



US-1 to I-595

FDOT District 4
Planning & Environmental Management Office
Concept Development Unit
03/26/2017



Agenda

- **Project Background**
- **Project Location**
- **Existing Conditions**
- **Traffic Operating Conditions**
- **Proposed Improvements**
- **Coordination**
- **Next Steps**



Project Background

- **Freight Hot Spot Analysis from the 2040 SE FL Regional Freight Plan**
 - Identified top Freight Hot Spots and conducted a site visit to identify possible issues and solutions
 - US-1 from SR-84 to I-595 link was identified as a Freight Hot Spot
 - US-1 at SE 28th St, SE 6th Ave intersection was identified to cause delay
- **Broward Partnership Exchange**
 - Held at FDOT's District 4 headquarters on January 12, 2017
 - FDOT received feedback for SB US-1 to WB I-595



Project Location



Existing Intersection Configuration

SE 28th Street



SE 30th Street



Existing On-Ramp Configuration



Field Observations





Field Observations



Existing & Future Traffic Volumes

AM Peak Hour Volumes

US-1 at SE 28th Street & SE 30th Street



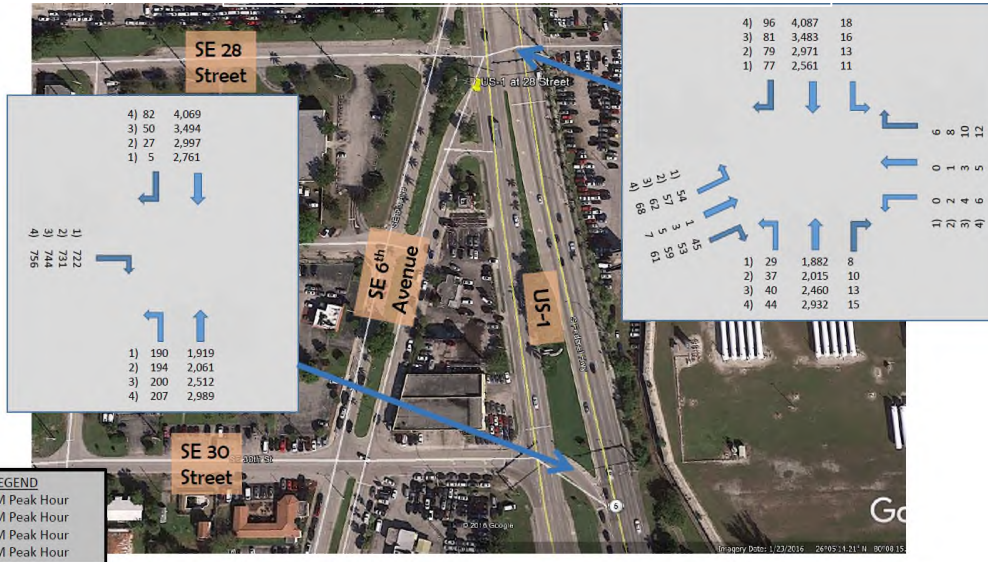
US-1 and I-595



Existing & Future Traffic Volumes

PM Peak Hour Volumes

US-1 at SE 28th Street & SE 30th Street



US-1 and I-595





Traffic Operating Conditions AM Peak Hour

Existing 2016 AM traffic conditions

- **SE 28th St**
 - Overall intersection LOS B
 - SB movement LOS B
- **SE 30th St**
 - Overall intersection LOS C
 - SB movement LOS D
- **SB US-1 to WB I-595 On-Ramp**
 - Volume-to-Capacity Ratio 0.52

Future No-Build 2040 AM traffic conditions

- **SE 28th St**
 - Overall intersection LOS F
 - SB movement LOS F
- **SE 30th St**
 - Overall intersection LOS F
 - SB movement LOS F
- **SB US-1 to WB I-595 On-Ramp**
 - Volume-to-Capacity Ratio 0.77



Traffic Operating Conditions PM Peak Hour

Existing 2016 PM traffic conditions

- **SE 28th St**
 - Overall intersection LOS D
 - SB movement LOS E
- **SE 30th St**
 - Overall intersection LOS F
 - SB movement LOS F
- **SB US-1 to WB I-595 On-Ramp**
 - Volume-to-Capacity Ratio 0.95

Future No-Build 2040 PM traffic conditions

- **SE 28th St**
 - Overall intersection LOS F
 - SB movement LOS F
- **SE 30th St**
 - Overall intersection LOS F
 - SB movement LOS F
- **SB US-1 to WB I-595 On-Ramp**
 - Volume-to-Capacity Ratio 1.08



Proposed Improvements

■ SE 28th St

- Remove NEL movement from SE 6th Ave
- Provide LT movement from EB SE 28th St to NB US-1
- Reconfigure intersection geometry to standard four-leg intersection
- Provide Signage to NB US-1
- Operational Benefits (2040 PM Peak Hour)
 - 24% Reduction in Overall Intersection Delay
 - 25% Reduction in Delay for SB movement
 - SB Queue Reduction of 18%

■ SE 30th St

- Existing to remain
- Expected improved operations due to improved lane distribution (lane utilization)

■ SB US-1 to I-595

- Widen SB US-1 to WB I-595 On-Ramp to 2 lanes
- Provide choice lane from SB US-1
- Provide overhead signs to WB I-595
- Operational Benefits (2040 PM Peak Hour)
 - Volume-to-Capacity (v/c) Ratio improvement to 0.54

