

***C.R. 609***  
***Planning & Conceptual Engineering***  
***(PACE) Study***



Joint ETAT Coordination Workshop  
May 27, 2009



# *Project Team*

**Min-Tang Li, Ph.D., P.E. -FDOT – District 4**

**Mike Ciscar, P.E. – The Corradino Group – Project Principal**

**Michael Colucci, P.E. – The Corradino Group –Project Manager**

**Karen Trujillo – URS – Environmental Manager**



# *Introduction / ETDM Process*

- **Conducting Planning Screen**
- **Project loaded onto Environmental Screening Tool (EST)**
- **Sociocultural Effects Evaluation (SCE)**
- **ETAT Review**
- **Planning Screen Summary Report**
- **Incorporate results into the PACE Study**

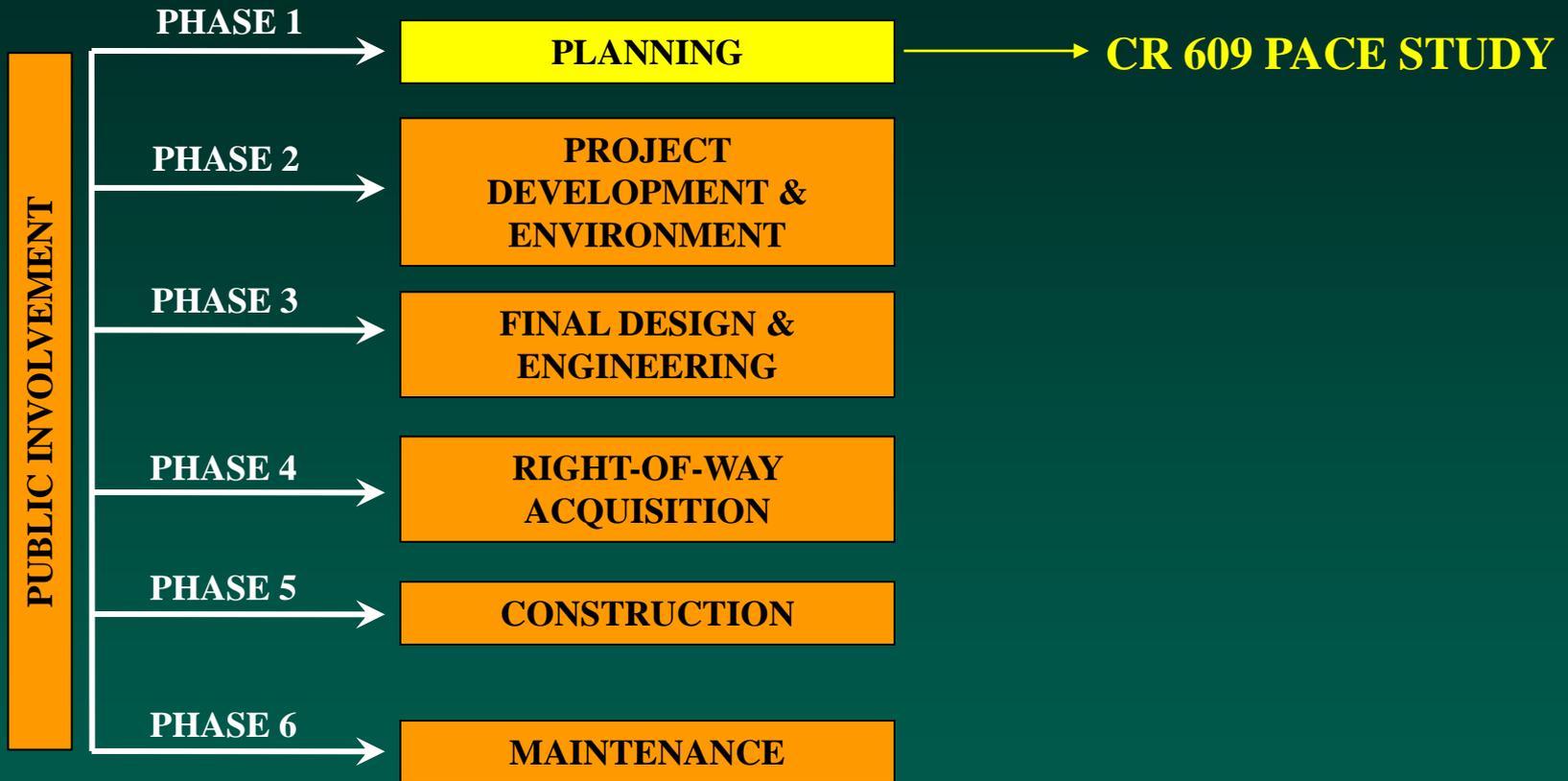


# *CR 609 PACE Study Objectives*

- **Identify and develop a preferred alignment that meets the anticipated travel demands and has the support from the local agencies and elected officials**
- **Identify any potential environmental impacts**
- **Identify ROW needs**
- **Include the project on all the transportation plans**
- **Identify potential funding**

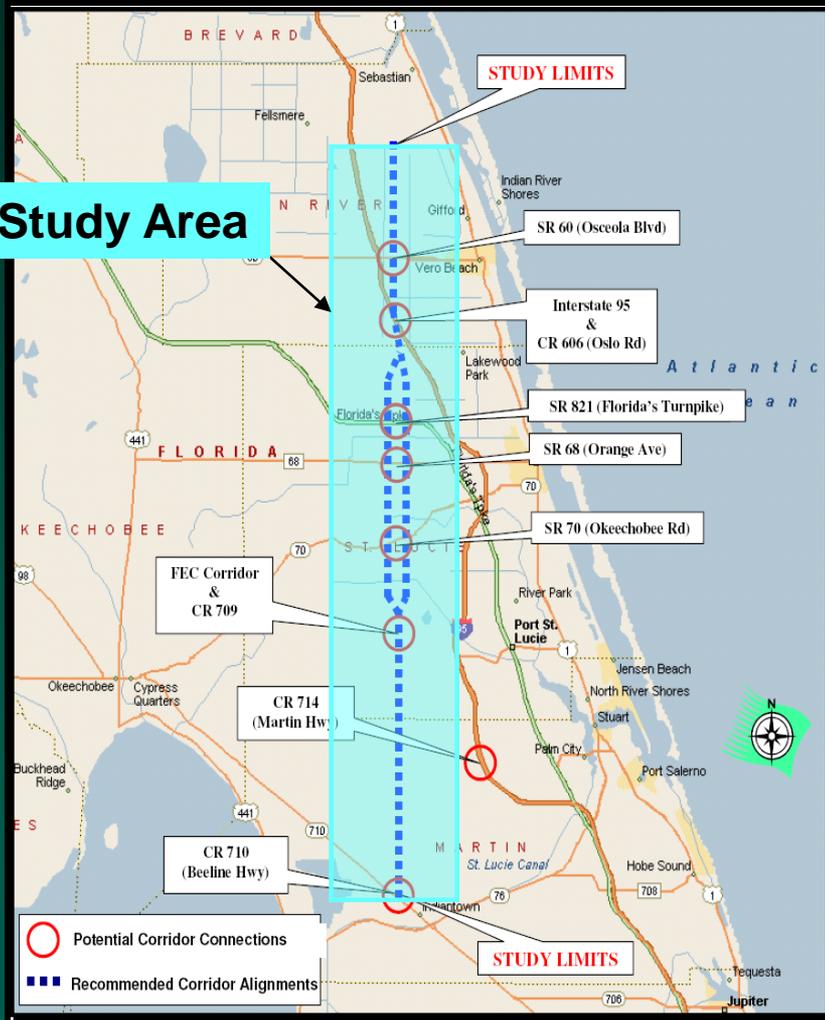


# *Project Phases*





# Project Location Map



- FDOT CR 609 alignment from 1995 study
- Originating at CR609/SR710 moving northward for approximately 50 miles and ending at CR510 (Wabasso Road) in Indian River County

