I-4 Beyond the Ultimate Project Development & Environment (PD&E) Reevaluation Study

FROM EAST OF SR 15-600/US 17-92 TO EAST OF SR 472

VOLUSIA COUNTY, FLORIDA

Financial Project ID No: 432100-1-22-01 | Federal Aid Project No: 0041-227-I

PUBLIC HEARING | November 16, 2016
This public hearing is being held in accordance with:

- Moving Ahead for Progress in the 21st Century (MAP-21)
- Chapter 23 of the United States Code 128
- Title 40 of the Code of Federal Regulations, parts 1500 through 1508
- Title 23 of the Code of Federal Regulations part 771
- Florida Statute 120.525
- Florida Statute 286.011
- Florida Statute 335.199
- Florida Statute 339.155
- Americans with Disabilities Act of 1990 (ADA)
- Title VI of the Civil Rights Act of 1964, as amended
- 49 CFR Part 24, Uniform Relocation Assistance and Real Property Acquisition for Federal and Federally Assisted Programs
- Executive Order 11988, Floodplain Management
- Executive Order 11990, Protection of Wetlands
This hearing is being conducted without regard to race, color, national origin, age, sex, religion, disability or family status. Persons wishing to express their concerns relative to FDOT compliance with Title VI may do so by contacting:

**District Five**
Florida Department of Transportation
District Five Title VI Coordinator
Jennifer Smith
719 South Woodland Boulevard
Deland, FL 32720-6834
(386) 943 – 5367
Jennifer.Smith2@dot.state.fl.us

**Central Office**
Florida Department of Transportation
Statewide Title VI Coordinator
Jacqueline Paramore
605 Suwannee Street, MS 65
Tallahassee, FL 32399-0450
(850) 414 – 4753
Jacqueline.Paramore@dot.state.fl.us

All inquiries or complaints will be handled according to FDOT procedure and in a prompt and courteous manner.
Purpose of Hearing

• Share information about the proposed improvements.
• Provide an opportunity for public input.
• All public comments will become part of the project’s public record.
What is a PD&E Study?

Project Development & Environment (PD&E) Study

• A process followed by FDOT to evaluate:
  - Social, cultural and economic impacts associated with a planned transportation project
  - Engineering alternatives

• Part of the project development process as mandated by the National Environmental Policy Act (NEPA) of 1969

• Required to secure federal approval and funding
Key PD&E Study Elements

1. Public Involvement
2. Engineering Analysis
3. Environmental and Socio-Economic Analysis
About the Project

• Approximately 10 miles in length
• Widen Interstate to ten lanes, 6 general use lanes + 4 express lanes
• Urban Interstate, SIS corridor
• 4 interchanges (3 existing, 1 new proposed); DDI proposed at SR 472)
• Rhode Island Avenue Extension and partial direct-connect to Express Lanes
• Saxon Boulevard widening to six lanes
River to Sea Transportation Planning Organization (R2C TPO)

- The TPO works with the Florida Department of Transportation and local governments to fund and implement projects identified through various plans developed by the TPO

Central Florida Metropolitan Planning Organization (MPO) Alliance

- The I-4 BtU Segment 4 project is identified in the Central Florida Metropolitan Planning Organization (MPO) Alliance FY 2016-2017 SIS Highway Projects for Prioritization
Planning Consistency

- The I-4 BtU Segment 4 project is identified in the R2C TPO 2040 Long Range Transportation Plan SIS Cost Feasible Projects list (As modified April 8, 2016)

- Consistent with the State Transportation Improvement Program (STIP)
  http://www.dot.state.fl.us/OWPB/Federal/STIP/stip_dist_05.pdf

- Consistent with the Volusia County Comprehensive Plan Transportation Element, updated May 31, 2016
  http://www.volusia.org/core/fileparse.php/6102/url/E.-Appendix-1-Maps-and-Figure-complete.pdf
Purpose and Need