■ **Construction Cost Estimate: \$4.0M**

■ **B/C Ratio: 12.10**

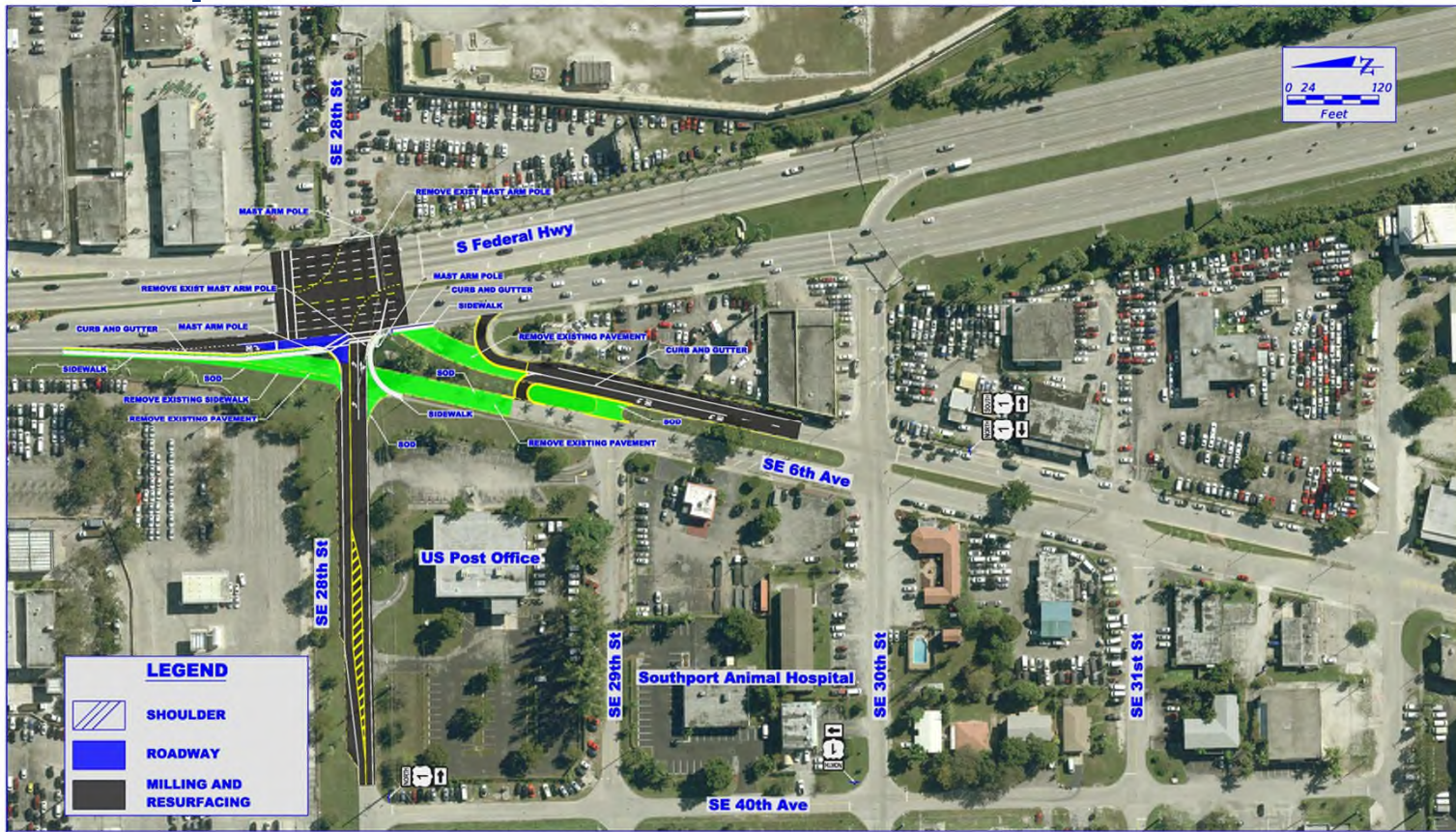


SE 28th St Intersection Proposed Improvements (No-Ramp Widening)

- Same four legged reconfiguration without ramp improvements
- Operational Benefits
 - 2040 AM Peak Hour
 - 15% Reduction in Overall Intersection Delay
 - 9% Reduction in Delay for SB movement
 - 2040 PM Peak hour
 - 4% Reduction in Overall Intersection Delay (2040 PM)
 - 4% Reduction in Delay for SB movement (2040 PM)

- **Construction Cost Estimate: \$0.5M**
- **B/C Ratio: 26.70**

Proposed Improvements US-1 at SE 28th St





Proposed Improvements SB US-1 to WB I-595 On-Ramp





Coordination

- Director of Transportation Development
- Traffic Operations Office
- Design Office
- Central Office
 - Structural
- Office of Modal Development
 - Freight coordinator
 - Rail coordinator
- Broward MPO
 - Freight Transportation Advisory Committee (FTAC)
- Florida East Coast (FEC) Railway
- City of Ft. Lauderdale



Next Steps

- Refine Concept Design and Cost Estimate
- Finalize Report
- Approval from Central Office/FHWA
- Request funding for implementation



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