

ADMINISTRATIVE ACTION
RECORD OF DECISION

U.S. Department of Transportation
Federal Highway Administration
and
Florida Department of Transportation – District 5
In cooperation with the U.S. Army Corps of Engineers and U.S. Coast Guard

Financial Project Number: 432100-1-22-01
Federal Aid Project Number: 0041 227 I
Efficient Transportation Decision Making Number: Not Applicable

SR 400 (Interstate 4 (I-4))
from west of SR 528 (Beachline Expressway)
to east of SR 472 in Orange, Seminole, and Volusia County, Florida
Evaluation and Assessment of the I-4 Ultimate and Beyond the Ultimate 2002 FEIS and RODs (2002 and 2005)

FHWA, in consultation with FDOT, has prepared this updated document for the proposed improvements to SR 400 (Interstate 4 (I-4)) in Orange County, Seminole County, and Volusia County, Florida. Originally conducted as the I-4 PD&E Study – Section 2, the project was proposed to widen I-4 to six General Use Lanes (GULs) and two High Occupancy Vehicle (HOV) lanes (6 GUL + 2 HOV lanes) within the full project study area (from south of SR 528 to east of SR 472). A 44-foot rail corridor was included in the median in portions of the study area and Auxiliary lanes supplement the GULs where necessary. The Preferred Alternative limits (from SR 435 (Kirkman Road) to SR 414 (Maitland Boulevard)) which represents only a portion of the overall project were identified in the FEIS (August 2002) and approved under a ROD (Referred to as the "I-4 Ultimate Section", December 2002). An additional ROD was approved for the section from SR 414 (Maitland Blvd.) to SR 434 in 2005 which expanded the limits of the Ultimate. The 2005 ROD modified the project changing the HOV lanes to express lanes, adding 2 more express lanes (one in each direction), through the limits from SR 435 (Kirkman Road) to SR 434. That project (the I-4 Ultimate) is currently under construction. A ROD for the full limits of the FEIS (from south of SR 528 to east of SR 472) was never obtained.

The portions of the I-4 Beyond the Ultimate (BtU) Project (see Map on Figure R-1) addressed herein includes the remainder of the project areas excluded from the previously approved RODs (Segment 2: from south of SR 528 to SR 435 (Kirkman Road), and Segments 3 and 4: from north of SR 434 to east of SR 472). The Preferred Alternative for the I-4 BtU proposes three General Use Lanes with the addition of two new Express Lanes in each direction, resulting in a total of ten dedicated lanes, matching the approved concept for the I-4 Ultimate under construction.

This study has evaluated the overall I-4 PD&E Section 2 FEIS project area including the portion currently under construction from Kirkman Road to north of SR 434 and the portions for which a ROD has not been issued. All of the commitments and mitigation for impacts evaluated and approved in the 2002 and 2005 RODs have been carried forward throughout the project, and have been fulfilled or are being fulfilled during the project construction, and all design changes and updates have been addressed during project Re-evaluations conducted by FDOT and subsequently approved by FHWA. The proposed design changes and associated environmental impacts for the portions of the original project area that fall outside of the approved RODs have been evaluated in this current study. The conclusion of the study is that there are not any new significant impacts that would necessitate the preparation of a supplemental EIS for the project.

Therefore, based on the Evaluation and Assessment of the I-4 Ultimate and Beyond the Ultimate 2002 FEIS and RODS (2002 & 2005) documents, and based upon consideration of all the social, economic, and environmental evaluation contained therein and full consideration of input from other federal, state and local agencies, non-government organizations and the public-at-large; the FHWA has determined that the preferred alternative, consisting of 3 General Use Lanes + 2 Express Lanes in each direction (as shown on the typical sections in Section 1.3.1 of the Evaluation Document) is hereby the selected alternative.

Submitted Pursuant to 42 USC 4332 (2) (c)