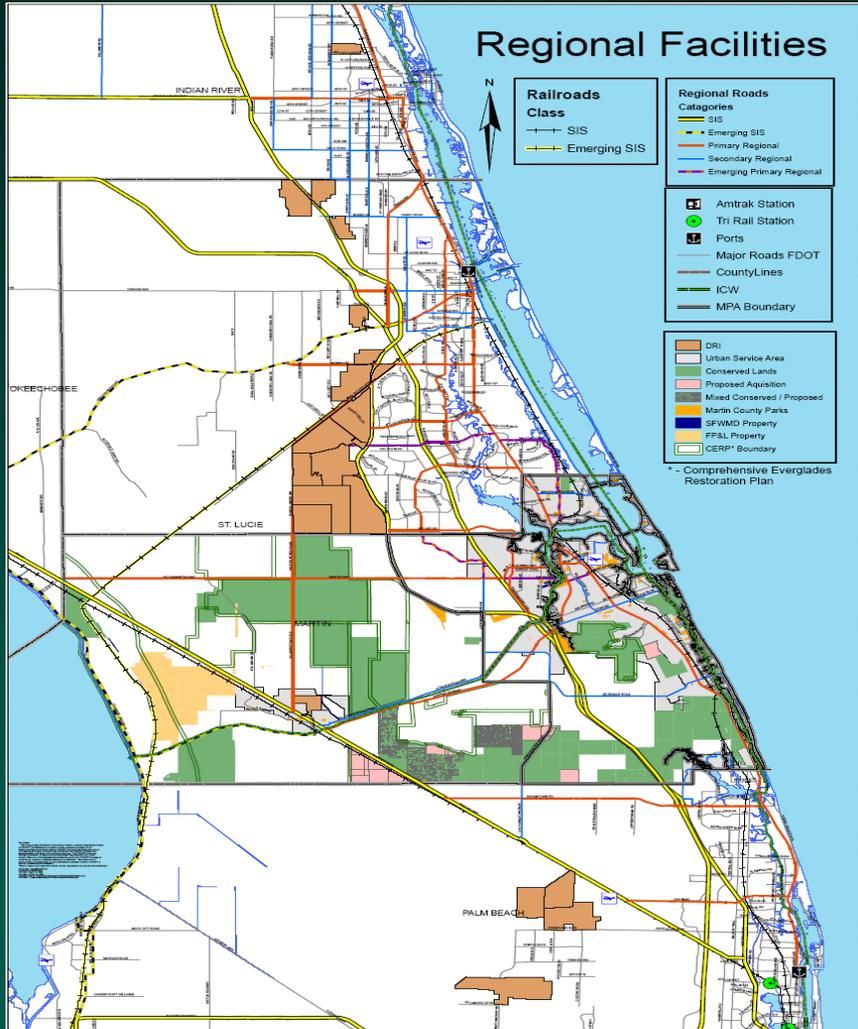


# *Regional Considerations*

- **St. Lucie & Indian River County Joint Meeting**
  - *Future N/S Inter-county Transportation Corridors Highlighted*
  
- **St. Lucie & Martin MPO Joint Meeting**
  - *Future cross-county connections*
  
- **Destination 2030 Regional Long Range Transportation Plan**
  - *Underscores need for N/S Regional Transportation Corridor*
  
- **Martin MPO Project Priorities for FY 05/06 & FY 06/07**
  - *Improve capacity of CR 609 and alternative N/S corridor*
  - *Consideration of CR 609 as an emerging SIS Facility*
  
- **Indian River County MPO Project Priorities**
  - *Improvements to 82 Avenue North of 26<sup>th</sup> Street*



# Martin County Project Considerations

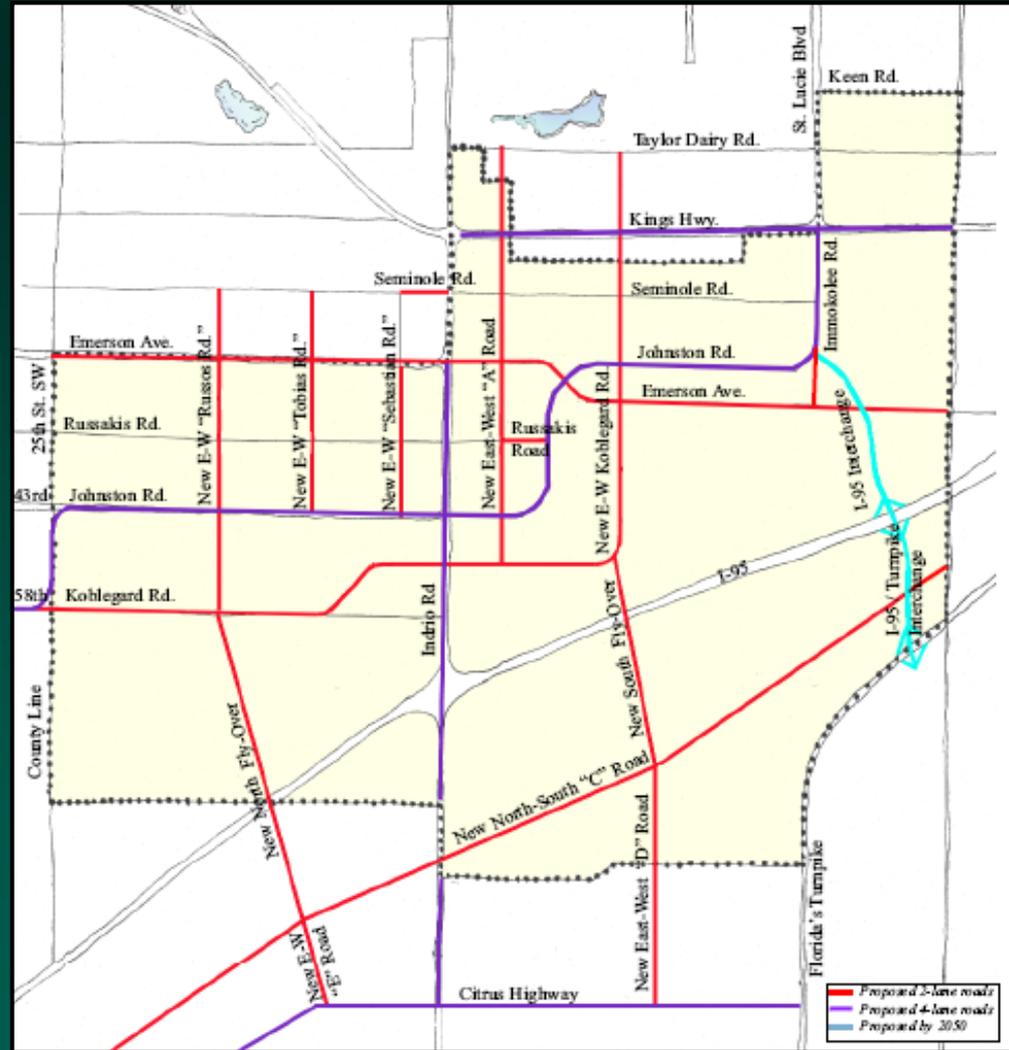


- ✓ **Coordinate information from SR 710 PD&E**
- ✓ **Impacts of growth North of Martin County**
- ✓ **Access management and retention of open space to continue county's philosophy to preserve land**
- ✓ **Indiantown DRI on South CR 609 at SR 710/Warfield Blvd.**
- ✓ **Connectivity to CR 714/Martin Highway**
- ✓ **Indiantown CRA**