• Changes proposed in the Modified Build scenario (current Reevaluation study) as compared to the previously approved Original Build scenario (April, 2000)
  – Proposed change in the project typical sections: switch from HOV (High Occupancy Vehicle) lanes in the median (number of HOV lanes varied from one to two in each direction), to four express lanes, two in each direction for majority of Segment 4
  – Proposed changes to interchange configurations: Interchange configurations have been modified to better accommodate traffic volumes and improve interstate and cross-street operations

• Accommodate future traffic needs based on anticipated population and employment growth
  – Certain roadway segments are nearing capacity
  – Meet capacity needs for design year 2040 project traffic

• Enhance safety and mobility
  – Reduction in congestion is expected to positively impact occurrences of rear end crashes
  – Improvement to all interchanges along the corridor resulting in fewer congestion bottleneck locations
  – Additional Advanced Signage – guidance for drivers unfamiliar with the corridor
  – Gaps exist in sidewalks and bicycle lanes
  – Provide sidewalks and 7-foot buffered bicycle lanes on State crossroads within study limits
This study is developing design alternatives that would efficiently accommodate traffic volumes that are projected to occur in year 2040.

Goal is to maintain an acceptable level of service through year 2040:

- Level of service measures to what extent cars are delayed when travelling through a given area.
- As in grade school, “F” is failing (or highly congested) and “A” is the best (or free flowing).

Results of Traffic Analysis

- Drivers will experience level of service E and F in the “Original Build” scenario along portions of Segment 4 and most intersections along the cross streets.

- Drivers will experience level of service D or better in the “Modified Build” scenario along majority of Segment 4 and most intersections along the cross streets.

- **4 additional travel lanes and interchange modifications** will be needed to accommodate projected 2040 traffic volumes.
• The existing right-of-way varies from 300 feet to 630 feet.
• Three 12-foot travel lanes in each direction.
• Outside and inside shoulders are 12 feet wide with 10 feet paved.
• Guardrail on the inside shoulder of the eastbound and westbound lanes in varying locations
• The posted speed limit for Segment 4 is 65 mph to the west of Saxon Boulevard and 70 mph to the east of Saxon Boulevard.
Local Agency & Other Stakeholder Meetings

- River to Sea Transportation Planning Organization
- Volusia County
- City of DeBary
- City of Deltona
- St. Johns River Water Management District (SJRWMD)

*list is not all-inclusive*
Public Involvement

- **Project website:**
  www.i4express.com

- **Alternatives Public Workshop**
  - April 24, 2014
  - 52 citizens & 17 project team members attended
  - 4 written comments were received
Alternatives Considered

• ‘No-Build’ or ‘Do Nothing’ Alternative
  – No corridor/capacity improvements
  – Discontinuous sidewalks and designated bicycle lanes
  – Remains as an alternative throughout the PD&E study

• ‘Reversible Lanes’ Alternative
  – 6 GUL + 3 EL (with Reversible “Zipper” Lane) - Six general use lanes and three express lanes (one in each direction with a center reversible “zipper” lane)
  – 6 GUL + 4 EL & 6 GUL + 2 EL (No Reversible Lanes) - Six general use lanes and four express lanes from east of SR 434 (Begin Project Station 2043+71.32) to the slip ramps west of Dirksen Drive (Station 2710+01.89) and six general use lanes and two express lanes from west of Dirksen Drive to east of SR 472 (End Project Station 3118+46.00).