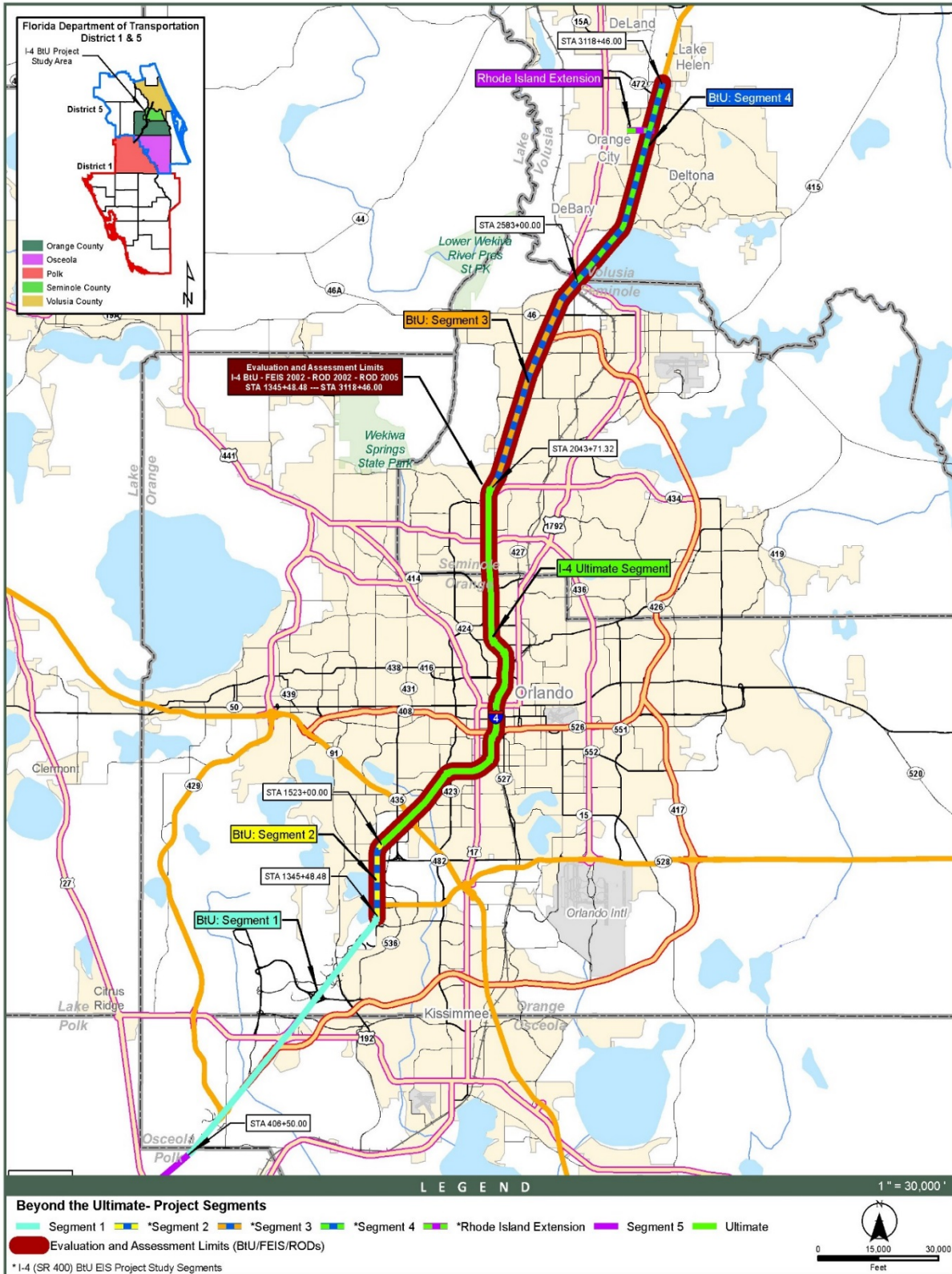


Figure R-1 – Project Location Map

RECORD OF DECISION

State Road Number: SR 400 / I-4

Financial Project Number: 432100-1-22-01

Federal Aid Project Number: 0041 227 I

Efficient Transportation Decision Making Number: Not Applicable

County: Orange, Seminole, Volusia

Description: The project (a part of the SR 400 (I-4) Beyond the Ultimate (BtU)) proposes improvements to I-4 in Orange County, Seminole County, and Volusia County, Florida. Originally conducted as the I-4 PD&E Study – Section 2, the project was proposed to widen I-4 to six General Use Lanes (GULs) and two High Occupancy Vehicle (HOV) lanes (6 GUL + 2 HOV lanes) within the full project study area (from south of SR 528 to east of SR 472). A 44-foot rail corridor was included in the median in portions of the study area and Auxiliary lanes supplement the GULs where necessary. The Preferred Alternative limits (from SR 435 (Kirkman Road) to SR 414 (Maitland Boulevard)) were identified in the FEIS (August 2002) and approved under a ROD (December 2002). An additional ROD was approved for the Preferred Alternative from SR 414 (Maitland Blvd.) to SR 434 in 2005. The 2005 ROD modified the project changing the HOV lanes to express lanes, adding 2 more express lanes (one in each direction), through the limits from SR 435 (Kirkman Road) to SR 434. That project (nicknamed I-4 Ultimate) is currently under construction. A ROD for the full limits of the FEIS (from south of SR 528 to east of SR 472) was never obtained.

The I-4 BtU concept involves the build-out of I-4 to its ultimate condition through Central Florida, including segments in Polk, Osceola, Orange, Seminole and Volusia Counties (the Polk and Osceola segments are not part of this document as they were separate federal actions from the original Section 2 FEIS). The BtU Preferred Alternative proposes three General Use Lanes with the addition of two new Express Lanes in each direction, resulting in a total of ten dedicated lanes, matching the approved concept for the I-4 Ultimate from west of Kirkman Road (SR 435) to north of SR 434 that is currently under construction. The I-4 BtU project subject to this document has been broken into the following three segments:

- Segment 2: SR 400 (I-4) from West of SR 528 (Beachline Expressway) to West of SR 435 (Kirkman Road) - Orange County (75280)
- Segment 3: SR 400 (I-4) from 1 Mile East of SR 434 to East of SR 15-600/US 17-92 (Seminole/Volusia County Line) - Seminole County (77160)
- Segment 4: SR 400 (I-4) from East of SR 15-600/US 17-92 (Seminole/Volusia County Line) to ½ Mile East of SR 472 - Volusia County (79110)

The specific purpose of the I-4 BtU project remains the same: to provide enhanced mobility throughout Central Florida for which I-4 serves as the backbone. This is to be accomplished through improved traffic

operations, enhanced connectivity, and improved safety on the I-4 mainline and interchange cross-streets in the immediate vicinity of I-4.

This is the *Record of Decision* (ROD) for the above subject project identified in the MetroPlan Orlando Metropolitan Planning Organization (MPO) 2040 Long Range Transportation Plan (LRTP), as adopted. The need for improvements to I-4 is illustrated by the important transportation roles I-4 serves to the Central Florida region and the State of Florida. If no improvements are made to the Interstate, a loss in mobility for the area's residents, visitors, and commuters can be expected, resulting in a severe threat to the continued viability of the economy and the quality of life.

In addition, the I-4 Ultimate Project, which was the subject of the approved ROD's resulting from the original FEIS for the project is currently under construction. The design of the I-4 BtU project will be consistent with the mainline typical section design for the I-4 Ultimate. The primary need for the I-4 BtU project remains to enhance mobility throughout Central Florida for which I-4 serves as the backbone. In addition, the I-4 BtU improvements will provide continuity with the I-4 Ultimate section through Orlando and the surrounding areas. Without the I-4 BtU project which is connected to both the eastern and western ends of the I-4 Ultimate project, the continuity in travel will be lost significantly altering the ability to travel through Central Florida.

This *Record of Decision* is made pursuant to the attached Evaluation and Assessment of the I-4 Ultimate and Beyond the Ultimate 2002 FEIS and RODs (2002 and 2005) Document.

DECISION

The Federal Highway Administration (FHWA) Florida Division, with cooperation from the US Army Corps of Engineers (USACE) and the US Coast Guard (USCG) in coordination with the Florida Department of Transportation (FDOT) and in accordance with the National Environmental Policy Act (NEPA) and associated laws, regulations, and orders, proposes the construction of the I-4 Beyond the Ultimate project. The selected alternative is three General Use Lanes with the addition of two new Express Lanes in each direction, resulting in a total of ten dedicated lanes. The three segments are Segment 2 from West of SR 528 (Beachline Expressway) to West of SR 435 (Kirkman Road) in Orange County, Segment 3 from 1 Mile East of SR 434 to East of SR 15-600/US 17-92 (Seminole/Volusia County Line) in Seminole County, and Segment 4 from East of SR 15-600/US 17-92 (Seminole/Volusia County Line) to ½ Mile East of SR 472 in Volusia County. The location map for the selected alternative can be viewed in **Figure R-1** of this *Record of Decision*.

The decision is being made as the proposed project will improve traffic operations, enhance connectivity, and improve safety on the I-4 mainline and interchange cross-streets associated with I-4. The proposed improvements are consistent with the current project under construction (I-4 Ultimate) and will further upgrade the mobility of the I-4 corridor which is the primary transportation corridor for the Orlando Metropolitan area.

Project History and Background

The I-4 PD&E Study – Section 2 was a direct outgrowth of prior transportation planning activities in the study area. In November 1989, FDOT completed a Master Plan for improvements to I-4 from the Polk / Osceola County Line to US 17-92 in Seminole County. The original I-4 Master Plan proposed highway improvements through 2010. The Master Plan recommended that the existing roadway be widened up to 16 lanes with an envelope for transit in the median. In addition, it recommended modifications to several interchanges. The Master Plan was approved by METROPLAN ORLANDO, formerly the Orlando Urban Area MPO, in November 1989.

As tourism and population continued to grow within the State of Florida, travel demand surpassed interstate capacity in many sections of the state’s 1,500-mile system. To address the expansion and preservation of the state’s interstate system, FDOT established an Interstate Highway Policy in November 1991. The Policy ensured that Florida’s interstate system adequately serves the needs of both commercial and personal mobility within the framework of environmental preservation, restoration of air quality, and support of growth management goals.

The Interstate Highway Policy represented a profound change from the traditional single mode planning orientation of the past by promoting urban interstate highways as multi-modal corridors and optimizing the movement of people rather than the flow of vehicles. Under the Policy, the number of lanes is limited to no more than six general purpose lanes and up to four special purpose lanes. Public transportation modes, including buses and light rail transit (LRT) and ride-sharing strategies such as HOV lanes are encouraged as long-term solutions to urban mobility challenges. In addition, interstate corridors allow high-speed and high volume traffic movements to facilitate commerce and long distance trips through the provision of additional right-of-way within the corridor for high speed rail, where appropriate.

In March 2001, FDOT consolidated a number of policies including the Interstate Highway Policy into a new streamlined policy entitled “*Florida Intrastate Highway System (FIHS) Program Development Procedure.*” The policy states that the construction of additional lanes on the intrastate highway system is set forth in Chapter 335.02(3) of the Florida Statutes. Chapter 335.02(3) states “In determining the number of lanes for any regional corridor or section of highway on the State Highway System to be funded by the Department with state or federal funds, the Department shall evaluate all alternatives and seek to achieve the highest degree of efficient mobility for corridor users.”

Guided by the Interstate Highway Policy, FDOT completed the I-4 Multi-Modal Master Plan (MMMP) for the 73-mile I-4 corridor through Central Florida in October 1996. The I-4 MMMP limits extended from the Polk/Osceola County line to Interstate 95 in Volusia County. The I-4 MMMP was developed to identify the specific components of the I-4 improvements through 2020.

