

## **Session 43**

**Joe Borello**

Department of Transportation

### ***I-595 Corridor Project -Integration of the Value Engineering Process into the PD&E Process***

#### **Topic Description**

Panel discussion on the integration of the value engineering process and design review process into the PD&E of the I-595 expansion project in District 4.

#### **Speaker Biography**

Joe has been with the Department for over 30 years and the past 25 years in the roadway design office. Joe has been the lead designer or in house section leader for over 50 projects successfully constructed in District 4, including several major bridge replacement projects, multiple urban reconstruction projects and interstate widening and reconstruction projects. Joe is currently serving as the corridor design manager for the I-595 expansion project in District 4 with an estimated construction cost of over \$1 billion .

## **Session 43**

### **Jeff Bowen**

Reynolds, Smith & Hills, Inc.

### ***I-595 Corridor Project -Integration of the Value Engineering Process into the PD&E Process***

#### **Topic Description**

Served as the Consultant Project Manager for both the I-595 Master Plan and Project Development & Environment (PD&E) Study.

#### **Speaker Biography**

Mr. Bowen is a Vice President for the Transportation/Infrastructure Program with Reynolds, Smith & Hills Incorporated. He has over 21 years of experience in planning and design of transportation projects. His responsibilities have included policy planning, concept/preliminary/final design, public presentation and environmental studies for both local roadways and major freeway systems.

## Session 43

**Steve Braun**

FL. Dept. of Transportation

### *I-595 Corridor Project -Integration of the Value Engineering Process into the PD&E Process*

#### **Topic Description**

The I-595 Program, building quality/value with multiple value engineering studies in a major program.

#### **Speaker Biography**

Mr. DePrimo is the District Utilities/Value Engineering Administrator for the Florida Department of Transportation. His responsibilities encompass Utility Coordination/Negotiations, Project Management, and Value Engineering. He began his career in 1967 with the Florida Department of Transportation in construction. In 1977 he moved to Dade County as Manager of Utilities and Railroads. In 1986 he was Director of Design for the Miami Dade Transit Authority. He served 6 years as a private consultant before returning to the Florida Department of Transportation (FDOT) in 1991. Mr. DePrimo has a B.S. degree in Construction Management and has completed graduate work in Public Administration. He is a registered Real Estate Broker and holds the Certified Public Manager (CPM) designation.

## Session 43

### Rocky DePrimo

FL. Dept. of Transportation

### *I-595 Corridor Project -Integration of the Value Engineering Process into the PD&E Process*

#### **Topic Description**

The I-595 Program, building quality/value with multiple value engineering studies in a major program.

#### **Speaker Biography**

Mr. DePrimo is the District Utilities/Value Engineering Administrator for the Florida Department of Transportation. His responsibilities encompass Utility Coordination/Negotiations, Project Management, and Value Engineering. He began his career in 1967 with the Florida Department of Transportation in construction. In 1977 he moved to Dade County as Manager of Utilities and Railroads. In 1986 he was Director of Design for the Miami Dade Transit Authority. He served 6 years as a private consultant before returning to the Florida Department of Transportation (FDOT) in 1991. Mr. DePrimo has a B.S. degree in Construction Management and has completed graduate work in Public Administration. He is a registered Real Estate Broker and holds the Certified Public Manager (CPM) designation.

## **Session 43**

**Rick Johnson**

PMA Consultants LLC

### ***I-595 Corridor Project -Integration of the Value Engineering Process into the PD&E Process***

#### **Topic Description**

Florida Department of Transportation (FDOT) has undertaken an innovative multi-study VE approach for a \$1 - 2 billion improvement project for the I-595 Corridor in Broward County. The proposed improvements are planned for I-595 from I-75/Sawgrass Expressway Interchange to East of the I-95 Interchange. A master plan has been completed and the identified Locally Preferred Alternative (LPA) was adopted by the Broward County Authorities and FHWA

#### **Speaker Biography**

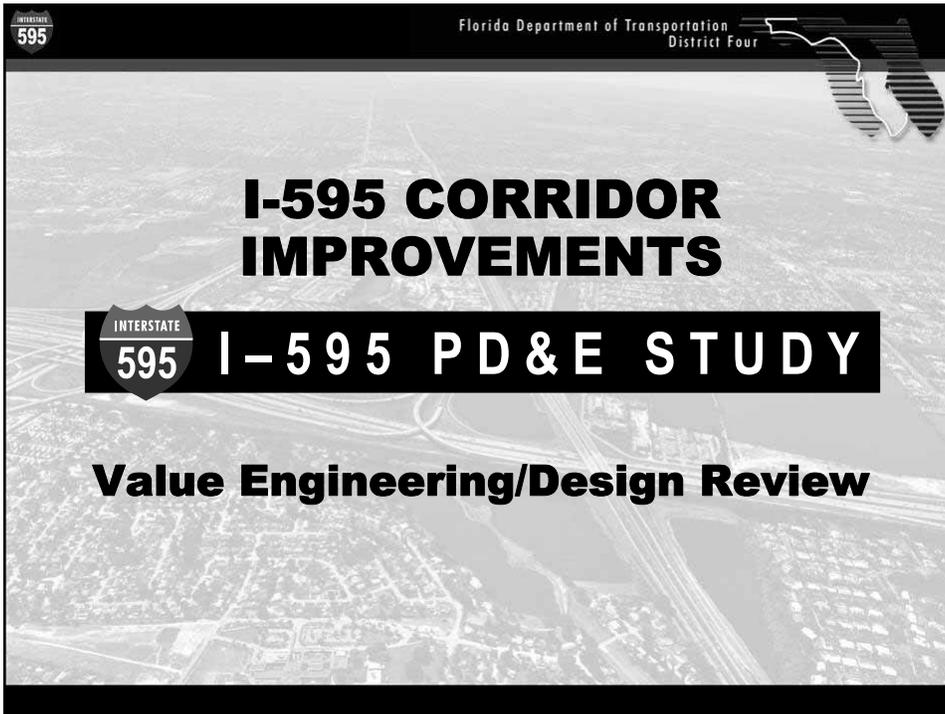
Richard L. Johnson, PE, CVS is a Senior Principal with PMA Consultants LLC, an international program/project management firm. Mr. Johnson is a Professional Engineer registered in Florida, North Carolina and South Carolina, a Certified Value Specialist, and a Certified General Contractor. He manages PMA's Nationwide Value Engineering Practice and the Statewide Continuing Value Engineering Contract with the Florida Department of Transportation.

595 Florida Department of Transportation District Four

# I-595 CORRIDOR IMPROVEMENTS

INTERSTATE 595 I-595 PD&E STUDY

## Value Engineering/Design Review

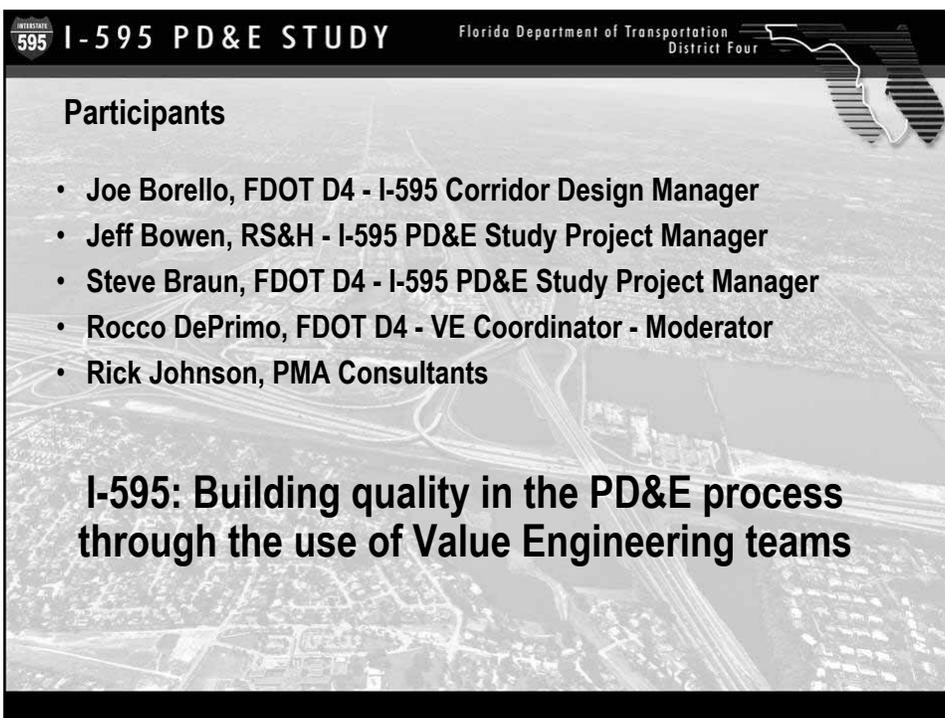


595 I-595 PD&E STUDY Florida Department of Transportation District Four

### Participants

- Joe Borello, FDOT D4 - I-595 Corridor Design Manager
- Jeff Bowen, RS&H - I-595 PD&E Study Project Manager
- Steve Braun, FDOT D4 - I-595 PD&E Study Project Manager
- Rocco DePrimo, FDOT D4 - VE Coordinator - Moderator
- Rick Johnson, PMA Consultants