• ‘Build’ Alternative
  – Widen road to ten lanes, 5 travel lanes in each direction (3 general use lanes + 2 express lanes)
  – 70 MPH Design Speed
  – 44-foot transit corridor within median
  – I-4 EB to Dirksen Drive EB Free-flow right turn lane
  – Widening of Saxon Boulevard to provide 6-lane section
  – Extension of Rhode Island Avenue from ex
  – Diverging diamond interchange at SR 472
  – Provide 7-ft buffered bicycle lanes on State Road 472
  – 8-ft trail along Dirksen Drive
  – Locate potential pond sites
## Alternatives Evaluation Matrix

<table>
<thead>
<tr>
<th>Summary of Impacts&lt;sup&gt;1&lt;/sup&gt;</th>
<th>No-Build</th>
<th>I-4 Mainline</th>
<th>Dirksen Drive</th>
<th>Saxon Boulevard</th>
<th>Rhode Island Avenue</th>
<th>SR 472</th>
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<tr>
<td>0</td>
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<td>Sites: 6-10, Site 17-Low/Risk 5-Medium risk 6-Low risk 6-Medium risk: 496, 408 (A), 809 (B), 209 and 401 Sites: 3-Low</td>
<td>Sites: 3-Low</td>
<td>Sites: 3-Low</td>
<td>Sites: 3-Low</td>
<td>Sites: 3-Low</td>
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<td>High</td>
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**Notes:** This document is a working draft; data provided is work-in-progress and may be updated or replaced.  
*Shared alternative columns designate the recommended alternative for each interchange.*  
*Table illustrates impacts from the proposed improvements to I-4 mainline for the build alternative and comparatively shows any additional impacts from the various interchange alternative options.*  
*Based on recommended pond sites as determined in the Pond Siting Report, Segment 4 (August 2016).*  
*Historic resources constructed during or before 1975 within the APE (Area of Potential Effect) which includes areas 330’ from proposed ROW and pond footprints plus 100’ buffer.*  
*Within 1/2 mile of Roadway ROW.*  
*New proposed interchange will provide greater connectivity within the local region.*  
*Construction cost are preliminary as determined by the Engineer’s Estimate included in Appendix D—shown in millions of dollars.*
Proposed Roadway Typical Section

East of US 17/92 to East of SR 472 (Design Speed = 70 MPH)
6 General Use Lanes + 4 Express Lanes (with Transit Corridor)
The proposed roadway typical section is recommended to follow the existing alignment of the Interstate.

Additional right-of-way required primarily for recommended stormwater and floodplain compensation pond sites.
Recommended Alternative:

- A new I-4 EB free-flow right turn ramp provides access to eastbound Dirksen Drive.
- A new park and ride lot is proposed on the west side of the interchange.
- Provides two 12-foot travel lanes in each direction with 5-foot sidewalk on the north side and 8-foot trail on the south side south side of Dirksen Drive.
- Additional right-of-way is required.
Recommended Alternative:

- New I-4 Eastbound off ramp in the Southeast quadrant will align with the modified I-4 Eastbound loop off ramp in the Northeast quadrant.
- Saxon Boulevard will be widened to six lanes.
- Additional right-of-way is required
Recommended Alternative: 

- New direct access interchange providing entry to I-4 WB and exit from I-4 EB express lanes
- Extension of Rhode Island Avenue to provide a connection between Veterans Memorial Parkway and Normandy Boulevard
- Two 11-foot travel lanes with 8-foot sidewalks in each direction
- A new park and ride lot along Normandy Boulevard, south of Rhode Island Avenue
- Additional right-of-way is required
Recommended Alternative:

- A new Diverging Diamond Interchange
- Additional turn lanes at the SR 472 intersections with Kentucky Avenue and Graves Avenue
- Bicycle lanes provided through the interchange and 6-foot sidewalk on the north side of SR 472
- Additional right-of-way is required along I-4, SR 472, Kentucky Avenue and Graves Avenue
Drainage Analysis

- The existing drainage systems will be enhanced to accommodate stormwater runoff from roadway improvements
  - Upgrading roadside swales
  - Constructing offsite ponds
  - Enhanced Water Quality (Treatment)
  - Enhanced Water Quantity (Attenuation)