FHWA participated in the development of the I-4 MMMP in an advisory role but did not formally approve the MMMP; so therefore, it does not constitute a Federal action or endorsement. The I-4 PD&E Study – Section 2 DEIS and subsequent FEIS, together with their required circulation and review was intended as the Federal action for the project.

The I-4 MMMP was performed using a three tier analysis, in which a broad range of alternatives were evaluated and narrowed. Tier 1 dealt with a broad array of potential investment strategies, including roadway investments outside the I-4 corridor. Nine alternatives were selected for further analysis in Tier 2.

Tier 2 was conducted as a Major Investment Study (MIS), in accordance with Federal Law. The recommended design concept and scope were adopted by both METROPLAN ORLANDO and the Volusia County MPO. Tier 3 refined the basic Tier 2 design concept and scope into a Master Plan, which adheres to the FDOT Interstate Highway Policy.

In September 1995, METROPLAN ORLANDO and the Volusia County MPO voted to adopt the I-4 MIS design concept and scope. In December 1995, both MPO's approved their respective 2020 Long Range Transportation Plans (LRTPs), which included the recommended I-4 MIS improvements to the I-4 corridor. As a result of the recommendations presented in the I-4 MMMP and MIS, FDOT elected to go forward with the next phase of the I-4 corridor facility development process through four closely coordinated studies. This included 3 PD&E studies for the I-4 highway sections and the production of a Preliminary Engineering Report (PER) and an EIS for the Light Rail Transit (LRT) system. The LRT and I-4 studies represent freestanding projects capable of independent operation.

In 1996, FDOT, in consultation with FHWA, initiated the I-4 PD&E Study – Section 2. FDOT proposed to widen I-4 to six general use lanes and two HOV lanes (6 GUL + 2 HOV lanes) within the Ultimate Project and Preferred Alternative limits. A 44-foot rail corridor was provided in the median in portions of the project. The HOV lanes would be separated from the general use lanes by barriers throughout the project limits, with access provided through the use of slip ramps, direct flyovers, and HOV-only interchanges. This concept was carried forward through the PD&E process and resulted in a DEIS and FEIS being completed though the Record of Decision was never approved for the full project, as previously discussed.

The original I-4 PD&E Study – Section 2 FEIS was prepared to address comments, issues, and concerns identified during the study and public hearing comment period for the DEIS; revise the DEIS to include the Preferred Alternative; identify avoidance or mitigation measures for adverse social, economic, and environmental impacts; and complete the environmental review process under the National Environmental Policy Act (NEPA). This update document includes an environmental and engineering analysis of the current design concept, which includes six GULs and four express lanes operating under a variable price toll plan (6 GUL + 4 express lanes) in comparison to the original design concept, which showed six general use lanes (GULs) and two high occupancy vehicles (HOV) lanes (6 GUL + 2 HOV lanes). Other changes from the original concept being analyzed include stormwater management, access plan and interchange configurations. This update to the FEIS covers all the changes in the project since the original study as well as changes in policy, procedures, and regulations since the date of the original document.

The original I-4 PD&E Study – Section 2 FEIS identified any proposed significant impacts from the project and the measures for mitigation to offset the impacts. The major areas in which impacts were proposed included Neighborhoods, Community Facilities, Neighborhood and Community Cohesion, Environmental

Justice, Cultural and Historic Resources, Section 4(f) Properties, Visual Impacts, and Noise. With the exception of Visual Impacts and Noise which occur throughout, the remaining impacts were all to occur within the I-4 Ultimate Section, specifically within the project segments south of Downtown Orlando, at or around the I-4 / SR 408 Interchange, within Downtown Orlando, or just north of Downtown Orlando. The Record of Decision (December 2002) addressed the impacts to the Ultimate Section from south of Kirkman Road (SR 435) to north of Maitland Boulevard (SR 414), while the Record of Decision from December 8, 2005 addressed the impacts to the project based upon extending the northern terminus to north of SR 434, modifying the HOV lanes to express lanes, and increasing the number of SUL lanes from 2 to 4 (2 in each direction).

Public Involvement

A comprehensive Public Involvement Plan (PIP) was initiated as part of this PD&E Study. This program is in compliance with Part 1, Chapter 11 of the FDOT PD&E Manual which details various federal, state and local regulations including Section 339.155, Florida Statutes; Council of Environmental Quality (CEQ) Regulations for implementing the procedural provisions of the National Environmental Policy Act (NEPA) and 23 Code of Federal Regulations (CFR) 771.

Separate public meetings and public hearings were held for each of the three segments in order for the communities to be provided information on the study, to see the proposed alternatives, to express their concerns and obtain answers to their questions. The project team used the information gathered from the meetings and hearings to incorporate into the project to the greatest extent practicable. The details of these meetings are as follows:

Segment 2

The public involvement program for I-4, Segment 2 included the publication of newsletters, meetings with government agencies, community outreach meetings, an Alternatives Public Workshop, and a Public Hearing. A project website, www.i4express.com, was also developed to disseminate updated information about the project and allow the public to communicate with the project team and/or provide comments.

The Alternatives Public Workshop was held on Thursday, January 30, 2014, from 5:30 p.m. to 7:30 p.m. at the DoubleTree Hotel, 10100 International Drive. An invitational letter was mailed to property owners located within at least 300-ft on either side of the current project corridor, public officials, organizations and individuals interested in the project. An advertisement was placed in the Orlando Sentinel (full circulation) and a press release was distributed by FDOT to local media outlets. The Alternatives Public Workshop was held in an open house format with project display boards and an automated presentation which gave an overview of the proposed project, including a summary of the engineering and environmental considerations in development of the proposed alternatives. Twenty citizens and thirteen project team members signed in at the public meeting. Project team attendees included the FDOT Project Manager, staff from FDOT Right-of-way and Environmental Management Offices, Metropolitan Planning Organization liaison and the project consultants. Public comment forms were made available to attendees, however no written comments were received during or after the meeting. Verbal comments/questions received during the public meeting consisted of discussions of future visions/development plans near the Sand Lake Road and International Drive intersection, questions

regarding animal crossing and keeping the high speed rail envelope within the corridor. No opposition against the project was received during the meeting.

Several additional meetings were held to discuss the proposed project improvements and PD&E study, as follows.

Meetings with Orange County:

- Orange County Partnering Meeting (August 12, 2014) – Presented alternative concepts to Orange County staff for both Sand Lake Road and SR 528
- Orange County Management Presentation (February 9, 2015) – Presented recommended alternative to Orange County management for Segments 1 and 2

Meetings with Florida's Turnpike Enterprise (FTE):

- Beachline and I-4 Coordination Meeting (February 7, 2014) – Discussed alternative concepts for the I-4/SR 528 interchange and collected information on the proposed widening for SR 528 by FTE
- I-4/Beachline Ramp Widening - Coordination (March 25, 2014) - Meeting to discuss the proposed interim ramp improvement for I-4 and SR 528/Beachline interchange concept- and traffic-wise
- FTE Coordination Meeting (May 2, 2014) – Discussion on proposed improvement concepts for SR 417 & SR 429 interchanges
- D-5/FTE Coordination Meeting, Beyond I-4 Ultimate PD&E (June 30, 2014)- Discussion on proposed improvement concepts for the SR 528/I-4 Interchange
- I-4/Beachline Interchange Future Traffic (July 17, 2014) – Discussion on traffic volumes to be used in the analysis for the SR 528 Interchange Operational Analysis Report (IOAR) being prepared by FTE
- I-4 and SR 528 Interchange Coordination (December 5, 2014) – FTE presented their recommended alternative for the SR 528 section of the I-4 improvements.