### I-595: Building quality in the PD&E process through the use of Value Engineering teams





## Agenda

- Project History
- PD&E Study Overview
- The VE/DR Goals
- The VE/DR Process
- The Results



## Project History

- Original FEIS (1979) for the I-595/Port Expressway
- I-595 opened to traffic in 1989
- Mainline currently approaching or exceeding capacity
- Master Plan and Locally Preferred Alternative (LPA) were accepted by Broward County and FHWA in 2002

**I-595 PD&E STUDY** Florida Department of Transportation District Four

### Project Need

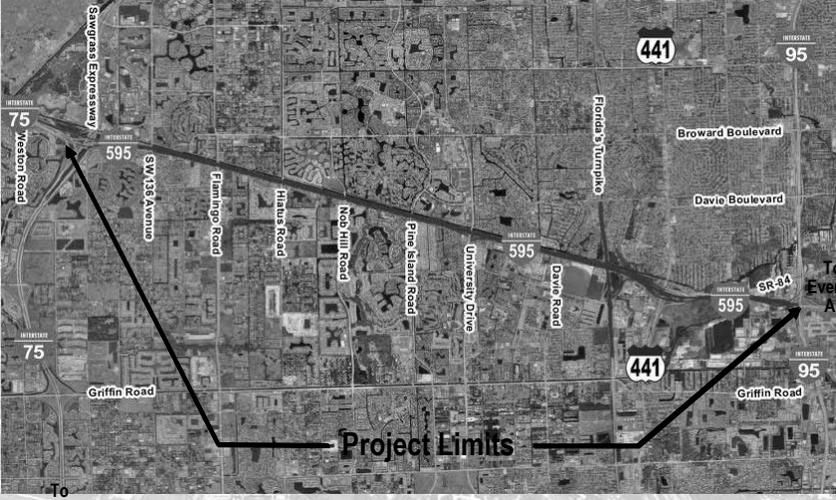
- Broward County has been one of the fastest growing urban areas in the US
- Only east-west expressway in Broward County
- Strategic Intermodal Corridor
- Existing AADT >180,000 vpd
- 2034 AADT >300,000 vpd





**I-595 PD&E STUDY** Florida Department of Transportation District Four

### Project Limits: I-595 from I-75/Sawgrass Expressway Interchange to East of the I-95 Interchange



The map shows the project limits for I-595, starting from the I-75/Sawgrass Expressway Interchange and extending east to the I-95 Interchange. Key roads shown include Sawgrass Expressway, I-75, I-95, Griffin Road, University Drive, Davie Road, Florida's Turnpike, Broward Boulevard, and Davie Boulevard. Arrows indicate directions: To Naples (northwest), To Miami (south), and To Port Everglades/Airport (east).

Interstate 595  
 Florida Department of Transportation  
 District Four



## Strategic Intermodal Corridor

- District 4 SIS – Growth Management Priority
- Truly Multi-Modal Corridor
  - I-75 / Sawgrass Expressway / I-95 / Florida’s Turnpike
  - Fort Lauderdale-Hollywood International Airport
  - Port Everglades
  - Connection to Tri-Rail and Amtrak
  - Proposed Transit Facility
  - Broward County Greenway

Interstate 595  
 Florida Department of Transportation  
 District Four

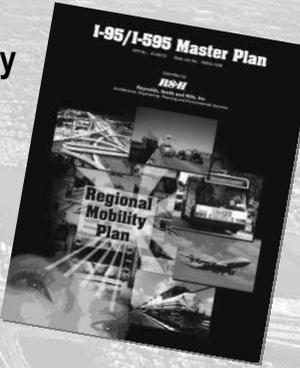


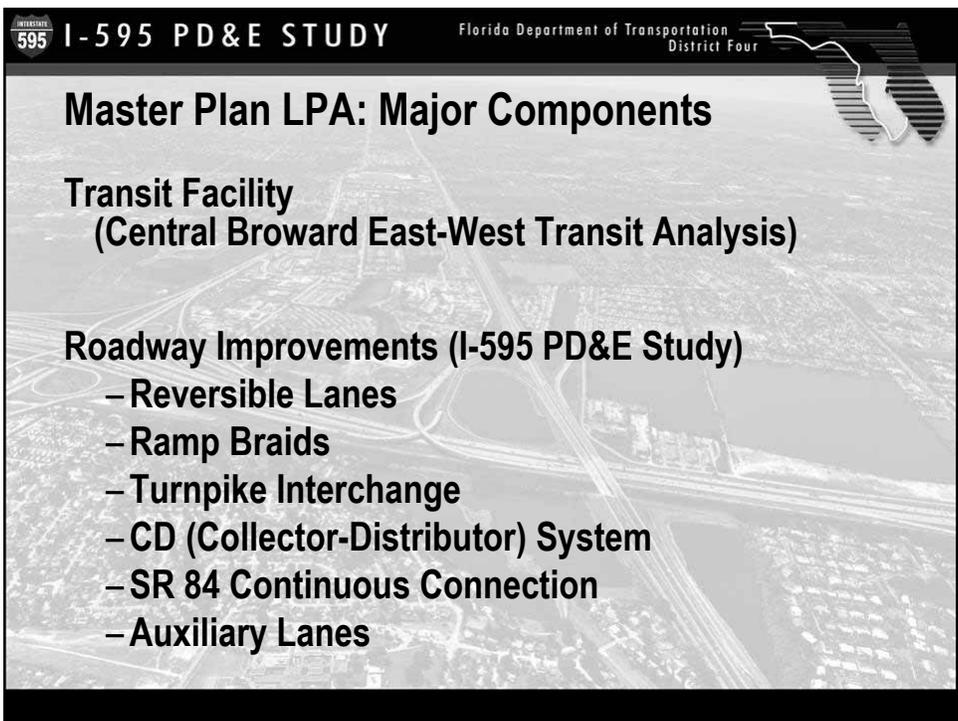
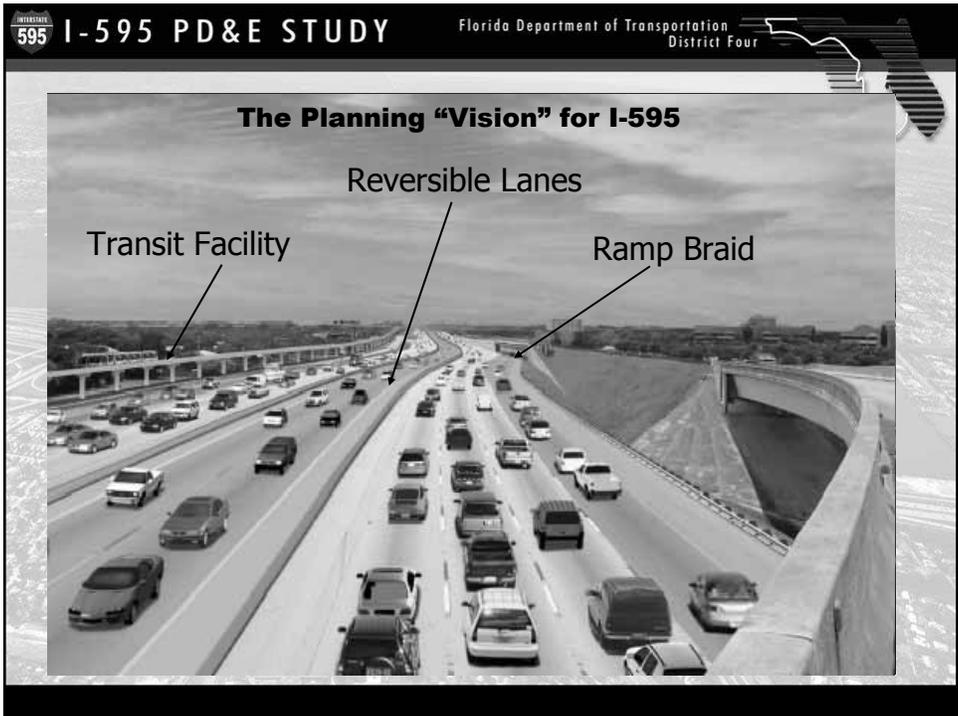
## A Master Plan identified a Locally Preferred Alternative (LPA) for the corridor