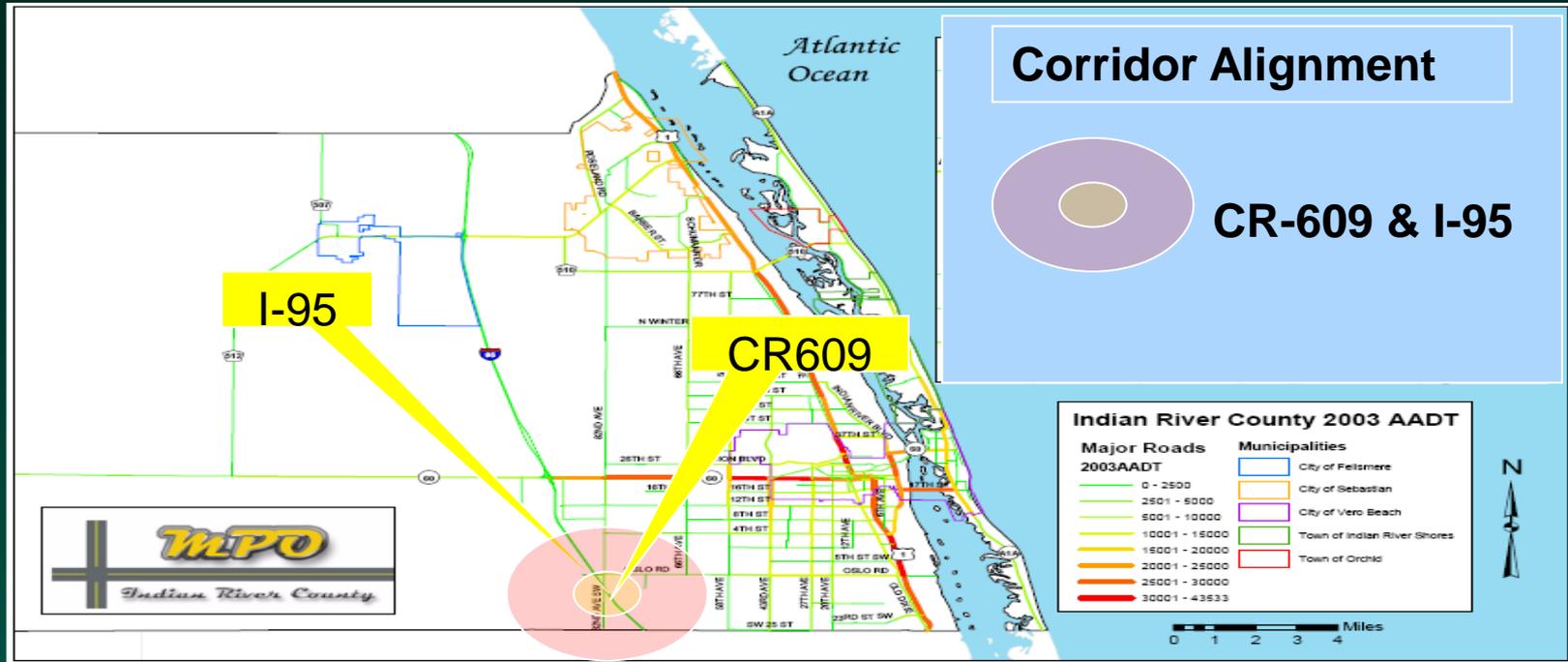
# St. Lucie County Project Considerations

- ✓ **Future Growth**
- ✓ **St. Lucie County Research Park**
- ✓ **Crosstown Parkway**
- ✓ **Corridor alignment with Florida Turnpike**
- ✓ **Evaluation of grade separated crossing**
- ✓ **Traverses FEC Rail Road and major roads including Okeechobee Road and SR-68/Orange Ave**
- ✓ **St. Johns Marsh**
- ✓ **2030 estimated population over 400,000**





# Indian River County Project Considerations



- ✓ Alignment at the south end of the County as it intersects with I-95
- ✓ Evaluation of a grade separated crossing
- ✓ Traverses other major corridors including: SR-60/Osceola Blvd;
- ✓ CR-606/Oslo Road
- ✓ Cross County Connections & Regional Growth



# *Environmental Data Collection*

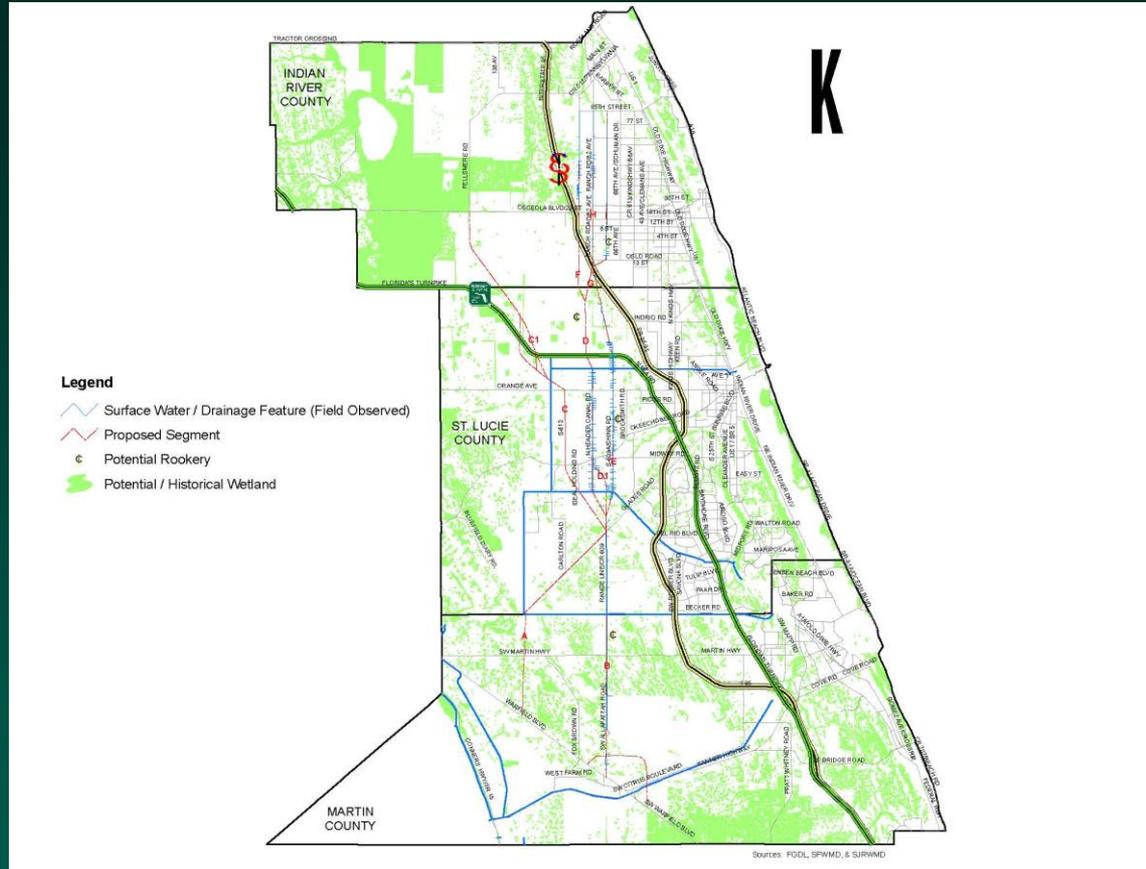
- **Wetlands/Surface Waters**
- **Threatened and Endangered Species**
- **Cultural Resources**
- **Air Quality**
- **Noise**