A formal public hearing was conducted on October 10, 2016 to seek input on the Recommended Alternative. The hearing, provided an overview of the Recommended Alternative and impacts, the study schedule, and summary of the remaining steps in the study process. The hearing was held at the Wyndham Orlando Resort, 8001 International Drive, Orlando, FL 32819. The draft environmental and engineering reports were available for public review from September 19, 2016 through October 20, 2016 on the project website (www.i4express.com) and at the Orange County Public Library, Southwest Branch, located at 7255 Della Drive, Orlando, FL 32819.

A half-hour open house preceded the formal portion of the hearing. The public was given the opportunity to ask questions and provide comments to the FDOT representatives in a one-on-one setting. A court reporter was present to receive oral comments from the public, and written comments were also accepted. The Recommended Alternative for the overall I-4 corridor and each interchange was displayed on aerial photography of the study area. A matrix with potential environmental impacts and cost

estimates was presented. An audiovisual presentation describing the engineering and environmental components of the Recommended Alternative was given. After the presentation, the public was given an opportunity to offer oral comments to the hearing moderator.

Per Chapter 11 of the PD&E Manual, all property owners within at least 300 feet of either side of the centerline of the Recommended Alternative were notified of the hearing by newsletter. Twenty-three (23) citizens and seventeen (17) project team members signed in at the public hearing. Project team attendees included the FDOT PD&E and Design Project Managers, staff from FDOT Public Information, Right-of-way and Environmental Management Offices and the project consultants. No public comment forms were received at the hearing or during the 10-day comment period following the hearing. Two public comments were provided during the oral comment period of the hearing. The public comments from the hearing are summarized as follows:

- A citizen expressed a need for clarification on the proposed improvements and identification of which property is needed for ponds from a specific parcel. Opposition to any land being used for FDOT ponds was also expressed.
- A citizen stated he was not opposed to progress; however, he also gave a lengthy comment suggesting to follow the “money trail” on the project. The citizen indicated he did not require a response.

Oral and written comments from the public were either directly addressed by project team members during the public hearing or through follow-up letter/email responses provided by the FDOT Project Manager. The official public hearing transcripts and public input comments with responses, are provided in the Appendix of the EIS Update document.

Segment 3

The public involvement program for I-4 Segment 3 included the publication of newsletters, meetings with government agencies, community outreach meetings and an Alternatives Public Workshop. A project website, www.i4express.com, was also developed to disseminate updated information about the project and allow the public to communicate with the project team and/or provide comments.

The Alternatives Public Workshop was held on Thursday, March 20, 2014, from 5:30 p.m. to 7:30 p.m. at Hyatt Place, 1255 S. International Parkway in Lake Mary. An invitational letter was mailed to property owners located within at least 300 feet on either side of the current project corridor and, to public officials, organizations and individuals interested in the project. An advertisement was placed in the Orlando Sentinel (full circulation) and a press release was distributed by FDOT to local media outlets. The Alternatives Public Workshop was held in an open house format with project display boards and an automated presentation which gave an overview of the proposed project, including a summary of the engineering and environmental considerations in development of the proposed alternatives. Forty-three citizens and fifteen project team members signed in at the public meeting. Project team attendees included the FDOT Project Manager, staff from FDOT Right-of-Way, Consultant Project Management and Environmental Management Offices and the project consultants. Public comment forms were made available to attendees; three written comments were received during or after the meeting. These

comments consisted of one comment in favor of the express lane connection to EE Williamson Boulevard, one comment requesting noise walls and one comment opposed to the express lane connection at EE Williamson Boulevard and opposed to the location of pond 300B.

Several additional meetings were held to discuss the proposed project improvements and PD&E study, as follows.

Meetings with Seminole County:

- Meeting with Seminole County staff (Brett Blackadar and Shad Smith) to discuss coordination with County projects along I-4 (June 6, 2013)
- Meeting with Seminole County staff to present proposed alternative improvements prior to Public Workshop (February 13, 2014)
- Meeting with Seminole County staff to discuss the results of the EE Williamson direct connect analysis (July 14, 2014)
- Coordination meeting with Seminole County staff to present recommended alternative concepts along Segment 3 (March 3, 2015)
- Workshop with Seminole County Board of County Commissioners to present interchange concepts, traffic, and schedule (February 9, 2016)
- Workshop and presentation with Seminole County Board of County Commissioners to present updated interchange concepts, Lake Emma direct ramp, and U-turns (January 24, 2017)

Meetings with Florida's Turnpike Enterprise (FTE):

- FTE Coordination Meeting (May 1, 2015) – Review the proposed I-4/SR 417/Wekiva Parkway interchange.

Other Meetings:

- Attended and presented the potential EE Williamson direct connect concept to the Markham Woods HOA group (May 6, 2014)
- Coordination meeting with Duke Energy staff to discuss potential utility impacts on the I-4 alignments (October 27, 2014)
- Coordination meeting with Florida Gas Transmission staff to discuss potential utility impacts on the I-4 alignments (October 30, 2014)
- Coordination meeting with City of Lake Mary staff to present recommended alternative concepts along Segment 3 (March 20, 2015)

A formal public hearing was conducted on November 14, 2016 to seek input on the Recommended Alternative. The hearing provided an overview of the Recommended Alternative and impacts, the study schedule and summary of the remaining steps in the study process. The hearing was held at Lake Mary City Hall, 100 North Country Club Road, Lake Mary, FL 32746. The draft environmental and engineering reports were available for public review from September 14, 2016 through November 25, 2016 on the

project website (www.i4express.com) and at the Seminole County Public Library, Northwest Branch, located at 580 Greenway Boulevard, Lake Mary, FL 32746.

A half-hour open house preceded the formal portion of the hearing. The public was given the opportunity to ask questions and provide comments to the FDOT representatives in a one-on-one setting. A court reporter was present to receive oral comments from the public, and written comments were also accepted. The Recommended Alternative for the overall I-4 corridor and each interchange was displayed on aerial photography of the study area. A matrix with potential environmental impacts and cost estimates was presented. An audiovisual presentation describing the engineering and environmental components of the Recommended Alternative was given. After the presentation, the public was given an opportunity to offer oral comments to the hearing moderator.

Per Chapter 11 of the PD&E Manual, all property owners within at least 300 feet of either side of the centerline of the Recommended Alternative were notified of the hearing by newsletter. Forty-seven (47) citizens and twenty-one (21) project team members signed in at the public hearing. Project team attendees included the FDOT PD&E and Design Project Managers and staff from FDOT Public Information, Right-of-way, and Environmental Management Offices. One public comment form was received at the hearing. One additional written comment was received via email during the 10-day comment period following the hearing. Four public comments were provided during the oral comment period of the hearing. The public comments from the hearing are summarized as follows:

Written Comments

- A resident of Northridge subdivision expressed concerns about water and air quality and a desire to keep the natural tree buffer around Grace Lake.
- A citizen stated she was pleased to see Pond 300-B is no longer the recommended pond site and the express lane entry/exit ramps accessing I-4 at EE Williamson Road have been removed from the concept plans. Additional comments from this citizen included: a request for FDOT to re-evaluate the noise impacts and need for sound barrier near her home, evaluation of an alternative that includes non-tolled express lanes, suggestion that segments of the I-4 BtU not be approved for toll lanes until the I-4 Ultimate section is constructed and the effectiveness of toll lanes in the Orlando area can be proved, and questioning the safety of merging traffic at the slip ramp locations of the express lanes.

Oral Comments

- A resident of Northridge Subdivision requested FDOT look for stormwater alternatives that don't impact the lake and existing tree buffer between the homes and interstate.
- A resident of Huntington Point Subdivision requested more details regarding the homes impacted by the project (whether they are in this subdivision), and also requested more information on the proposed sound barriers.
- A County Commissioner commented on FDOT's efforts on this project and asked for details regarding the funding of construction and impacts to businesses as a result of

sidestreet improvements. She asked for further discussion between the County and FDOT before getting too far into the plans and asked if the sidestreet improvements can be held off until the Interstate widening is completed. She specifically mentioned the CR 46A at Rinehart Road intersection.