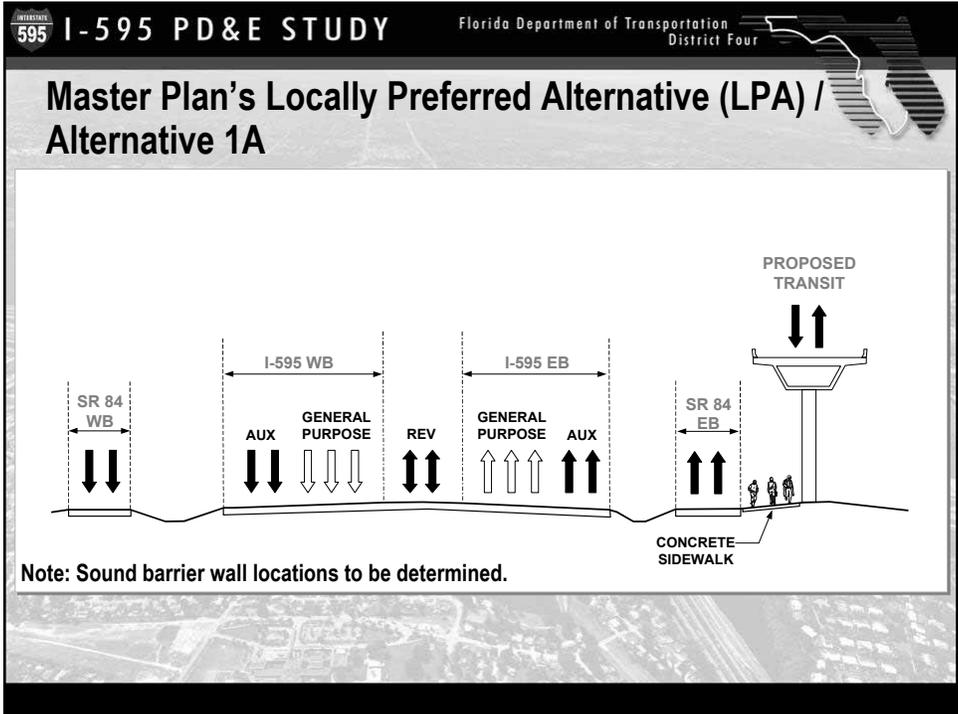
This LPA was adopted by Broward County and approved by FHWA

The “corridor” LPA is advancing through two separate projects:

-  CENTRAL BROWARD EAST-WEST TRANSIT ANALYSIS
-  INTERSTATE 595 I-595 PD&E STUDY







**I-595 PD&E STUDY** Florida Department of Transportation District Four

### PD&E Study

- Unique project due to complexity and integration with other projects (overall cost >\$1 Billion)
- High profile project with interest by many agencies, municipalities, residential communities and businesses
- Priority corridor for roadway and transit improvements



## PD&E Study Functions & Goals

- Maintain the intent of the LPA
- Minimize overall project impacts
- Develop a project that can be implemented
- Maintain project schedule (PD&E / Design / Construction)



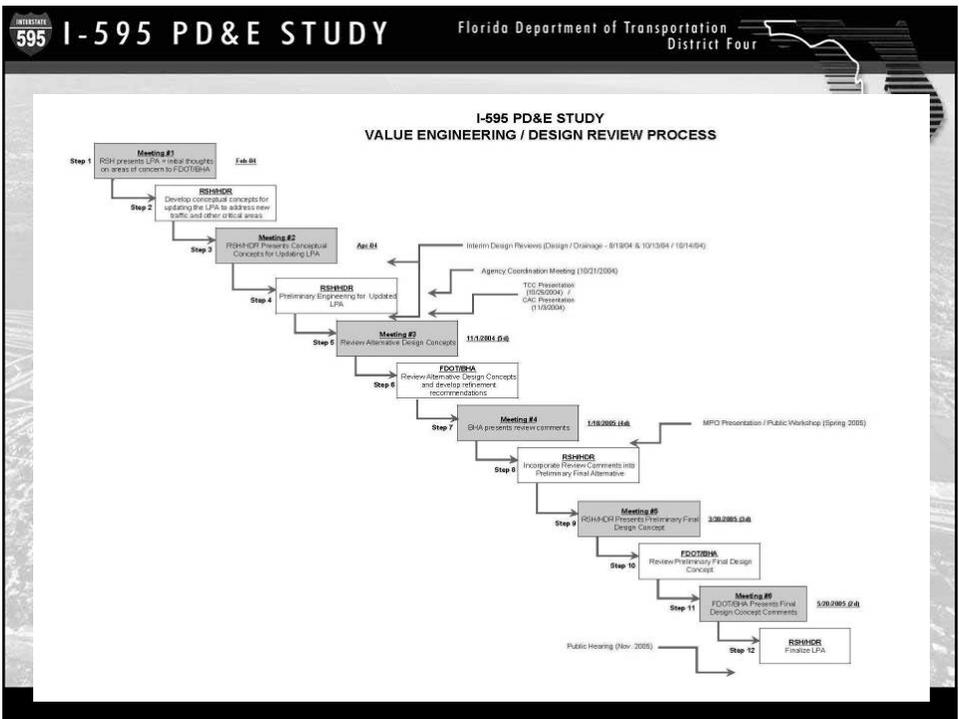
## Why develop an innovative Value Engineering / Design Review Process?

- District 4 Priority Project
- High profile complex project
- Early validation of project alternatives
- Obtain buy-in from:
  - Management
  - Stakeholders
  - Agencies
  - Team members

**595 I-595 PD&E STUDY** Florida Department of Transportation District Four

## How was the VE/DR Process Implemented?

- Multi-disciplined team
- Team Commitment
- Early consensus on the project functions and concepts
- Series of meetings at key milestones in the project
- Multi-phased “workshops” to refine the concepts and alternatives





## Team Participants

- **FDOT District 4 Support**
  - Planning & Environmental Management
  - Design
  - Construction
  - Traffic Operations/ITS
  - Utilities
  - Structures
  - Drainage/Permitting
  - Right of Way
  - Modal Development
- **Broward County**
  - Greenway
  - Transit
- **PD&E Consultant**
- **Independent Consultants**
  - Structural
  - Roadway
  - Construction
  - Right of Way
  - Transit
  - Environmental
- **Florida's Turnpike Enterprise**