# Environmental Update

- **Ground Truthing**
  - **Martin County**
  - **St Lucie County**
  - **Indian River County**





# *Environmental Update*

- **Ground Truthing**
  - *Fewer Wetlands*
  - *More Canals and Ditches*
  - *Some Wildlife Observed*
  - *Very few noise receptors*





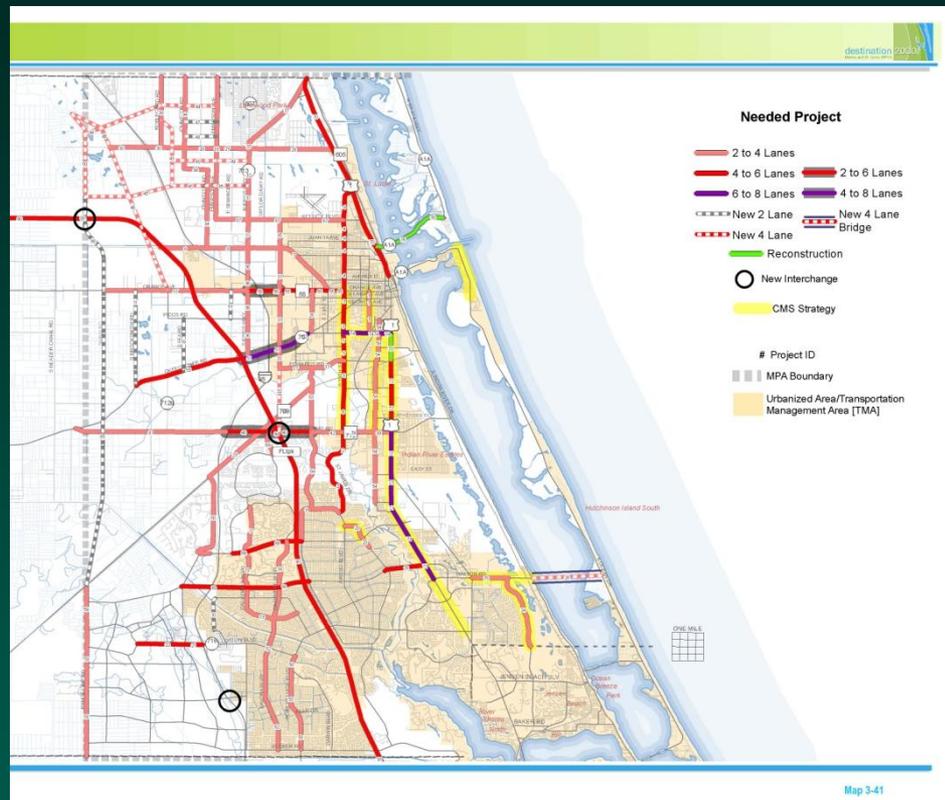
# *Sociocultural Effects (SCE) Evaluations*

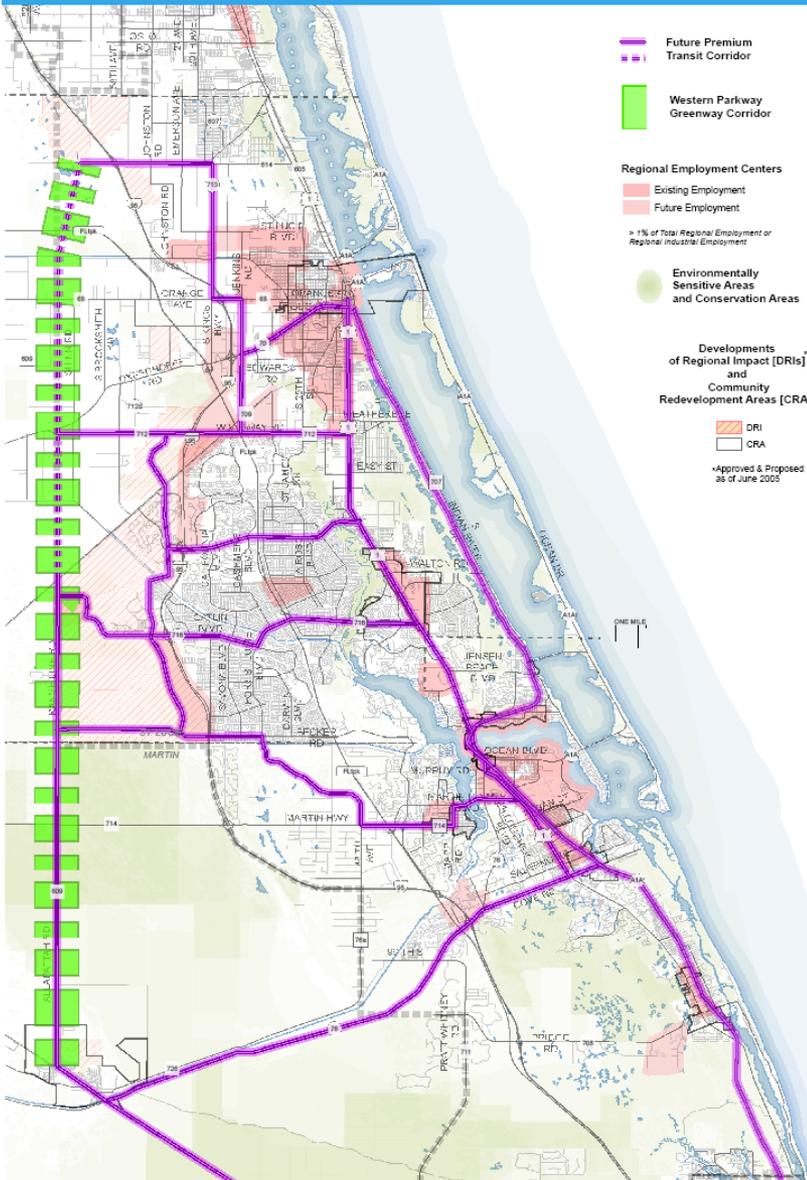
<b>SOCIAL</b>	<b>ECONOMIC</b>	<b>LAND USE</b>	<b>MOBILITY</b>	<b>AESTHETICS</b>	<b>RELOCATION</b>
<ul style="list-style-type: none"> <li>• Quality of Life</li> <li>• Community Cohesion</li> <li>• Community Goals</li> <li>• Changes in Demographics               <ul style="list-style-type: none"> <li>• Population</li> <li>• Employment</li> <li>• Income</li> <li>• Age/Sex</li> <li>• Education</li> <li>• Occupancy</li> <li>• Ethnicity</li> <li>• Housing Units without a vehicle</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Effect on Businesses</li> <li>• Regional Employment</li> <li>• Travel Patterns</li> <li>• Traffic Levels</li> <li>• Business Visibility</li> <li>• Special Needs Patrons</li> <li>• Tax Base</li> </ul>	<ul style="list-style-type: none"> <li>• Consistency with Future Land Use Plan</li> <li>• Character of Land Use</li> <li>• Urban Form/Context</li> <li>• Effect on Open Space</li> <li>• Potential for Sprawl</li> </ul>	<ul style="list-style-type: none"> <li>• Accessibility               <ul style="list-style-type: none"> <li>• Pedestrian/Bicycle</li> <li>• Transit</li> <li>• Vehicles</li> <li>• Transportation Disadvantaged</li> </ul> </li> <li>• Connectivity               <ul style="list-style-type: none"> <li>• Intermodal Facilities</li> <li>• Land Use</li> </ul> </li> <li>• Traffic Patterns</li> <li>• Freight Movement</li> <li>• Public Parking</li> <li>• Emergency Facilities/ Evacuation</li> <li>• Safety</li> </ul>	<ul style="list-style-type: none"> <li>• Noise</li> <li>• Vibration</li> <li>• Proximity to Community Focal Points</li> <li>• Community Aesthetic Compatibility</li> <li>• Landscaping</li> </ul>	<ul style="list-style-type: none"> <li>• Residential Parcels</li> <li>• Business Parcels</li> <li>• Public Facilities</li> </ul>