- A County Commissioner questioned access of pedestrians and bicycles crossing I-4 on existing roadways. He also inquired about the scheduling of the I-4 BtU segments, specifically asking when the northern segments will be going through the right-of-way phase and construction.

Oral and written comments from the public were either directly addressed by project team members during the public hearing or through follow-up letter/email responses provided by the FDOT Project Manager. The official public hearing transcripts and public input comments with responses, are provided in the Appendix of the EIS Update document.

Segment 4

The public involvement program for I-4, Segment 4 included the publication of newsletters, meetings with government agencies, community outreach meetings and an Alternatives Public Workshop. A project website, www.i4express.com, was also developed to disseminate updated information about the project and allow the public to communicate with the project team and/or provide comments.

The Alternatives Public Workshop was held on Thursday, April 24, 2014 from 5:30 p.m. to 7:30 p.m. at Deltona City Hall located at 2345 Providence Boulevard, Deltona, Florida 32725. An invitational letter was mailed to property owners located within at least 300 feet on either side of the current project corridor, public officials, organizations and individuals interested in the project. The Alternatives Public Workshop was held in an open house format with project display boards and an automated presentation which gave an overview of the proposed project, including a summary of the engineering and environmental considerations in development of the proposed alternatives. FDOT staff and project team members were available to provide information and address comments as needed. Fifty-two citizens and seventeen project team members signed in at the public meeting. Projects team attendees included the FDOT Project Manager, Right-of-Way and Environmental Management Office staff and the project consultants. Public comment forms were made available to attendees; four written comments were received during or after the meeting. These comments consisted of keeping the rail envelope, having rail access at the interchange of I-4 and SR 472, indicating a preference for interchange alternatives and concern about the distance between a home and I-4 travel lanes. No opposition against the project was received during the meeting.

Several additional meetings, which included presentations describing the proposed project and PD&E study, were held to discuss the proposed improvements:

- River to Sea TPO on September 25, 2013 - The Consultant Project Manager for FDOT gave a presentation on the I-4 BtU Managed Lanes project and an update on the PD&E Study. Information was provided on: consideration of zipper lanes along I-4 from SR 434 to SR 472 (Segments 3 & 4 of the I-4 BtU corridor), public involvement

for the project, development of preferred alternatives and review of access points in the surrounding roadway network. Discussion ensued following the presentation and included the following topics: widening of local roads (such as Saxon Boulevard), impacts of SunRail on the I-4 BtU project, rail corridor through Volusia County and electric power grid corridor. FDOT stated that various options were being evaluated and considerations as part of the study include: funding for improvements that would be required to local roadways as a result of FDOT actions, SunRail passenger use and impacts on I-4 widening, preservation of the rail corridor through I-4 Segments and possible elimination of the electrical power grid corridor.

- City of DeBary City Council Meeting on May 7, 2014 - A presentation, which provided an update on the plans to widen I-4, was made by the FDOT District 5 Director of Transportation Development.
- River to Sea TPO on May 28, 2014 - The FDOT District 5 Director of Transportation Development provided information on the I-4 BtU PD&E Study. It was identified that while a rail envelope was preserved in the I-4 Corridor from SR 472 to Daytona Beach, none was provided south of SR 472 towards Orlando. The Volusia County Council requested that the rail envelope be continued from SR 472 to the County line and FDOT committed to doing so. The FDOT Project Manager for I-4 BtU gave a presentation on the I-4 managed use lanes project. Following the presentation, discussion ensued regarding the options for the corridor including preservation of a rail envelope through the Volusia County portion of the I-4 BtU corridor. Additional discussion included commentary on public involvement throughout the process, the value of the rail corridor with respect to connectivity through Orlando and coordination between FDOT and local public agencies. FDOT staff responded to TPO Board questions with additional information provided on: Alternatives Analysis for rail corridor options connecting Daytona Beach to SunRail, the impact of preserving the rail envelope including replacement of the SR 472 bridge to fit the rail corridor, providing local agencies with the presentations made at the TPO Board meeting and continued public involvement efforts by FDOT to keep the public updated on the project.
- River to Sea TPO on November 26, 2014 - The FDOT District 5 Director of Transportation Development provided information on the I-4 BtU Managed Lanes Project. Specific topics presented to the TPO Board were: widening of Saxon Boulevard to six lanes, evaluation of a park and ride lot as part of the Rhode Island Avenue extension and a DDI as the preferred alternative for the SR 472 interchange. The TPO Board was also presented alternatives including cost and right-of-way impacts for the I-4 Managed Lanes Project which included: with and without a rail corridor and the terminal point and number of express lanes (one or two express lanes between Dirksen Drive and Rhode Island Avenue). Discussion ensued regarding the need for managed lanes through Volusia County and preservation of rail corridor without connectivity to surrounding areas. A motion was carried

unanimously to review and approve a resolution in the January, 2015 TPO Board meeting to maintain the rail envelope in the I-4 Corridor and to designate it as a transit corridor.

A formal public hearing was conducted on November 16, 2016 to seek input on the Recommended Alternative. The hearing provided an overview of the Recommended Alternative and impacts, the study schedule and summary of the remaining steps in the study process. The hearing was held at Deltona City Hall, 2345 Providence Boulevard, Deltona, FL 32725. The draft environmental and engineering reports were available for public review from September 14, 2016 through November 26, 2016 on the project website (www.i4express.com) and at the Deltona Regional Library, located at 2150 Eustace Avenue, Deltona, FL 32725.

A half-hour open house preceded the formal portion of the hearing. The public was given the opportunity to ask questions and provide comments to the Florida Department of Transportation (FDOT) representatives in a one-on-one setting. A court reporter was present to receive oral comments from the public; written comments were also accepted. The Recommended Alternative for the overall I-4 corridor and each interchange was displayed on aerial photography of the study area. A matrix with potential environmental impacts and cost estimates was presented. An audiovisual presentation describing the engineering and environmental components of the Recommended Alternative was given. After the presentation, the public was given an opportunity to offer oral comments to the hearing moderator.

Per Chapter 11 of the PD&E Manual, all property owners within at least 300 feet of either side of the centerline of the Recommended Alternative were notified of the hearing by newsletter. One hundred and one (101) citizens and twenty (20) project team members signed in at the public hearing. Project team attendees included the FDOT PD&E and Design Project Managers and staff from FDOT Public Information, Right-of-way and Environmental Management Offices. One public comment form was received at the hearing. Seven additional email comments were received via email during the 10-day comment period following the hearing. Five public comments were provided during the oral comment period of the hearing. The public comments from the hearing are summarized as follows:

Written Comments

- A resident of the Summerhaven Subdivision expressed concerned about not having a sound barrier along the interstate to buffer their home.
- City of DeLand expressed a concern about the current concept showing developable lands being utilized for stormwater retention around the SR 472 interchange. The City indicated they previously had a Development of Regional Impact (DRI) in place for the area and requested FDOT consider an alternate design to minimize the impacts to developable lands surrounding the interchange.
- A property owner requested an opportunity to discuss with FDOT realignment of the eastbound exit ramp to SR 472 and the proposed location of pond 413 on their property.
- A resident of the Summerhaven Subdivision (who also spoke during the oral comment period of the hearing) reiterated their disappointment that a sound barrier was not

found to be cost feasible for the subdivision. He also provided a petition with 171 signatures from residents of Summerhaven and The Landings subdivisions, requesting a sound barrier be constructed between I-4 and their subdivisions.

- A citizen questioned why toll lanes are proposed instead of widening without tolls.
- A citizen requested a schedule/timeline for the project.
- A resident expressed concern for decreased property values due to increased noise from the interstate.
- A resident of DeBary Bayou expressed concern for the increased noise levels and requested suggestions for reducing noise levels at her home.