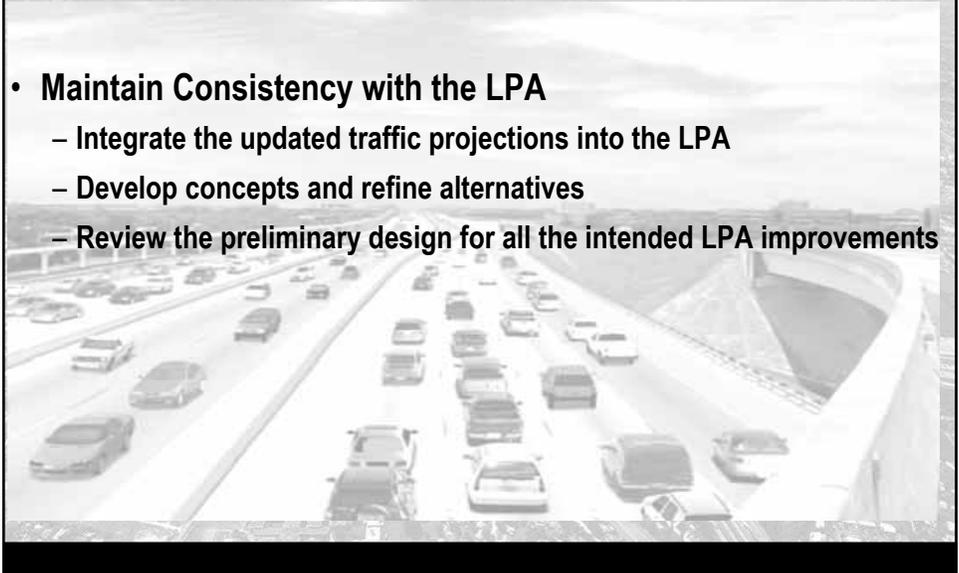
## VE/DR Team Goals

- **Maintain Consistency with the LPA**
- **Minimize Overall Project Impacts**
- **Better Integration of Transit Improvements**
- **Develop a Project that can be Implemented**
- **Maintain the Project Schedule**
- **Build Consensus!**

**595 I-595 PD&E STUDY** Florida Department of Transportation District Four

### VE/DR Team Goals

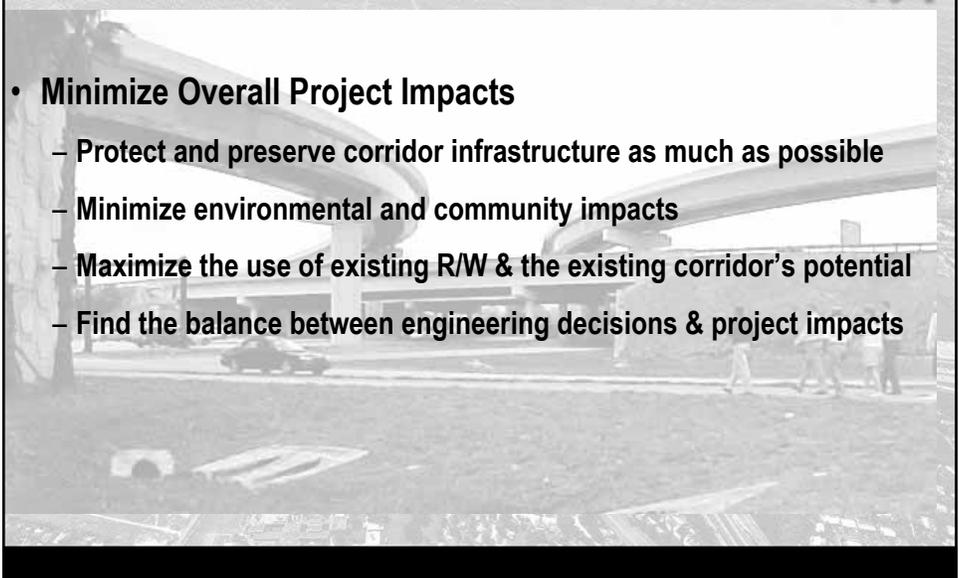
- **Maintain Consistency with the LPA**
  - Integrate the updated traffic projections into the LPA
  - Develop concepts and refine alternatives
  - Review the preliminary design for all the intended LPA improvements



**595 I-595 PD&E STUDY** Florida Department of Transportation District Four

### VE/DR Team Goals

- **Minimize Overall Project Impacts**
  - Protect and preserve corridor infrastructure as much as possible
  - Minimize environmental and community impacts
  - Maximize the use of existing R/W & the existing corridor's potential
  - Find the balance between engineering decisions & project impacts



**595 I-595 PD&E STUDY** Florida Department of Transportation District Four

### VE/DR Team Goals

- **Better Integration of Transit Improvements**
  - Forum for coordination with concurrent transit study
  - Consensus building between roadway and transit

**595 I-595 PD&E STUDY** Florida Department of Transportation District Four

### VE/DR Team Goals

- **Develop a Project that can be Implemented**
  - Review key decisions
  - Evaluate opportunities to advance “spin-off” projects
  - Facilitate a “seamless” transition between PD&E and Design phases
  - Develop the phasing of multiple design/construction packages

**RS&H** I-595 Corridor Improvement Projects



## VE/DR Team Goals

- **Maintain the Project Schedule**
  - Use the VE/DR Process as a tool
  - VE/DR Meetings at key milestones
  - Accelerate defining the system geometry
  - Public Hearing in 24 months
  - LDCA by July 2006