# Project Need

- Review and update of demographic and socioeconomic data
- Regional north/south multimodal corridor to help relieve traffic on other major corridors
- Consistency with plans and future projections of local agencies





# Project Need

- **Martin & St. Lucie Destination 2030 Regional Long Range Transportation Plan**



# Alignment Alternative Research Tool (AART)

- **Previously known as the Corridor Analysis Tool (CAT) which was used for the statewide new corridors initiative**
- **Identifies Criteria for Corridor Planning Evaluation**
  - *Mobility and Connectivity*
  - *Economic Competitiveness*
  - *Environmental Stewardship*
  - *Community Livability*
- **Identifies corridor of least impact**
- **Quantifies corridor impacts**
- **Facilitates comparison of multiple corridors**
- **Uses standard GIS data**





# Alignment Alternative Research Tool (AART)

- **Workshops**
- **Gathered county data and criteria rankings**

*Environmental  
Criteria*

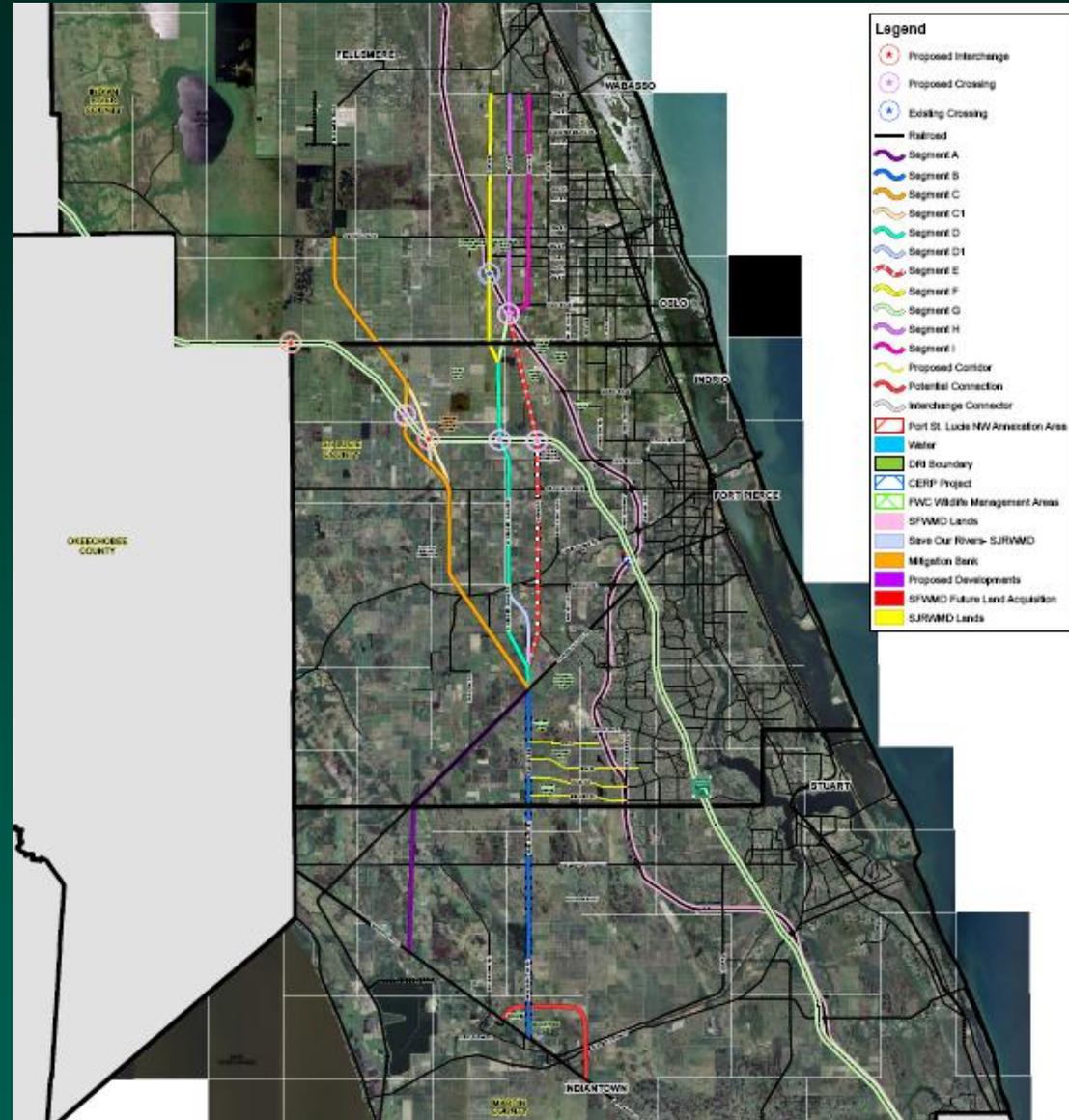


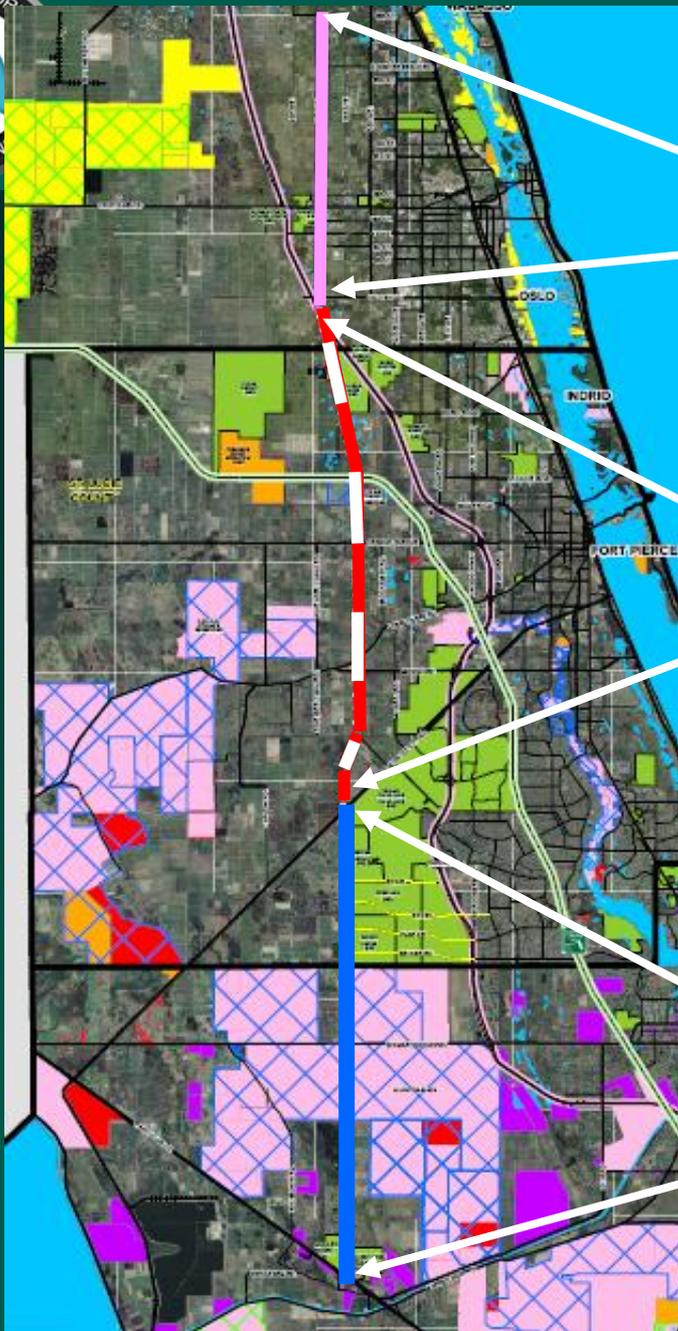
<b>Conservation Lands</b>	<b>Florida Forever Lands</b>
	<b>Florida Managed Areas</b>
	<b>Statewide Greenways and Trails Opportunities</b>
	<b>State Parks</b>
	<b>Conservation Easements/Areas (held by board, commission, federal, or districts)</b>
<b>Surface Waters</b>	<b>Outstanding Florida Waters</b>
	<b>Class 1 and 2 Surface Waters</b>
	<b>Aquatic Preserves</b>
	<b>Springs/Spring Sheds</b>
<b>Wetlands</b>	<b>Marine/Salt Marsh</b>
	<b>Bayheads</b>
	<b>Riverine Swamp</b>