Oral Comments

- A resident of the Summerhaven Subdivision expressed disappointment that the sound barrier would benefit the subdivision, however is cost prohibitive by approximately \$7,000 per receptor. He asked that it be reevaluated and requested FDOT staff discuss the sound barriers with the homeowner's association.
- A resident of the Summerhaven Subdivision expressed concern for not having a sound barrier and commented the noise study peak hour times analyzed were not during the noisiest times of the day.
- A citizen commented about the presentation which showed that three families were impacted, but stated that his building that has twelve (12) units is impacted.
- A citizen questioned if FDOT was sure they wouldn't buy his home. He wants to make improvements and also asked if FDOT will compensate for those improvements if they later decide to purchase his home.
- A resident of Blue Side Condos expressed a concern of property values and impacts to HOA funds due to the proposed improvements impacting several units within a couple of buildings. He also expressed a concern for the close proximity of the sound barrier to their building.

Oral and written comments from the public were either directly addressed by project team members during the public hearing or through follow-up letter/email responses provided by the FDOT Project Manager. The official public hearing transcripts and public input comments with responses, are provided in the Appendix of the EIS Update document.

Alternatives Considered

Four Alternatives were carried forward as part of the original I-4 PD&E Study – Section 2 Ultimate project. These included the No Action, Transportation Systems Management and Operations (TSMO), Mass Transit, and the Recommended Build Alternative. The analysis resulted in the Recommended Build Alternative being selected as the Preferred Alternative in the original FEIS. The discussion on alternatives from the original document in summary:

The No Action (No Build) Alternative included the highway facilities likely to exist in 2020, which contained the existing highway network plus the highway improvements that were identified in METROPLAN

ORLANDO'S 2020 LRTP Update and the Volusia County MPO's 2020 LRTP Refinement. The No Action Alternative did not fulfill the purpose and need of the Ultimate Project as established in Chapter 1 of the I-4 PD&E Study – Section 2 FEIS (August 2002). The No Action Alternative would not be able to accommodate the anticipated growth in traffic volumes in the project study area.

The TSMO Alternative involved low capital cost transportation improvements designed to maximize the utilization and efficiency of the present system. TSMO options were considered during the development of the I-4 PD&E Study – Section 2 project. Options that were considered under the TSMO Alternative included traffic signal improvements, intersection/interchange improvements, HOV lanes, ridesharing programs, provision for transit, ramp-to-ramp auxiliary lanes, Intelligent Transportation Systems (ITS), and demand pricing. Since the Ultimate Project did not preclude the use of TSMO measures to enhance the operations of the interstate facility, several of the TSMO strategies were incorporated into the proposed improvements for the preferred alternative. This made further evaluation of the TSMO Alternative as a separate alternative no longer necessary.

The CFLRTS project was initiated as a result of the I-4 MIS recommended design and scope. The project consisted of a new Light Rail Transit (LRT) system extending from Central Florida Parkway in Orange County to Longwood in Seminole County. Input received during the DEIS for this project caused the project to adjust the limits of the proposed LRT system from Central Florida Parkway to the Loch Haven / Princeton Street area. The proposed I-4 PD&E Study – Section 2 included provisions for the inclusion of rail services and bus systems within the corridor. A 44-foot rail corridor was set aside in areas within the project limits for rail service, and provisions were made to allow buses to use HOV lanes. The Mass Transit Alternative was not carried forward for further evaluation, since the CFLRTS project was assessed as a separate action and was a free-standing project capable of independent operation.

The Recommended Build Alternative was identified as a result of the financial constraints identified in the 2020 LRTP Update performed by METROPLAN ORLANDO and the Volusia County MPO of the I-4 proposed improvements. The limits of the Ultimate improvements were reduced from the original 43-mile project corridor to extending from Kirkman Road (SR 435) to Maitland Boulevard (SR 414). The improvements included six general use lanes, three in each direction, with two HOV lanes (one in each direction), with auxiliary lanes between interchanges as needed for traffic operations. The Reconstruction of arterial interchanges along the I-4 mainline were proposed at Kirkman Road (SR 435), Orange Blossom Trail (US 441), Michigan Street, Kaley Avenue, Anderson Street, South Street, Robinson Street (SR 526), Amelia Street, Colonial Drive (SR 50), Ivanhoe Boulevard, Princeton Street (SR 438), Par Street, Fairbanks Avenue (SR 426), Lee Road (SR 423), and Maitland Boulevard (SR 414). Additional viable Ultimate Build Alternatives were proposed within the preferred alternative limits as part of the DEIS including the Kaley / Michigan Stormwater Treatment Alternatives, I-4 / SR 408 Interchange and Downtown Access Alternatives, I-4 / SR 50 (Colonial Drive) Alternatives, and College Park Typical Section and Stormwater Treatment Alternatives. The alternatives analysis for these additional viable alternatives resulted in the selection of a preferred alternative to be included with the overall project Preferred Alternative.

The Preferred Alternative was carried forward in the study with the completion of the I-4 PD&E Study – Section 2 FEIS in 2002. The Record of Decision (December 2002) addressed the 15.4 miles of multi-lane

improvements for I-4 from south of Kirkman Road (SR 435) to north of Maitland Boulevard (SR 414) with the Preferred Alternative design of 6 General Use Lanes (3 in each direction) with 2 barrier-separated HOV lanes (1 in each direction). The improvements also included a 44-foot rail corridor in portions of the project, auxiliary lanes between interchanges as needed for traffic operations, and the reconstruction of a number of interchanges along the corridor. A subsequent Record of Decision was issued in December 2005 extending the eastern project limits from Maitland Boulevard (SR 414) to north of SR 434, and revising the 2 HOV lanes to 4 Special Use Express Lanes (2 in each direction). A project Re-evaluation was completed earlier in 2005 approving the change from SUL/HOV lanes to Express Lanes. This change occurred after the completion of the original FEIS and was addressed in the 2005 ROD, though the FEIS was not modified.

The I-4 BtU Study has carried this approved Preferred Alternative forward with 6 General Use Lanes (3 in each direction) and 4 Express Lanes (2 in each direction) under a variable price toll plan to be consistent with the design approved in the 2005 ROD which is currently under construction.

The update described herein adheres to the PD&E Study process by examining the various concepts considered for this project. As the Recommended Build Alternative was selected as the Preferred Alternative in the original study, that remains the case for the I-4 BtU Study. A comparison of the Build Alternative with the No-Build Alternative is presented, though the alternatives analysis will focus primarily on the newly proposed interchanges and pond sites. The alternatives for the interchanges include no modifications to the existing interchange geometry (No Build), Transportation System Management and Operations (TSMO), Multimodal and Study (Build) Alternatives.

No-Build Alternative

The No-Build Alternative assumes no changes to I-4 within the project corridor beyond currently planned and programmed projects already committed within Metro Plan Orlando's 2040 Long Range Transportation Plan and the Fiscal Year 2015/16 to 2019/20 Transportation Improvement Program. The No-Build Alternative forms the basis of the comparative analysis for each of the viable Study Alternatives. The benefits of the No-Build Alternative are the absence of construction-related and short-term operational impacts associated with the Build Alternatives. However, long-term benefits accrued from serving future traffic demands will not be realized with this alternative. Operating conditions are anticipated to worsen with time, while further increasing delays and congestion. Specifically, the No-Build Alternative will offer no benefits to address existing or future traffic congestion anticipated on I-4. Distinct advantages and disadvantages associated with the No-Build Alternative are as follows.