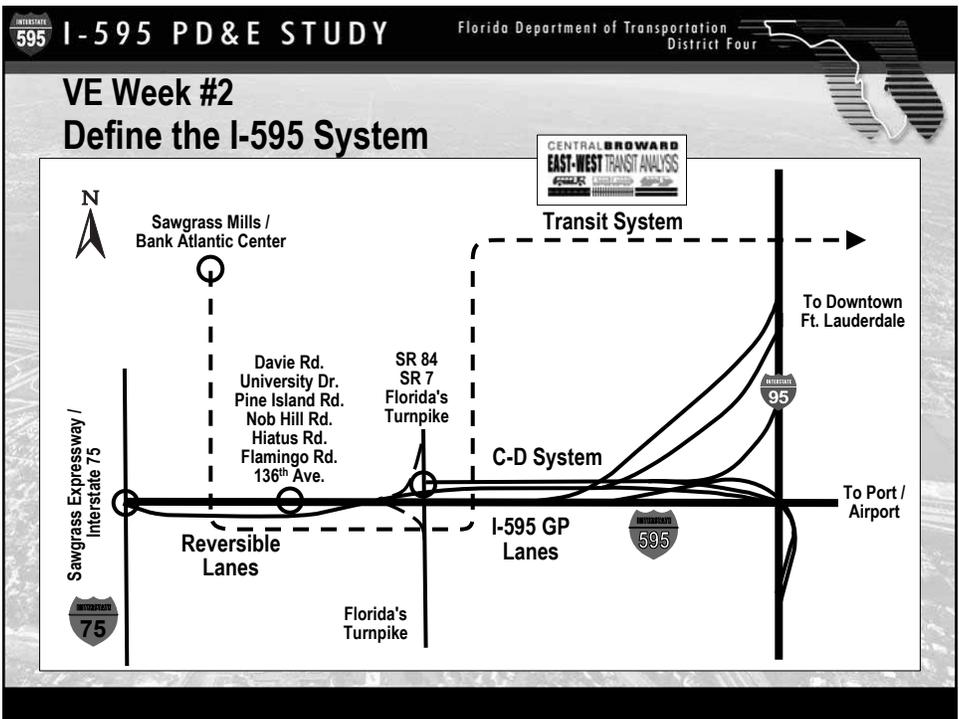
## VE/DR Team Goals

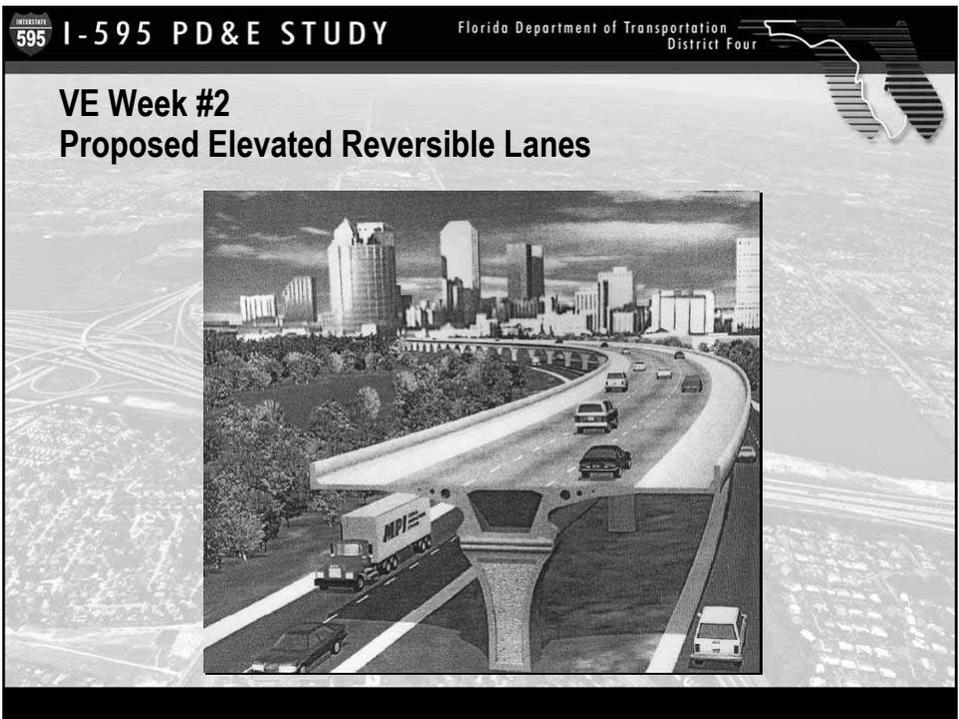
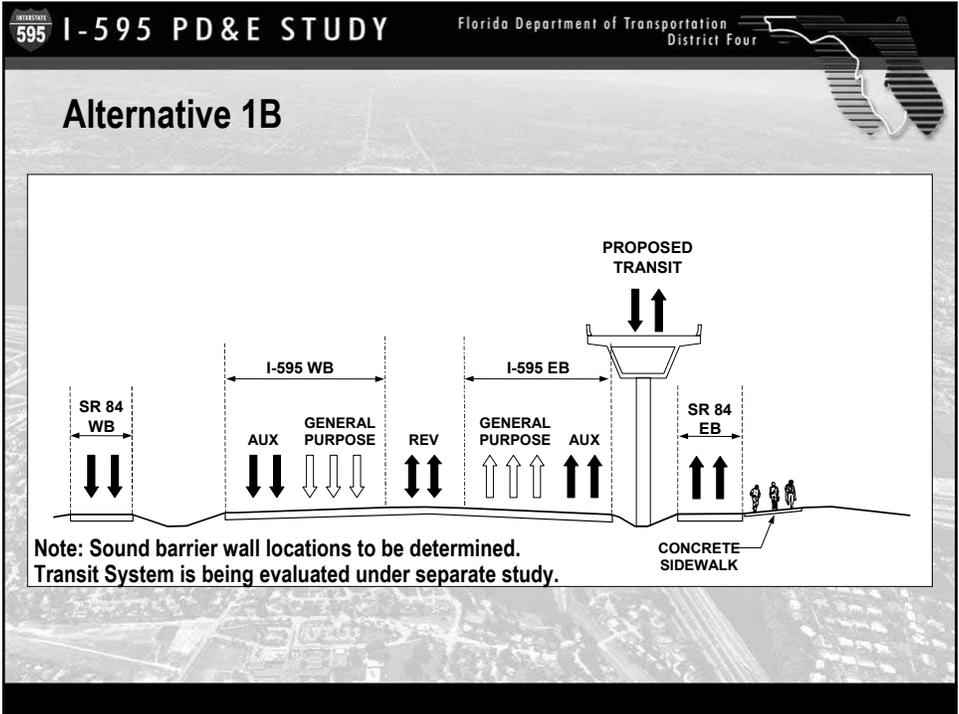
- **Build Consensus!**
  - FDOT
  - Agencies
  - Community

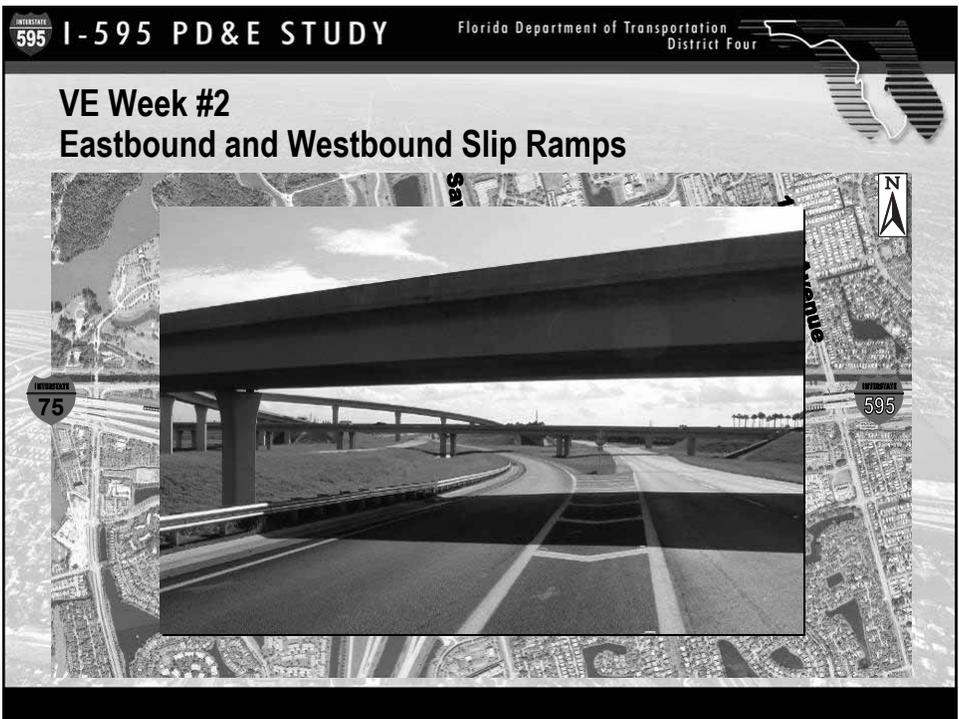
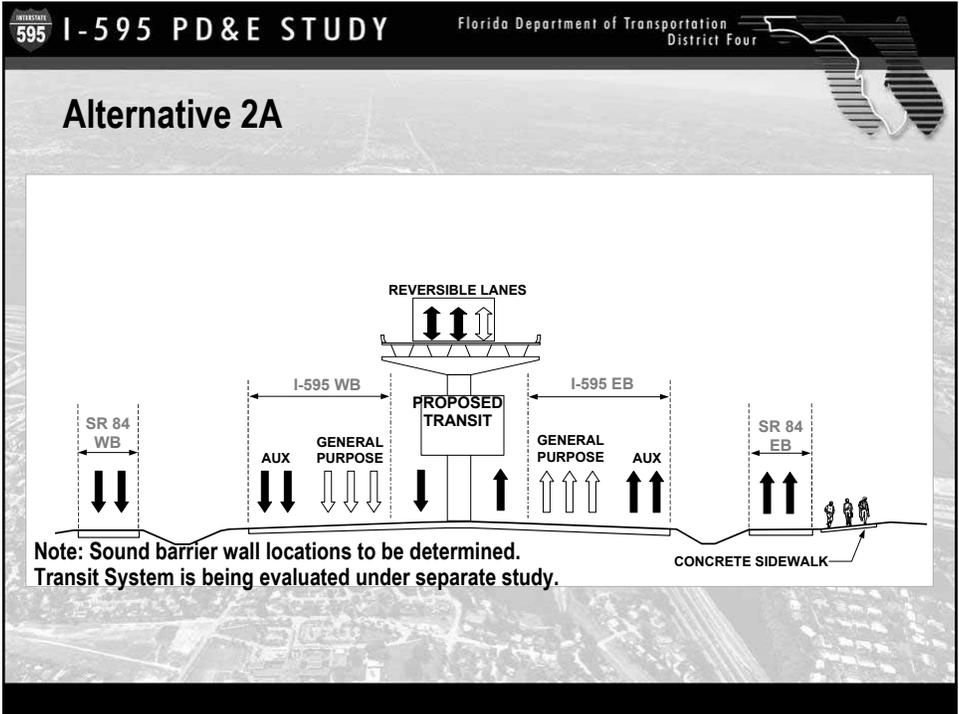
**595 I-595 PD&E STUDY** Florida Department of Transportation District Four

## Focus of Five VE Workshops

VE Week Number	Focus
1	Kickoff meeting to introduce the VE/DR Process
2	Define overall system and identify spin-off projects (restriping of mainline and ramp upgrades)
3	TPK interchange refinements, Greenway coordination, transit coordination, variations and exceptions
4	Noise walls, ramp braid refinements, University Drive flyovers, project phasing, median transit station
5	Identify two alternatives to take to Public Hearing, including a matrix that evaluates the overall system for both roadway and transit components







**595 I-595 PD&E STUDY** Florida Department of Transportation District Four

### VE Week #3 I-595/Turnpike Interchange Refinement & Sequencing

**PHASED CONSTRUCTION SEQUENCE**

PHASE 'A' CONSTRUCT BRAIDED RAMPS AND THE CONNECTION TO THE SB TURNPIKE.