# AART Analysis Results

- Map includes feasible alternatives
- Corridors are shown in segments





# *Corridor B-E-H*

*Segment H*

*Segment E*

*Segment B*

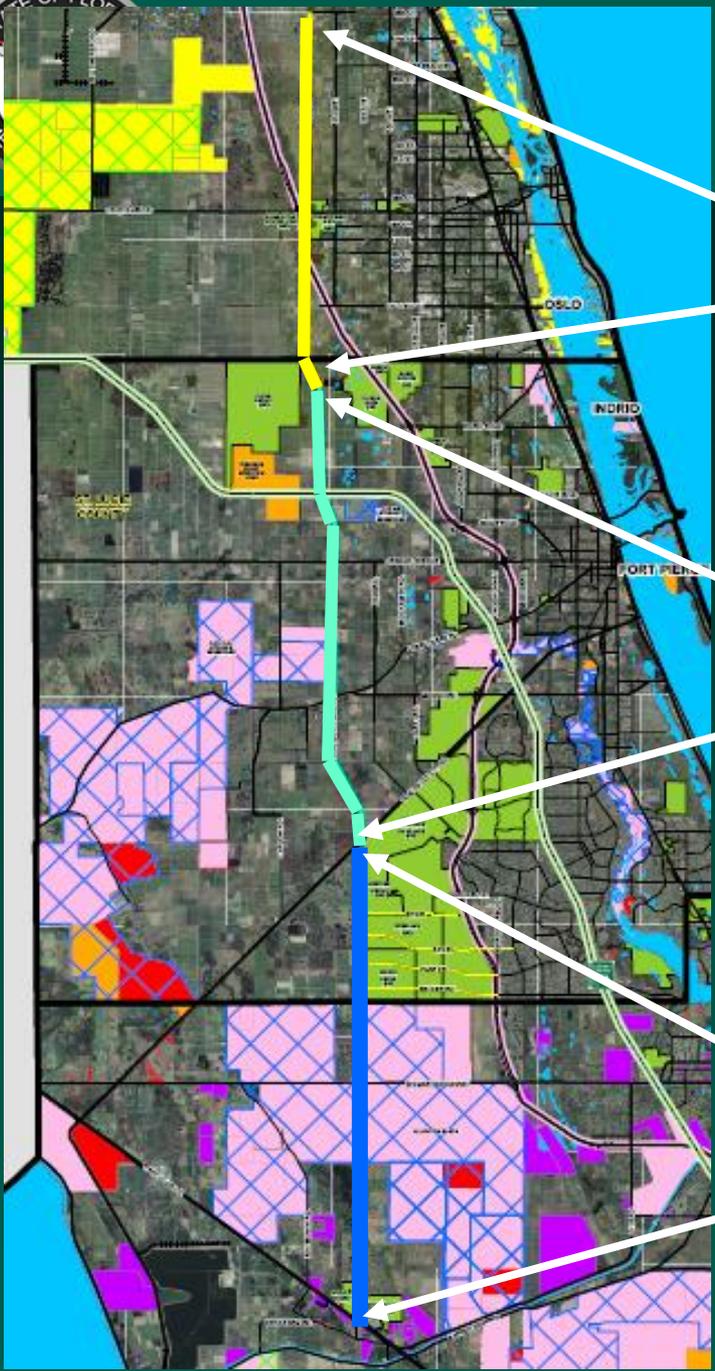


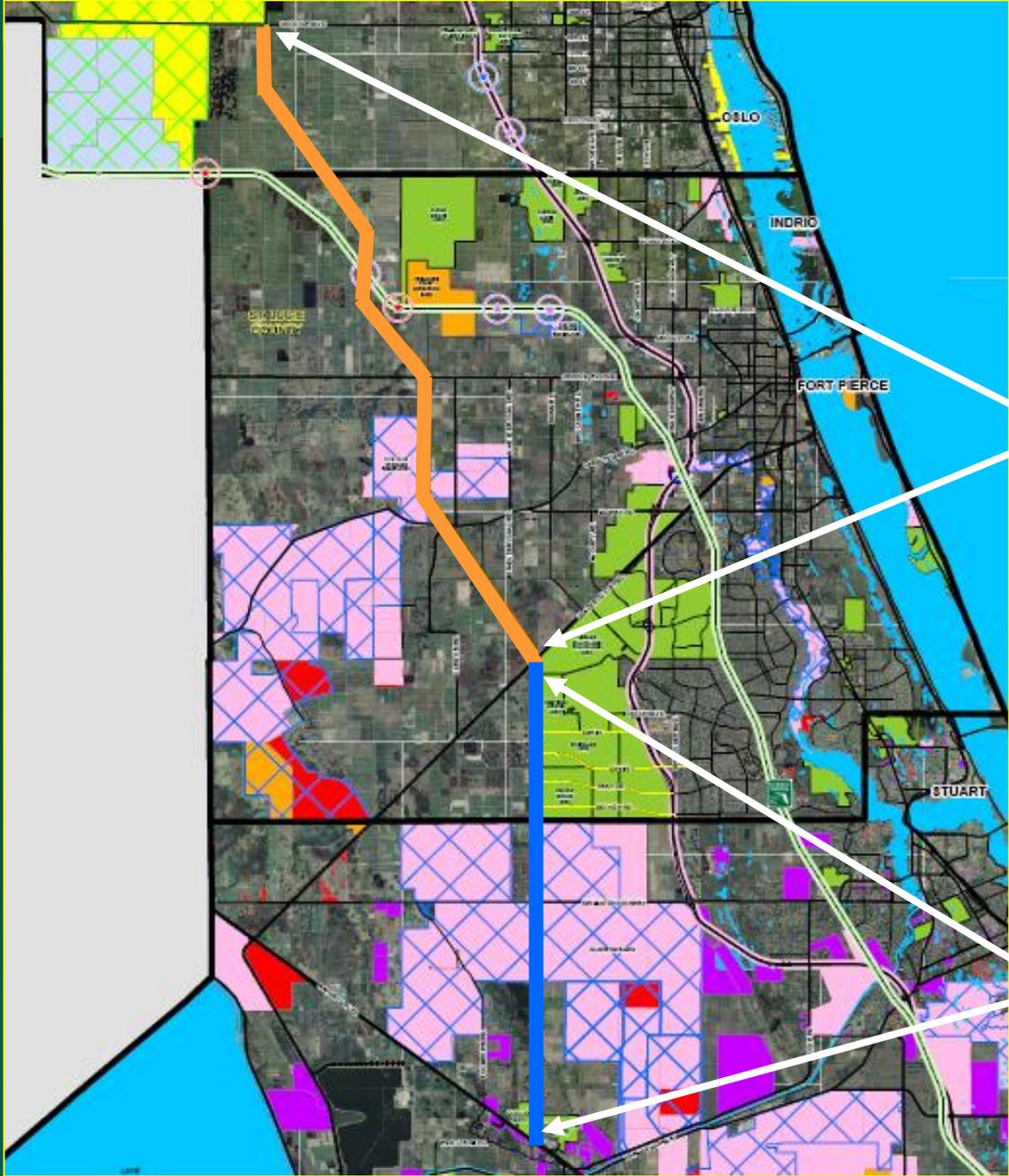
# *Corridor B-D-F*

*Segment F*

*Segment D*

*Segment B*





# *Corridor B-C*

*Segment C*

*Segment B*

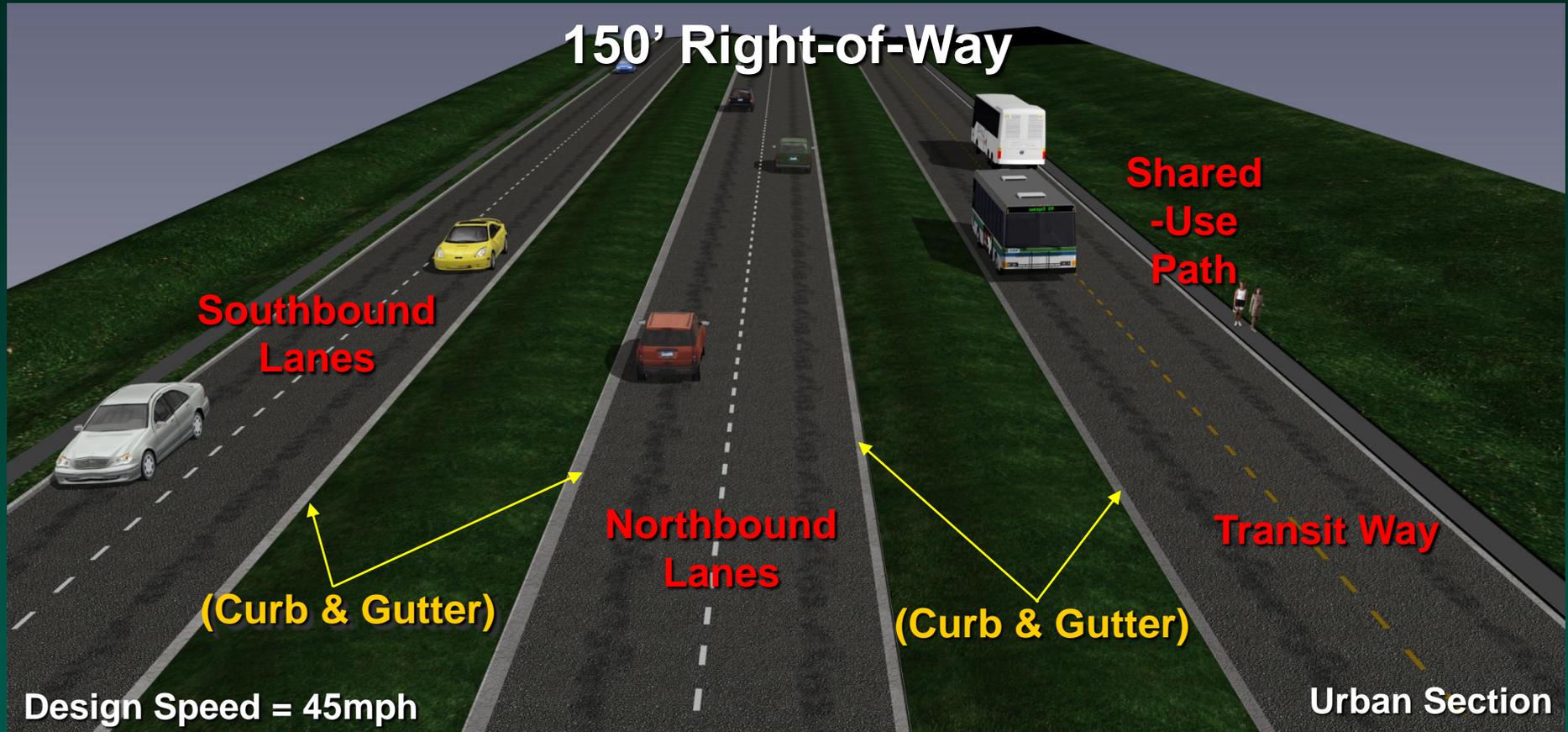
# *Existing Typical Section*

**Southbound  
Lane**

**Northbound  
Lane**



# Typical Section Options





# Typical Section Options



212' Right-of-Way

Shared-Use Path

Southbound Lanes

Northbound Lanes

Transit Way

Design Speed = 55mph



# Typical Section Options



Southbound  
Lanes

Northbound  
Lanes

Shared-  
Use Path

Transit Way

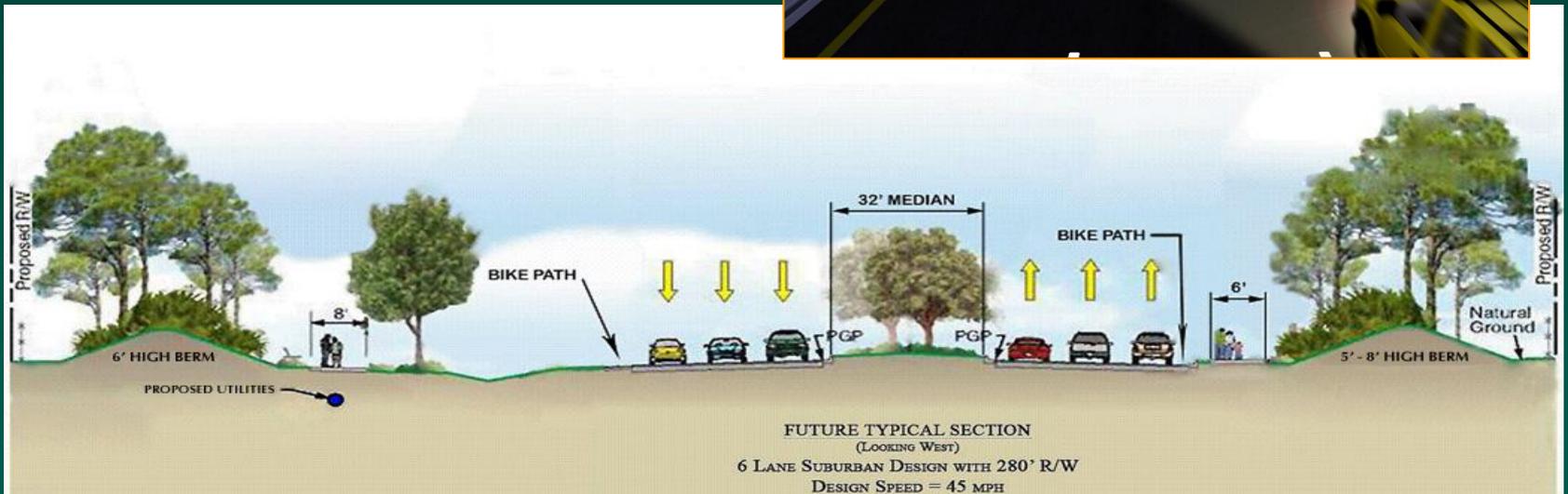
300' Right-of-Way

Design Speed = 55mph



# Comparable Corridor

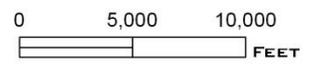