Advantages:

- No impedance to traffic flow during construction
- No expenditure of funds for design, right of way acquisition, or construction
- No impact to the adjacent natural, social, physical and cultural environments
- No disruption to existing/future land uses due to construction-related activities

Disadvantages:

- Increase in traffic congestion and road user costs, unacceptable level of service and an increase in accidents associated with an increase in travel times and traffic volumes due to excessive delays
- Increase in carbon monoxide levels and other air pollutants caused by an increase in traffic congestion
- Increase in maintenance costs due to roadway and structure deterioration
- Increase in emergency service response time in addition to an increase in evacuation time during weather emergencies as a result of heavy congestion
- Increase in delays to evacuation procedures throughout the state
- Increase in safety-related accidents due to heavy congestion
- New traffic congestion at the termini of the I-4 Ultimate Section

Transportation System Management and Operations

Transportation System Management and Operations (TSMO) Alternatives are defined as low capital cost transportation improvements designed to maximize the utilization and efficiency of the existing transportation system through improved system management. The various forms of TSMO activities include:

- Traffic signal improvements
- Intersection/interchange improvements
- Widening of parallel arterials
- Ridesharing programs
- Transit
- ITS
- Ramp-to-ramp auxiliary lanes

Although the implementation of TSMO strategies would certainly aid in localized operation of the existing roadway, the projected traffic volumes for the design year 2040 require I-4 to be widened to provide the additional capacity necessary to maintain or improve the existing and future levels of service. Therefore, the TSMO Alternative is not considered a viable alternative and no further evaluation of the TSMO Alternative will be conducted during this study.

Multi-Modal Alternatives

The project study area including arterial streets crossing I-4 is served by different modes of travel, both motorized and non-motorized. Increased connectivity for bicycle, pedestrian and transit users are an objective of the project. Multi-modal improvements are not a viable alternative to the build alternative. Considerations for improvements in the project corridor of transit (bus, rail) and to bicycle and pedestrian features were included in the project study, though on their own do not meet the purpose and need of the project.

Build Alternatives

Segment 2

The project limits for Segment 2 are within a 3.9-mile segment of I-4 which extends from west of SR 528 (MP 5.650) to west of SR 435 (Kirkman Road) [MP 9.528] in Orange County. Although, the interstate is a designated east-west corridor, the alignment follows a north-south orientation through the majority of Segment 2. The study area in this section from west of SR 528 to west of SR 435 (Kirkman Road) includes the interchanges at SR 528, Sand Lake Road, Adventure Way and Universal Boulevard.

Two mainline typical sections are proposed for I-4 Segment 2. The typical section from the begin project limits east of Central Florida Parkway to SR 528 includes a 44-foot rail envelope in the median within a minimum 300 foot right-of-way (6 GUL + 4 express lanes with rail envelope). The 300-foot right-of-way represents the existing minimum limited access right-of-way already owned by FDOT (it varies from 300 – 330 feet in this Segment) and does not represent any additional right-of-way to meet the 300 feet proposed by the typical section. However, some right-of-way impacts are still anticipated in areas where the proposed improvements fall outside of the existing minimum limited access right-of-way (stormwater ponds, interchanges, auxiliary lanes). The rail corridor is for the dedicated High Speed Rail proposed to connect to I-4 from the Orlando International Airport. The typical section from SR 528 to west of SR 435 does not include the rail corridor and also has a proposed minimum 300 foot right-of-way (6 GUL + 4 Express lanes without rail envelope). No rail corridor is proposed for the I-4 Improvements currently under construction to the north from SR 435 to SR 434. Both typical sections have a design speed of 70 miles per hour (mph) and will include three 12-foot general use lanes with a 10-foot inside shoulder and a 12-foot outside shoulder (10-foot paved) and two 12-foot express lanes with a 4-foot inside shoulder and a 10-foot outside shoulder, in each direction. A barrier wall between adjacent shoulders will separate the express lanes from the general use lanes. Additionally, up to three auxiliary lanes in either direction of travel will be provided in some areas.

Build alternatives were evaluated for the interchanges at SR 528 and Sand Lake Road. No design changes or new interchanges are proposed for the Adventure Way or the Universal Boulevard interchanges, which were under construction during the original study. The original design proposed interchange concepts for the Beachline Expressway (SR 528) and Sand Lake Road, as does the I-4 BtU.

Beachline Expressway Interchange

The Preferred Alternative for the Beachline Expressway from the FEIS design was a three-level, three-leg, system to system design with flyover ramps. Two-lane ramps serving the GUL's would be provided for the primary movements connecting the Beachline and I-4, and Turkey Lake Road would need to be re-aligned in the portion near the Sand Lake Hospital.

The Recommended Alternative for I-4 BtU maintains the freeway terminal junction design while providing direct connection to the SR 528 express lanes. I-4 exit ramps for westbound general use and express lanes will remain separate, and fly over I-4 and the ramps from SR 528 westbound to I-4 westbound. The I-4 westbound general use ramp will merge with the I-4 eastbound to SR 528 eastbound general use ramp. The I-4 westbound express lane ramp will merge with the I-4 eastbound to SR 528 eastbound express lane ramp. The SR 528 westbound general use lanes will split to eastbound and westbound ramps to I-4. The

SR 528 westbound express lanes will also split to eastbound and westbound ramps to I-4. Right-of-way will have to be acquired along the southwest quadrant of the interchange. Turkey Lake Road will have to be realigned due to the widening of I-4. The Recommended Alternative proposed in the I-4 BtU for the Beachline Expressway will tie in to the improvements currently under construction for the *Beachline Expressway (SR 528 Widening from I-4 to Florida's Turnpike, FPN 406090-5-52-01)*. The project will widen the existing four-lane expressway to an eight-lane facility by adding four express toll lanes within the median of SR 528. This alternative is depicted on the concept plans for Segment 2 which are included in Appendix A of the *Preliminary Engineering Report* (June 2017) prepared for this project.

Sand Lake Road Interchange

The Preferred Alternative from the original design maintained the existing configuration while adding on-ramps and merge lanes to provide for a five-lane section to the Beachline Expressway. No additional road alignment or right-of-way would be required.

The Recommended Alternative for I-4 BtU proposes a Diverging Diamond Interchange (DDI) with a loop ramp in the northwest quadrant for westbound Sand Lake Road traffic to access Turkey Lake Road south of the interchange. Additionally, the I-4 westbound off ramp will split into two ramps north of Sand Lake Road. One ramp will continue to the Sand Lake Road DDI and the other will merge with the loop ramp from westbound Sand Lake Road. The two merged ramps will continue to the south until they intersect Turkey Lake Road. This additional ramp will eliminate the left turn movement from westbound Sand Lake Road onto southbound Turkey Lake Road. Additionally, a third northbound through lane will be added on Turkey Lake Road adjacent to the existing Phillips Crossing and Phillips Village shopping centers, south of Sand Lake Road, which will require some right-of-way to construct. This interchange concept will tie in to the planned improvements for *Sand Lake Road (SR 482 Widening from Turkey Lake Road to Universal Boulevard, FPN 407143-4-52-01)*. The proposed Sand Lake Road project will widen the existing four-lane roadway to a six-lane facility with exclusive turn lanes, drainage improvements, bike paths and sidewalks on both sides. This alternative is depicted on the concept plans for Segment 2 which are included in Appendix A of the *Preliminary Engineering Report* (June 2017) prepared for this project.

Adventure Way Interchange

No interchange alternatives were evaluated for Adventure Way under the I-4 BtU. The existing one-lane west bound off ramp will continue to connect to the I-4 general use lanes. The westbound on ramp will continue to connect to the two-lane on ramp from Kirkman Road southbound to I-4 westbound.

Universal Boulevard Interchange

No interchange alternatives were evaluated for Universal Boulevard under the I-4 BtU. The existing two-lane eastbound off ramp will continue to connect to the I-4 general use lanes. The two-lane eastbound on ramp will continue to connect to the I-4 eastbound general use lanes.

Segment 3

The project limits for Segment 3 are within an approximately 10-mile segment of I-4 which extends from east of SR 434 (Milepost 4.050) to east of US 17-92 (Milepost 14.135) in Seminole County (herein referred to as I-4 Segment 3).