PHASE 'B' CONSTRUCT SB SB TO NB TURNPIKE CONNECTION.

PHASE 'C' CONSTRUCT SB TO SB TURNPIKE FLYOVER, GRIFFIN ROAD BYPASS AND THE SB TURNPIKE AUXILIARY LANES. CONSTRUCT THE PORTION OF THE SB TO SB FLYOVER OVER THE TURNPIKE AND GRIFFIN ROAD BYPASS LANES.

PHASE 'D' CONSTRUCT SB TURNPIKE FLYOVER TO SB.

PHASE 'E' CONSTRUCT GRIFFIN ROAD NB AUXILIARY LANES AND THE NB EXIT RAMPS TO SB.

**595 I-595 PD&E STUDY** Florida Department of Transportation District Four

### VE Week #4: Braided Ramps

- Combined/Refined Locations
- Minimized Footprint
- Improved Sight Distance
- Accommodated Bicyclists / Pedestrians
- Defined SR 84 Location

**595 I-595 PD&E STUDY** Florida Department of Transportation District Four

**VE Week #4: Braided Ramps**

**BRAIDED RAMP SYSTEM AT NOB HILL ROAD**

**595 I-595 PD&E STUDY**

**VE Week #4**  
**University Drive Constructability & Transit Station Locations**

**595 I-595 PD&E STUDY** Florida Department of Transportation District Four

### VE Week #4: Transit in the Median

The diagrams illustrate the proposed transit infrastructure in the median. The top-left diagram, labeled 'DEPRESSED STATION', shows a cross-section of a station with two tracks, stairs, and platform areas. The top-right diagram, labeled 'SECTION THRU ACCESS BRIDGE', shows a bridge structure with stairs leading down to the station level. The bottom diagram shows a 'REVERSIBLE LANCE BRIDGE' with a 'SLOPE' leading to the station. A note below the bottom diagram reads: 'ELEVATION AT BRIDGE CENTER WOULD BE ENOUGH TO CLEAR BRIDGE OVERHEADS'.

**595 I-595 PD&E STUDY** Florida Department of Transportation District Four

### VE Week #4 Avoidance of Sewell Lock and FP&L Substation

This section contains four photographs showing the existing infrastructure. The top-left photo shows a view of the Sewell Lock with a concrete wall and a gate. The top-right photo shows a large crane or barge structure in the water. The bottom-left photo shows a view of the lock from a different angle. The bottom-right photo shows a road with a car and a building in the background, likely the FP&L Substation area.

**595 I-595 PD&E STUDY** Florida Department of Transportation District Four

**Avoidance of Sewell Lock Park [Section 4(f)] and FP&L Substation [\$40 M]**

**Sewell Lock**

**FP&L**

**595 I-595 PD&E STUDY** Florida Department of Transportation District Four

**Innovative Environmental Considerations**

**595 I-95 PD&E STUDY** Florida Department of Transportation District Four

## VE Week #5: Team Recommendation for Public Hearing

**Table 8.1 I-95 Highway Corridor Evaluation Matrix**

CRITERIA	At Grade Reversible Lanes		Elevated Reversible Lanes		COMMENTS
	Alternative 1A	Alternative 1B	Alternative 2A	Alternative 2B	
<b>Cost Criteria</b>					
Roadway Construction Cost	+	+	-	-	High structures cost for elevated reversible lanes.
RTW Cost	0	0	0	+	Roadway impacts only (2B is compressed section).
Subtotal Costs	1	1	-1	0	
<b>Engineering Criteria</b>					
Mainline LOS/Capacity	0	0	+	+	Additional Reversible lane capacity for elevated options.
Constructability	+	+	0	-	Easier to construct reversible lanes at grade in the north.
VI	0	0	0	-	2B requires more phasing of 100'.
System Linkage/ITS Operator	0	0	+	+	Elevated reversible lanes offers advantages.
Signing	0	0	-	-	More difficult to sign elev.
Phasing of Roadway Projects	+	+	0	-	Potential to build.
Design/Phasing Feasibility	0	0	+	-	Phasing.
Height of Structures	0	0	-	-	
University Drive Paving	0	0	0	0	
Express Lanes Capacity	0	0	0	0	
Greenway/Inch					
Emergency Res					
Utility Relocation					
Accommodations					
Subtotal					

**Table 8.3 I-95 Key Criteria Evaluation Matrix**

CRITERIA	At Grade Reversible Lanes		Elevated Reversible Lanes		COMMENTS
	Alternative 1A	Alternative 1B	Alternative 2A	Alternative 2B	
<b>Cost</b>	1	1	-1	0	
<b>Engineering</b>	0	0	+	+	
<b>VI</b>	0	0	0	-	
<b>System Linkage/ITS Operator</b>	0	0	+	+	
<b>Signing</b>	0	0	-	-	
<b>Phasing of Roadway Projects</b>	+	+	0	-	
<b>Design/Phasing Feasibility</b>	0	0	+	-	
<b>Height of Structures</b>	0	0	-	-	
<b>University Drive Paving</b>	0	0	0	0	
<b>Express Lanes Capacity</b>	0	0	0	0	
<b>Greenway/Inch</b>					
<b>Emergency Res</b>					
<b>Utility Relocation</b>					
<b>Accommodations</b>					
<b>Subtotal</b>					
<b>TOTAL</b>	<b>11</b>	<b>13</b>	<b>15</b>	<b>12</b>	

**Table 8.4 I-95 Key Criteria Evaluation Matrix**

CRITERIA	At Grade Reversible Lanes		Elevated Reversible Lanes		COMMENTS
	Alternative 1A	Alternative 1B	Alternative 2A	Alternative 2B	
<b>Cost</b>	1	1	-1	0	
<b>Engineering</b>	0	0	+	+	
<b>VI</b>	0	0	0	-	
<b>System Linkage/ITS Operator</b>	0	0	+	+	
<b>Signing</b>	0	0	-	-	
<b>Phasing of Roadway Projects</b>	+	+	0	-	
<b>Design/Phasing Feasibility</b>	0	0	+	-	
<b>Height of Structures</b>	0	0	-	-	
<b>University Drive Paving</b>	0	0	0	0	
<b>Express Lanes Capacity</b>	0	0	0	0	
<b>Greenway/Inch</b>					
<b>Emergency Res</b>					
<b>Utility Relocation</b>					
<b>Accommodations</b>					
<b>Subtotal</b>					
<b>TOTAL</b>	<b>11</b>	<b>13</b>	<b>15</b>	<b>12</b>	

**Table 8.5 I-95 Key Criteria Evaluation Matrix**

CRITERIA	At Grade Reversible Lanes		Elevated Reversible Lanes		COMMENTS
	Alternative 1A	Alternative 1B	Alternative 2A	Alternative 2B	
<b>Cost</b>	1	1	-1	0	
<b>Engineering</b>	0	0	+	+	
<b>VI</b>	0	0	0	-	
<b>System Linkage/ITS Operator</b>	0	0	+	+	
<b>Signing</b>	0	0	-	-	
<b>Phasing of Roadway Projects</b>	+	+	0	-	
<b>Design/Phasing Feasibility</b>	0	0	+	-	
<b>Height of Structures</b>	0	0	-	-	
<b>University Drive Paving</b>	0	0	0	0	
<b>Express Lanes Capacity</b>	0	0	0	0	
<b>Greenway/Inch</b>					
<b>Emergency Res</b>					
<b>Utility Relocation</b>					
<b>Accommodations</b>					
<b>Subtotal</b>					
<b>TOTAL</b>	<b>11</b>	<b>13</b>	<b>15</b>	<b>12</b>	