## Crosstown Parkway





# Comparable Corridor

## Osceola Parkway





# *ETDM Screening Information*

- **Planning Screen**
- **Multiple Alternatives**
- **Purpose and Need Statement in Development**
- **ETAT Release Date – June 2009**



*Questions ?*

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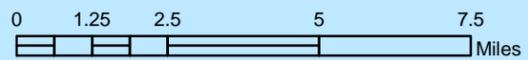
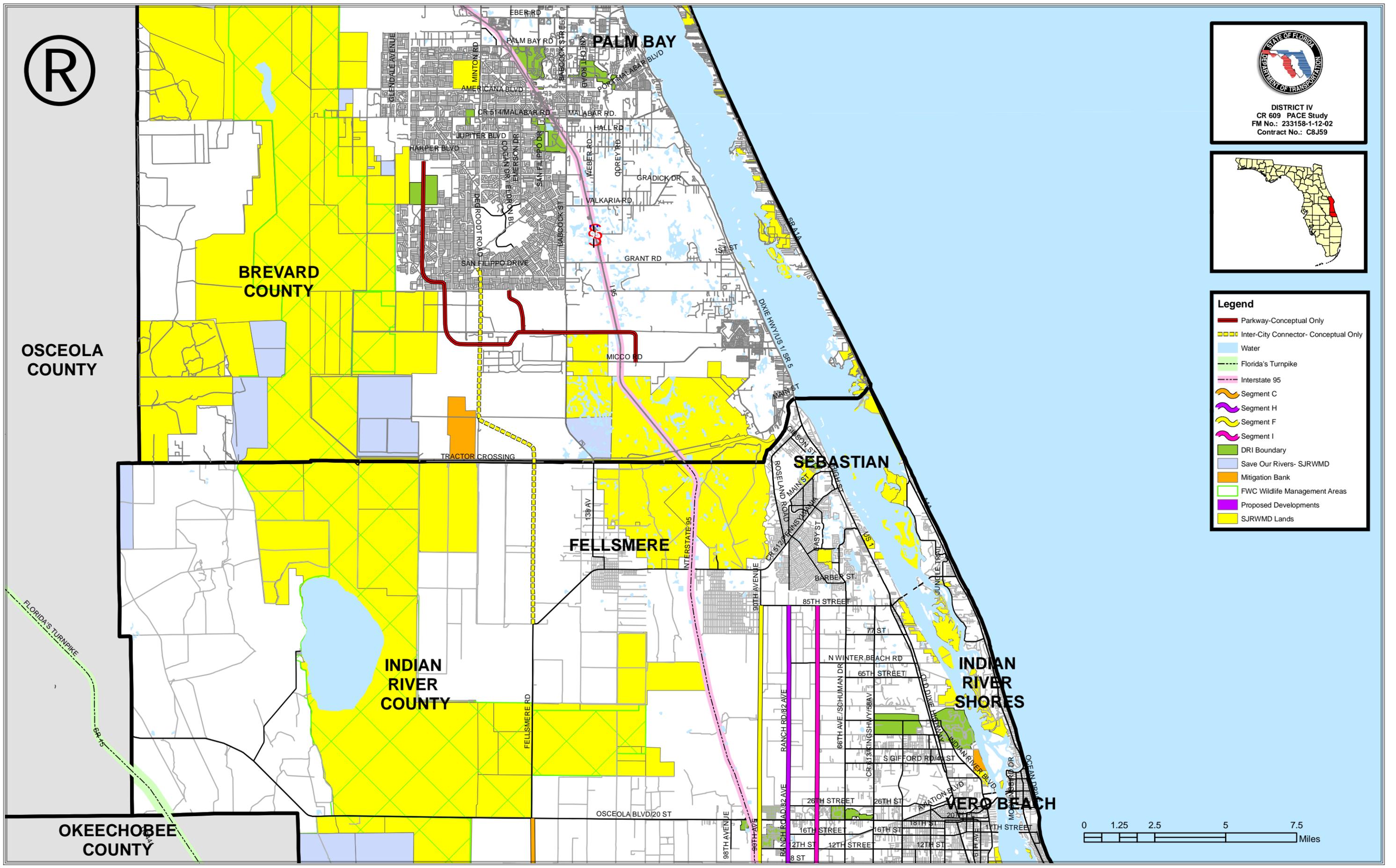


DISTRICT IV  
CR 609 PACE Study  
FM No.: 233158-1-12-02  
Contract No.: C8J59



**Legend**

-  Parkway-Conceptual Only
-  Inter-City Connector- Conceptual Only
-  Water
-  Florida's Turnpike
-  Interstate 95
-  Segment C
-  Segment H
-  Segment F
-  Segment I
-  DRI Boundary
-  Save Our Rivers- SJRWMD
-  Mitigation Bank
-  FWC Wildlife Management Areas
-  Proposed Developments
-  SJRWMD Lands



OSCEOLA COUNTY

BREVARD COUNTY

INDIAN RIVER COUNTY

OKEECHOBEE COUNTY

PALM BAY

SEBASTIAN

FELLSMERE