- Modify several existing SJRWMD Permits
Pond Site Design Criteria

- Governed by the rules and criteria set forth by the St. Johns River Water Management District (SJRWMD), Florida Department of Environmental Protection (FDEP), Volusia County and the FDOT.
- Water Quality and Pond Recovery
  - Wet Detention
  - Dry Retention
  - Outstanding Florida Water (OFW)
  - Nutrient Impaired Water
- Water Quantity
  - Open Basin
  - Closed Basin (with and without outfall)
- Pond Design
  - Minimum horizontal clearance
  - Rounded corner radii
  - Minimum 1-foot of freeboard

Pond Site Evaluation Criteria

| Residential, business, and unimproved properties |
| Community Facilities |
| Section 4(f) / Public Lands |
| Historic / Archaeological |
| Wetlands |
| Upland Areas |
| Aquatic Preserves / Outstanding Florida Waters |
| Wild and Scenic Rivers |
| Floodplains |
| Threatened and Endangered Species |
| Farmlands |
| Noise |
| Contamination |
| Utilities |
| Right-of-Way Acquisition and Cost |
Recommended Pond Site Locations
To comply with various Executive Orders and other federal and state requirements, engineering and environmental information was reviewed and evaluated to determine if there were any substantial impacts to social and economic, cultural, physical, and natural resources that may result from construction of the proposed improvements.

**Social & Economic Effects:**
- Land use changes
- Economic impacts
- Relocations of residences or businesses

**Cultural Effects:**
- Historic & archaeological sites

**Physical Effects:**
- Noise and air
- Contamination
- Utility Relocations

**Natural Effects:**
- Wetlands
- Threatened and endangered species
- Water quality
- Floodplains
Socio-Economic

• Improves mobility
• Relieves congestion
• Provides regional economic benefits
An Cultural Resource Assessment Survey was performed within the project Area of Potential Effect (APE).

The APE includes the existing ROW along I-4 and was extended to a distance of no more than 100 meters (330 feet) from the proposed ROW and includes the proposed pond footprints plus a 100-foot buffer.

Pedestrian surface inspection and excavation of 120 shovel tests within proposed ponds and 46 shovel tests along Rhode Island Avenue Extension.

No artifacts were recovered from any of the shovel tests.

No archaeological sites or occurrences were identified.

23 historic resources constructed before 1970 located within the I-4 Segment 4 APE.

No historic resources are eligible for inclusion in the National Register of Historic Places (NRHP).

No adverse effects to any cultural resources are anticipated.
Wetlands

- In accordance with Executive Order 11990 “Protection of Wetlands”
  - Estimated 68.61 Acres of Direct Wetland Impacts
  - Estimated 45.24 Acres of Jurisdictional Other Surface Water Impacts
Threatened and Endangered Species

- In accordance with Title 50 Code of Federal Regulations Part 402 of the Endangered Species Act of 1973, as amended

- The proposed I-4 Segment 4 project “may affect and likely adversely affect” one federal listed species, the Florida Scrub-jay

- Compensatory mitigation to offset impacts to occupied scrub-jay habitat in Segment 4 at a ratio of 2:1 to the Nature Conservancy Umbrella Plan mitigation fund will be provided

- US Fish and Wildlife Service (USFWS) issued a Biological Opinion addressing impacts, and is available for review
Essential Fish Habitat

- The project will impact approximately 33.36 acres of herbaceous wetlands and 5.03 acres of forested wetlands associated with Lake Monroe and the St. Johns River, and additional non-Essential Fish Habitat (EFH) wetlands in other areas of Segment 4.