**Table 8.6 I-95 Key Criteria Evaluation Matrix**

CRITERIA	At Grade Reversible Lanes		Elevated Reversible Lanes		COMMENTS
	Alternative 1A	Alternative 1B	Alternative 2A	Alternative 2B	
<b>Cost</b>	1	1	-1	0	
<b>Engineering</b>	0	0	+	+	
<b>VI</b>	0	0	0	-	
<b>System Linkage/ITS Operator</b>	0	0	+	+	
<b>Signing</b>	0	0	-	-	
<b>Phasing of Roadway Projects</b>	+	+	0	-	
<b>Design/Phasing Feasibility</b>	0	0	+	-	
<b>Height of Structures</b>	0	0	-	-	
<b>University Drive Paving</b>	0	0	0	0	
<b>Express Lanes Capacity</b>	0	0	0	0	
<b>Greenway/Inch</b>					
<b>Emergency Res</b>					
<b>Utility Relocation</b>					
<b>Accommodations</b>					
<b>Subtotal</b>					
<b>TOTAL</b>	<b>11</b>	<b>13</b>	<b>15</b>	<b>12</b>	

**Table 8.7 I-95 Key Criteria Evaluation Matrix**

CRITERIA	At Grade Reversible Lanes		Elevated Reversible Lanes		COMMENTS
	Alternative 1A	Alternative 1B	Alternative 2A	Alternative 2B	
<b>Cost</b>	1	1	-1	0	
<b>Engineering</b>	0	0	+	+	
<b>VI</b>	0	0	0	-	
<b>System Linkage/ITS Operator</b>	0	0	+	+	
<b>Signing</b>	0	0	-	-	
<b>Phasing of Roadway Projects</b>	+	+	0	-	
<b>Design/Phasing Feasibility</b>	0	0	+	-	
<b>Height of Structures</b>	0	0	-	-	
<b>University Drive Paving</b>	0	0	0	0	
<b>Express Lanes Capacity</b>	0	0	0	0	
<b>Greenway/Inch</b>					
<b>Emergency Res</b>					
<b>Utility Relocation</b>					
<b>Accommodations</b>					
<b>Subtotal</b>					
<b>TOTAL</b>	<b>11</b>	<b>13</b>	<b>15</b>	<b>12</b>	

**Table 8.8 I-95 Key Criteria Evaluation Matrix**

CRITERIA	At Grade Reversible Lanes		Elevated Reversible Lanes		COMMENTS
	Alternative 1A	Alternative 1B	Alternative 2A	Alternative 2B	
<b>Cost</b>	1	1	-1	0	
<b>Engineering</b>	0	0	+	+	
<b>VI</b>	0	0	0	-	
<b>System Linkage/ITS Operator</b>	0	0	+	+	
<b>Signing</b>	0	0	-	-	
<b>Phasing of Roadway Projects</b>	+	+	0	-	
<b>Design/Phasing Feasibility</b>	0	0	+	-	
<b>Height of Structures</b>	0	0	-	-	
<b>University Drive Paving</b>	0	0	0	0	
<b>Express Lanes Capacity</b>	0	0	0	0	
<b>Greenway/Inch</b>					
<b>Emergency Res</b>					
<b>Utility Relocation</b>					
<b>Accommodations</b>					
<b>Subtotal</b>					
<b>TOTAL</b>	<b>11</b>	<b>13</b>	<b>15</b>	<b>12</b>	

**Table 8.9 I-95 Key Criteria Evaluation Matrix**

CRITERIA	At Grade Reversible Lanes		Elevated Reversible Lanes		COMMENTS
	Alternative 1A	Alternative 1B	Alternative 2A	Alternative 2B	
<b>Cost</b>	1	1	-1	0	
<b>Engineering</b>	0	0	+	+	
<b>VI</b>	0	0	0	-	
<b>System Linkage/ITS Operator</b>	0	0	+	+	
<b>Signing</b>	0	0	-	-	
<b>Phasing of Roadway Projects</b>	+	+	0	-	
<b>Design/Phasing Feasibility</b>	0	0	+	-	
<b>Height of Structures</b>	0	0	-	-	
<b>University Drive Paving</b>	0	0	0	0	
<b>Express Lanes Capacity</b>	0	0	0	0	
<b>Greenway/Inch</b>					
<b>Emergency Res</b>					
<b>Utility Relocation</b>					
<b>Accommodations</b>					
<b>Subtotal</b>					
<b>TOTAL</b>	<b>11</b>	<b>13</b>	<b>15</b>	<b>12</b>	

**Table 8.10 I-95 Key Criteria Evaluation Matrix**

CRITERIA	At Grade Reversible Lanes		Elevated Reversible Lanes		COMMENTS
	Alternative 1A	Alternative 1B	Alternative 2A	Alternative 2B	
<b>Cost</b>	1	1	-1	0	
<b>Engineering</b>	0	0	+	+	
<b>VI</b>	0	0	0	-	
<b>System Linkage/ITS Operator</b>	0	0	+	+	
<b>Signing</b>	0	0	-	-	
<b>Phasing of Roadway Projects</b>	+	+	0	-	
<b>Design/Phasing Feasibility</b>	0	0	+	-	
<b>Height of Structures</b>	0	0	-	-	
<b>University Drive Paving</b>	0	0	0	0	
<b>Express Lanes Capacity</b>	0	0	0	0	
<b>Greenway/Inch</b>					
<b>Emergency Res</b>					
<b>Utility Relocation</b>					
<b>Accommodations</b>					
<b>Subtotal</b>					
<b>TOTAL</b>	<b>11</b>	<b>13</b>	<b>15</b>	<b>12</b>	

**Table 8.11 I-95 Key Criteria Evaluation Matrix**

CRITERIA	At Grade Reversible Lanes		Elevated Reversible Lanes		COMMENTS
	Alternative 1A	Alternative 1B	Alternative 2A	Alternative 2B	
<b>Cost</b>	1	1	-1	0	
<b>Engineering</b>	0	0	+	+	
<b>VI</b>	0	0	0	-	
<b>System Linkage/ITS Operator</b>	0	0	+	+	
<b>Signing</b>	0	0	-	-	
<b>Phasing of Roadway Projects</b>	+	+	0	-	
<b>Design/Phasing Feasibility</b>	0	0	+	-	
<b>Height of Structures</b>	0	0	-	-	
<b>University Drive Paving</b>	0	0	0	0	
<b>Express Lanes Capacity</b>	0	0	0	0	
<b>Greenway/Inch</b>					
<b>Emergency Res</b>					
<b>Utility Relocation</b>					
<b>Accommodations</b>					
<b>Subtotal</b>					
<b>TOTAL</b>	<b>11</b>	<b>13</b>	<b>15</b>	<b>12</b>	

**Table 8.12 I-95 Key Criteria Evaluation Matrix**

CRITERIA	At Grade Reversible Lanes		Elevated Reversible Lanes		COMMENTS
	Alternative 1A	Alternative 1B	Alternative 2A	Alternative 2B	
<b>Cost</b>	1	1	-1	0	
<b>Engineering</b>	0	0	+	+	
<b>VI</b>	0	0	0	-	
<b>System Linkage/ITS Operator</b>	0	0	+	+	
<b>Signing</b>	0	0	-	-	
<b>Phasing of Roadway Projects</b>	+	+	0	-	
<b>Design/Phasing Feasibility</b>	0	0	+	-	
<b>Height of Structures</b>	0	0	-	-	
<b>University Drive Paving</b>	0	0	0	0	
<b>Express Lanes Capacity</b>	0	0	0	0	
<b>Greenway/Inch</b>					
<b>Emergency Res</b>					
<b>Utility Relocation</b>					
<b>Accommodations</b>					
<b>Subtotal</b>					
<b>TOTAL</b>	<b>11</b>	<b>13</b>	<b>15</b>	<b>12</b>	