INDIAN RIVER SHORES

VERO BEACH

FLORIDA'S TURNPIKE  
SR 95

OSCEOLA BLVD/20 ST

98TH AVENUE

99TH AVENUE

RANCH ROAD/82 AVE

16TH STREET

12TH STREET

8 ST

GLENDALE AVENUE  
MINTON RD  
AMERICANA BLVD  
DR 314/MALABAR RD  
HARPER BLVD  
JUPITER BLVD  
ROCKAWAY DR  
SAN FILIPPO DR  
SAN FILIPPO DRIVE  
DEERWOOD ROAD  
MINTON RD  
PALM BAY RD  
WEBER RD  
GRADICK DR  
VALKARIA RD  
GRANT RD  
MICCO RD  
TRACTOR CROSSING  
FELLSMERE RD  
OSCEOLA BLVD/20 ST

WEBER RD  
GRADICK DR  
VALKARIA RD  
GRANT RD  
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8 ST  
26TH STREET  
16TH ST  
12TH ST  
20TH ST  
14TH STREET  
N WINTER BEACH RD  
65TH STREET  
77 ST  
66TH AVE./SCHUMAN DR  
CR 513/KINGS HWY/58AV  
S GIFFORD RD/41 ST  
INDIAN RIVER BLVD  
OCEAN BLVD

WEBER RD  
GRADICK DR  
VALKARIA RD  
GRANT RD  
MICCO RD  
TRACTOR CROSSING  
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