delay: 140 sec/veh
Queue length: >900 ft

Peak HR: 1658 veh/hr
LOS: E
Delay: 66 sec/veh
Queue length: >1000 ft

Peak HR: 1709 veh/hr
LOS: F
Delay: 88 sec/veh
Queue length: >1450 ft

Peak HR: 1720 veh/hr
LOS: F
Delay: 234 sec/veh
Queue length: >1000 ft

LOS D = Acceptable
LOS E & F = Failing
Build Alternatives Considered

Alternative 1

Alternative 2

ELIMINATED FROM FURTHER EVALUATION

Alternative 3

Alternative 4
# Evaluation Matrix: All Build Alternatives

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>CRITERIA</th>
<th>No-Build</th>
<th>BUILD ALTERNATIVES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>1 NB - WB</td>
</tr>
<tr>
<td>Engineering</td>
<td>Fully addresses Project Purpose and Need</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td></td>
<td>Addresses all major traffic movements at interchange</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td></td>
<td>Satisfies the LOS Criteria through the Design Year</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td></td>
<td>Improves Roadway / Interchange Operation</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td></td>
<td>Requires Access Management revisions</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td></td>
<td>Enhances SIS System Connectivity</td>
<td>-</td>
<td>++</td>
</tr>
<tr>
<td></td>
<td>Enhanced Pedestrian &amp; Bicycle Facilities</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>Environmental and Social</td>
<td>Noise Levels ($+, - =)</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td></td>
<td>Air Quality ($+, - =)</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td></td>
<td>Potential Impact to Contaminated Sites</td>
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<td>8</td>
</tr>
<tr>
<td></td>
<td>Wetland Impacts (# of acres)</td>
<td>0</td>
<td>0.28</td>
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<tr>
<td></td>
<td>Wildlife &amp; Habitat Impacts</td>
<td>0</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Historic &amp; Archaeological Resources (direct impacts)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Visual / Aesthetic Impacts</td>
<td>=</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Safety / Emergency Response Times ($+, - =)</td>
<td>-</td>
<td>++</td>
</tr>
<tr>
<td></td>
<td>Section 4(f) impacts (Dreher Park)</td>
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<td>0</td>
</tr>
<tr>
<td></td>
<td>Mobility impacts ($+, - =)</td>
<td>-</td>
<td>++</td>
</tr>
<tr>
<td></td>
<td>Economic Development ($+, - =)</td>
<td>-</td>
<td>+</td>
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<tr>
<td>Right-of-Way</td>
<td>Total Potential Property Impacts (total # of parcels)</td>
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<tr>
<td></td>
<td>Total Right-of-Way Required (# of acres)</td>
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<td>0.812</td>
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<td>Total Right-of-Way Estimated Cost (millions)</td>
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<td>Estimated Costs</td>
<td>Final Engineering, Design &amp; Construction</td>
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<td></td>
<td>Right-of-way</td>
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<td>$3.70</td>
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<td>TOTAL ESTIMATED COSTS (Millions)</td>
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</table>
# Impact Matrix: Recommended Alternative 4

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>CRITERIA</th>
<th>Recommended, Dual 3rd Level</th>
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</thead>
<tbody>
<tr>
<td>Engineering</td>
<td>Fully addresses Project Purpose and Need</td>
<td>yes</td>
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<tr>
<td></td>
<td>Satisfies the LOS Criteria through the Design Year</td>
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<tr>
<td></td>
<td>Improves Roadway / Interchange Operation</td>
<td>yes</td>
</tr>
<tr>
<td></td>
<td>Requires Access Management revisions</td>
<td>yes</td>
</tr>
<tr>
<td></td>
<td>Enhances SIS system connectivity, Pedestrian &amp; Bicycle Facilities</td>
<td>yes</td>
</tr>
<tr>
<td>Environmental and Social</td>
<td>Noise Levels</td>
<td>decreased</td>
</tr>
<tr>
<td></td>
<td>Air Quality</td>
<td>increased</td>
</tr>
<tr>
<td></td>
<td>Wetland Impacts (# of acres)</td>
<td>0.28</td>
</tr>
<tr>
<td></td>
<td>Wildlife &amp; Habitat Impacts</td>
<td>none</td>
</tr>
<tr>
<td></td>
<td>Section 4(f), Historic &amp; Archaeological Resources (direct impacts)</td>
<td>none</td>
</tr>
<tr>
<td></td>
<td>Visual / Aesthetic Impacts</td>
<td>yes</td>
</tr>
<tr>
<td></td>
<td>Safety / Emergency Response Times</td>
<td>enhanced</td>
</tr>
<tr>
<td></td>
<td>Mobility and Economic Development</td>
<td>enhanced</td>
</tr>
<tr>
<td>Right-of-Way</td>
<td>Total Potential Property Impacts (total # of parcels)</td>
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</tr>
<tr>
<td></td>
<td>Total Right-of-Way Required (# of acres)</td>
<td>1.518</td>
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<tr>
<td>Estimated Costs</td>
<td>Final Engineering, Design &amp; Construction</td>
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<td>Right-of-way</td>
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<td><strong>TOTAL ESTIMATED COSTS (Millions)</strong></td>
<td><strong>$86.3</strong></td>
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</table>
Recommended Alternative 4: NB I-95 Flyover to WB SR 80 & EB SR 80 Flyover to NB I-95
Alternative 4: SR 80 West of I-95

- Requires right-of-way
  - West of I-95, north and south side of SR 80

0-56 ft
12-28 ft
0-7 ft
Alternative 4: SR 80 West of I-95 – Typical Section
SR 80 (East of I-95) at Parker Ave
Parker Avenue south of SR 80

Ex. R/W

5.5'

11' 3.5' 20' 22'

Ex. R/W

5'

Existing Roadway to be Widened

SB PARKER

NB PARKER

VEDADO HISTORIC DISTRICT
Other Improvements

- Bridge widening over I-95 and Rail Road
- Increased ramp storage at entrance and exit ramps and turn lanes
- Upgraded bicycle facilities
- Upgraded pedestrian facilities & cross walks
Recommended Alternative: SR 80 West of I-95
Perspective View on SR 80 Looking East
Approaching SR 80 from Lang Road
Perspective View from Oak Street
View from above I-95, Looking North
What’s Next?

- Public Hearing: October 19, 2017
- Finalize alternatives and documentation incorporating public input
- Submit Final Environmental and Engineering Documents: December 2017
- Location Design Concept Acceptance (LDCA): March 2018
Contact Information

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