**Table 8.13 I-95 Key Criteria Evaluation Matrix**

CRITERIA	At Grade Reversible Lanes		Elevated Reversible Lanes		COMMENTS
	Alternative 1A	Alternative 1B	Alternative 2A	Alternative 2B	
<b>Cost</b>	1	1	-1	0	
<b>Engineering</b>	0	0	+	+	
<b>VI</b>	0	0	0	-	
<b>System Linkage/ITS Operator</b>	0	0	+	+	
<b>Signing</b>	0	0	-	-	
<b>Phasing of Roadway Projects</b>	+	+	0	-	
<b>Design/Phasing Feasibility</b>	0	0	+	-	
<b>Height of Structures</b>	0	0	-	-	
<b>University Drive Paving</b>	0	0	0	0	
<b>Express Lanes Capacity</b>	0	0	0	0	
<b>Greenway/Inch</b>					
<b>Emergency Res</b>					
<b>Utility Relocation</b>					
<b>Accommodations</b>					
<b>Subtotal</b>					
<b>TOTAL</b>	<b>11</b>	<b>13</b>	<b>15</b>	<b>12</b>	

**Table 8.14 I-95 Key Criteria Evaluation Matrix**

CRITERIA	At Grade Reversible Lanes		Elevated Reversible Lanes		COMMENTS
	Alternative 1A	Alternative 1B	Alternative 2A	Alternative 2B	
<b>Cost</b>	1	1	-1	0	
<b>Engineering</b>	0	0	+	+	
<b>VI</b>	0	0	0	-	
<b>System Linkage/ITS Operator</b>	0	0	+	+	
<b>Signing</b>	0	0	-	-	
<b>Phasing of Roadway Projects</b>	+	+	0	-	
<					

**Interstate 595 I-595 PD&E STUDY** Florida Department of Transportation District Four

Alternative 1B

Interstate 595

**Interstate 595 I-595 PD&E STUDY** Florida Department of Transportation District Four

**VE Week #5**  
**Team Recommendation for Public Hearing**

**Alternative 2A**

REVERSIBLE LANES

I-595 WB

I-595 EB

SR 84 WB

SR 84 EB

PROPOSED TRANSIT

AUX

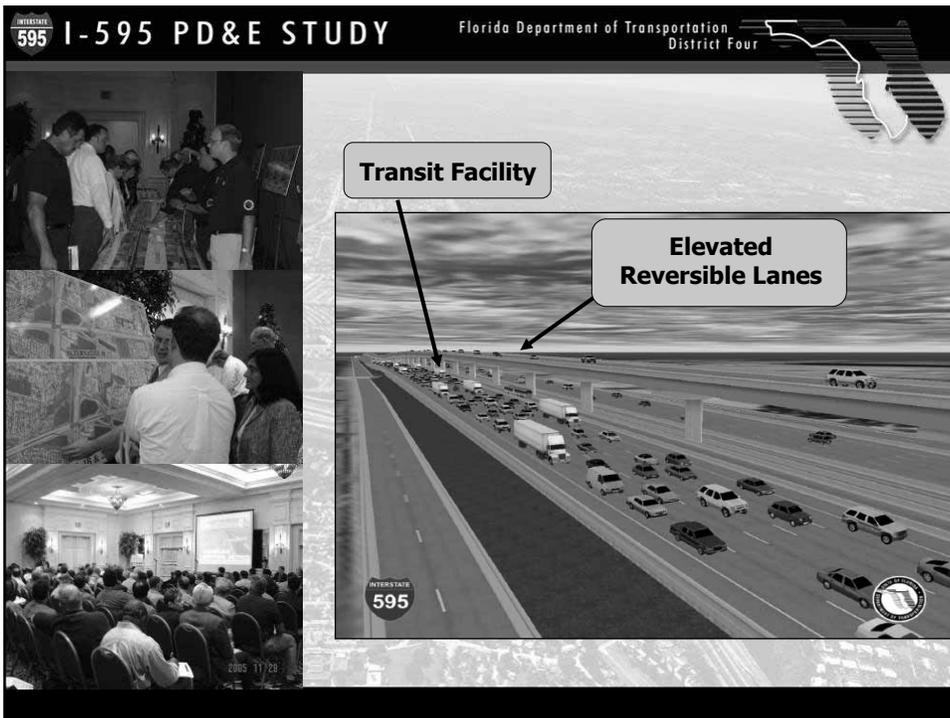
GENERAL PURPOSE

GENERAL PURPOSE

AUX

CONCRETE SIDEWALK

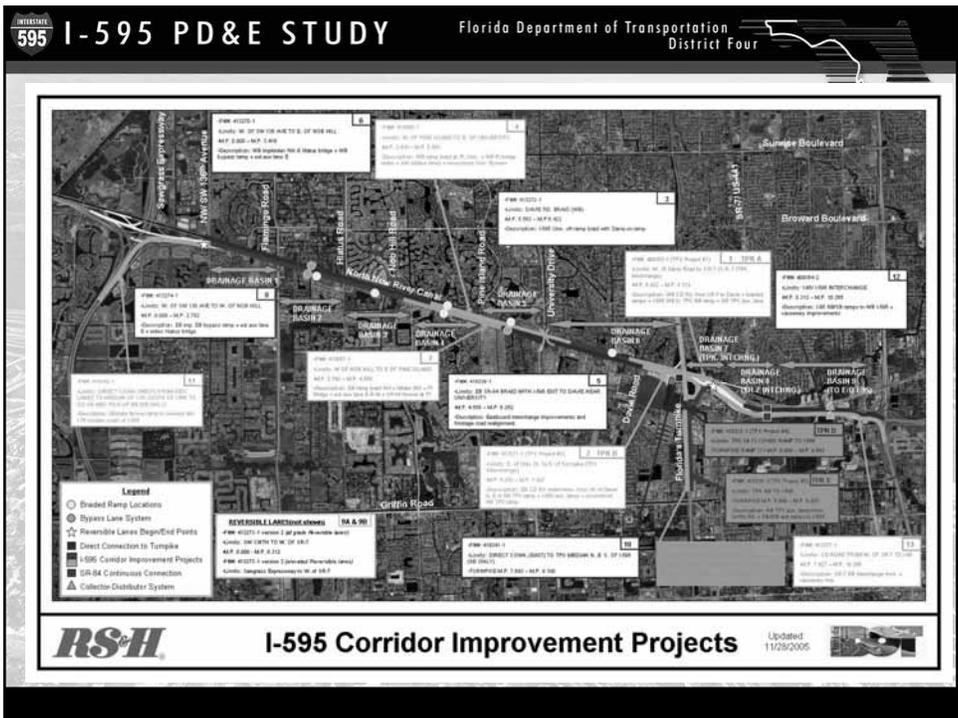
Note: Sound barrier wall locations to be determined.  
 Transit System is being evaluated under separate study.



**595 I-595 PD&E STUDY** Florida Department of Transportation District Four

### The Results

- Improved deliverable from the PD&E process
- Partnership with transit and Turnpike for a shared vision
- Identified the best use of existing right of way for both roadway and transit
- Identified individual corridor design and “spin-off” projects
- Reviewed/evaluated constructability, compatibility and MOT between adjacent projects
- Re-sequenced design, right of way and construction phasing within the Work Program



**I-95 PD&E STUDY** Florida Department of Transportation District Four

## The Results

- Resulted in time and cost savings
- Opportunities to expedite the permitting process due to the early and continuous involvement of the resource agencies
- District 4 / Turnpike ownership of the PD&E alternative's geometry = No major re-design
- Selection of THE Preferred Alternative
- BEAT the original aggressive project schedule!

Mr. J. [Name] District Four Secretary Florida Department of Transportation 3400 Central Expressway Tallahassee, FL 32310-1000  
Attention: Mr. Paul Lamley P.E.  
Subject: [Subject]

Enclosed is one signed copy of the Environmental Class of Action Determination for a Type II [Subject] project. The Federal Highway Administration (FHWA) has approved the project in accordance with the requirements of the National Environmental Policy Act (NEPA). The Type II EIS is considered complete and the preferred alternative is granted.

Mrs. Salir DeTizio at (850) 942-9610  
Sincerely,  
David C. Gibbs  
Division Administrator

Enclosure  
Mr. Steve Braun, P.E., Senior Project Manager, FHCT District Four

REVIEWER'S SIGNATURE  
DATE  
5/1/2005  
5/31/2005  
6/27/06  
6/29/06