- Mitigation to offset EFH impacts will be provided via a 100-foot long bridge section in each direction of I-4, as approved by the National Marine Fisheries Service (NMFS).
• The proposed stormwater facilities will be designed to meet the current requirements of the St. Johns River Water Management District

• Stormwater treatment will be provided by a combination of dry swales, wet ponds, dry ponds and a stormwater vault which may be on-site or off-site
Floodplains

- In accordance with Executive Order 11988 “Floodplain Management”
- 65.01 Ac-ft. floodplain impacts are anticipated
• In accordance with the Code of Federal Regulation Part 772

• A 14-foot tall, 898-foot long shoulder-mounted barrier is reasonable and feasible on the west side of I-4, north and south of Dirksen Drive

• A 16-foot tall, 1,266 foot-long ground-mounted barrier is reasonable and feasible on the east side of I-4 between Enterprise Road and north of Haversham Road
Potential Contamination Sites

- 133 sites identified as potential contamination sites
- None rated high risk and 8 sites rated medium risk
- Out of 43 potential pond sites (including pond alternatives), six were rated medium risk and none were rated high risk
- 37 pond sites rated as low risk

125 sites are rated as No Risk or Low Risk for potential contamination
Air Quality

- An air quality analysis, specifically an analysis of carbon monoxide (CO) concentrations, has been performed on the recommended alternative.
- The analysis has been conducted using the established FDOT Air Quality Screening Model.
- Air quality impacts are not expected to occur as a result of this project.
Right-of-Way Requirements

- Approximately 33 acres of additional right-of-way is anticipated for roadway improvements
- Approximately 40 acres of additional right-of-way is anticipated for off-site ponds
- 41 potential relocations (40 residential, 1 business) are anticipated

**Florida Statute 330.09**
Federal Uniform Relocation Assistance and Real Property Acquisition Act of 1970
(Public law 91-646 as amended by public law 100-17)
Right-of-Way and Relocations

• You will be contacted by an appraiser who will inspect your property
• Be present and provide information about the value of your property
• Eligibility for relocation advisory services and payment benefits
• You may appeal relocation determination
• If you move before notification is received, benefits may be jeopardized
• Relocation specialists will answer any questions
## Project Cost Estimates

### Estimated Project Costs for I-4 Segment 4

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<thead>
<tr>
<th>Cost Component</th>
<th>Estimated Cost (LRE)</th>
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<tbody>
<tr>
<td><strong>LRE</strong></td>
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<tr>
<td><strong>MOT (10%)</strong></td>
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<td>Mobilization (10%)</td>
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<td><strong>Total Estimated Project Cost</strong></td>
<td><strong>$507,697,356.82</strong></td>
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*Subject to Change*
Schedule and Funding

- **Obtain Environmental Impact Statement Update approval; Record of Decision from the FHWA**
  - Anticipated end **November 2016**

- **Design**
  - **Funded** FY2017
  - Potential for Design-Build

- **Permit**
  - **Funded** FY2018

- **Right-of-Way Purchase**
  - Currently **not funded**

- **Utilities**
  - Currently **not funded**

- **Construction (w/design)**
  - Currently **not funded**

- **Construction Engineering and Inspection (CEI)**
  - Currently **not funded**
• Draft documents were available for review starting September 15, 2016 and will remain on display until November 26, 2016 at:
  - Deltona Regional Library
    2150 Eustace Avenue
    Deltona, FL 32725

- Project website: [www.i4express.com](http://www.i4express.com)
Public Comments

• Make an oral statement
  – To the court reporter
  – During the public comment period, after completing a “Speaker Card”

• Submit written comments
  – During the Public Hearing
  – Mail to the FDOT Project Manager:
    Beata Stys-Palasz, P.E.
    Florida Department of Transportation
    719 South Woodland Boulevard
    Deland, FL 32720

Comment Period Ends on November 26, 2016
Public Comments

• Email or call
  – (386) 943-5418 or beata.stys-palasz@dot.state.fl.us

• Visit www.i4express.com
  – Click on the Email Updates link
  – Fill out the form and click submit

• All comments become public record

Comment Period Ends on November 26, 2016
Thank you for attending!

PUBLIC HEARING

I-4 Beyond the Ultimate PD&E Reevaluation Study

FDOT