The section of I-4 from the begin project limits to just south of Lake Mary Boulevard will have three GUL and one auxiliary lane in each direction, resulting in a 12-lane section (6 GUL + 2 Aux + 4 Express Lanes) within a minimum 300-foot right-of-way through this portion of the corridor. The existing right-of-way varies from 300 to 350 feet with a very limited median (paved inside shoulders separated by a guard-rail barrier). The proposed typical median will be barrier separated consisting of four-foot paved shoulders on either side of a 2-foot wide barrier wall. The typical sections can be found in Section 1.3.1. of the Evaluation and Assessment of the I-4 Ultimate and Beyond the Ultimate 2002 FEIS and RODs (2002 and 2005) update document. No rail/transit envelope is proposed in this Segment. Although, the interstate is a designated east-west corridor, the alignment follows a southwest to northeast orientation through the limits of Segment 3. The study area in this section from east of SR 434 to east of US 17-92 includes the interchanges at Lake Mary Boulevard, CR 46A, SR 417 (Central Florida Greeneway)/SR 429 (future Wekiva Parkway), SR 46 and US 17-92.

The footprint of the original design concept for the mainline remains essentially the same in the BtU concept, with the exception that the original included a 44-foot rail envelope which has been eliminated from the BtU design in this segment. The original design proposed interchange concepts for Lake Mary Boulevard, CR 46A, SR 46, and US 17/92. The interchange with the (at the time) proposed SR 417 (Central Florida Greeneway) was scheduled for construction in 2002/2003. Subsequent to the completion of the FEIS design, the SR 417 project was completed, which had some modifications to the interchanges at CR 46A and SR 46, and in addition, a newly designed interchange was constructed at SR 46. In addition, the I-4 Six-laning and St. Johns Bridge Project was constructed which included new off-ramps to US 17/92.

The 417/Wekiva Parkway interchange will be constructed under the Wekiva Parkway Design-Build project that is currently under development and will be advertised for construction as a Design Build in October 2017 (FDOT FPN 240200-4). The interchange will be built to accommodate the express lanes along I-4 with minimal reconstruction during the Beyond the Ultimate construction. The I-4 BtU project proposes new interchange concepts at Lake Mary Boulevard, CR 46A, SR 46, and US 17/92.

Lake Mary Boulevard Interchange

The Preferred Alternative identified in the original PD&E study (*I-4 PD&E Study – Section 2, Final Environmental Impact Statement FEIS, August 2002*) for the Lake Mary Boulevard interchange maintained the existing partial cloverleaf design with the proposed I-4 improvements. Proposed modifications to the interchange included improvements to ramp gore areas and merging of the two I-4 westbound on ramps into a single ramp before connecting to I-4.

The Recommended Alternative proposes modifying the existing partial cloverleaf interchange to a DDI. A DDI is designed so that each direction of the crossing roadway traffic is split and then crosses over itself. The traffic will temporarily drive on the left hand side of the roadway and cross back over on the other side of the interchange. In order to avoid wrong way movements through this type of interchange, the opposite directions of the roadway are intersected at an angle that is large enough to appear to the driver as if they are making a through movement and that the other side of the roadway is an intersecting street. This alternative also includes a new two-way, east-west connector roadway approximately 1/4 mile south

of Lake Mary Boulevard. The eastbound connector road will spur off the I-4 eastbound off-ramp and terminate at a new signalized intersection at Lake Emma Road. The westbound connector road begins at Lake Emma Road and continues west until it splits and crosses over the I-4 eastbound off-ramp. The left spur will provide access to the I-4 eastbound general use lanes and the right spur will run parallel to Lake Mary Boulevard and over I-4 before connecting to the I-4 westbound general use lanes. Additional right-of-way will be required along the new connector road between Lake Emma Road and the I-4 eastbound off ramp. This alternative is depicted on the concept plans for Segment 3 which are included in Appendix A of the *Preliminary Engineering Report* (June 2017) prepared for this project.

CR 46A Interchange

The Preferred Alternative identified in the original PD&E study/FEIS for the CR 46A interchange proposed modifying the full access diamond with a loop ramp for the I-4 westbound to CR 46A movements to allow for the continuation of the westbound C-D ramp from SR 46 and providing a 2-lane eastbound off ramp. West of the interchange, the C-D ramp would merge with the I-4 westbound on ramp from CR 46A.

The Recommended Alternative from the I-4 BtU proposes a DDI. All vehicle movements in the interchange will be signalized and provide triple lefts and triple right turn lanes onto CR 46A. This design changes the signal operations at the eastbound ramp terminal from a three-phase to two-phase cycle, as the left turn movements from the crossroad to the on ramp are now free flow movements. CR 46A will be widened to three through lanes in each direction between International Parkway and east of Rinehart Road and bike lanes have been provided along CR 46A through the interchange. To the west of the interchange, modifications include elimination of the westbound dual left lanes at CR 46A and Colonial Center Parkway; I-4 westbound will be accessed by the westbound lanes of the DDI. To the east of the interchange, modifications include elimination of eastbound and westbound left turn lanes at the intersection of CR 46A and Rinehart Road. Eastbound traffic on CR 46A destined to the north will have the option to go straight through and make a U-turn on CR 46A to return to the intersection and make a right turn onto northbound Rinehart Road. The other option for eastbound traffic is to turn right onto Rinehart Road and make a U-turn at a new, proposed median opening south of the intersection. Westbound traffic destined to the south would have to turn right onto Rinehart Road and access the existing median opening which will be modified to accommodate U-turns for a larger design vehicle. This alternative will require additional right-of-way at several locations including along CR 46A, Colonial Center Parkway and the I-4 westbound off ramp. This alternative is depicted on the concept plans for Segment 3 which are included in Appendix A of the *Preliminary Engineering Report* (June 2017) prepared for this project.

SR 417 / Wekiva Parkway Interchange

The Preferred Alternative identified in the original PD&E study for the SR 417 (Central Florida GreeneWay) interchange proposed modifying ramp junctions to and from I-4 to connect to the reconstructed freeway. The I-4 westbound to SR 417 ramp junction would be moved east to approximately 2,100 feet west of SR 46. This ramp would merge with the SR 46 to SR 417/I-4 C-D ramp and form a three-lane facility adjacent to I-4. The interchange constructed was modified slightly from this design and included loop ramps to the west of I-4, a braided ramp system in both directions for access to SR 46 in the eastbound direction and SR 46A in the westbound direction, and a direct on-off ramp from SR 417 to International Parkway

west of I-4. The Wekiva Parkway was not included in the original PD&E Study as it had not been advanced to design at the time and did not have any concepts to consider.

The Recommended Alternative from the I-4 BtU proposes to have the eastbound express exit ramp go under the eastbound general use lanes and merge with the single lane off ramp from the general use lanes. From there, the two lane ramp splits: the right lane goes to southbound SR 417 and left lane goes to westbound Wekiva Pkwy via a proposed loop ramp. Northbound SR 417 has a two lane exit ramp that will provide two lanes to merge into the eastbound I-4 general use lanes and will have one lane taper off and braid over northbound and southbound SR 417 and then contra flow between the SR 417 southbound ramp and southbound SR 417 lanes. This single lane ramp will provide access to International Pkwy and to westbound I-4 general use lanes. The single lane ramp from southbound SR 417 will merge with the two lane ramp from northbound SR 417 to form a 3 lane ramp. The left lane of the ramp will braid over the eastbound general use lanes and merge into the eastbound express lanes. The other two lanes will merge into the eastbound general use lanes. The westbound express lane exit will travel under the westbound general use lanes and the westbound C-D system. The ramp will split: the right split will combine with the exit ramp off of the C-D system and merge into westbound Wekiva Pkwy and the left split will merge into the westbound C-D system and will have access to southbound SR 417 via the existing loop ramp, CR 46A, or the westbound general use lanes. There is a one lane exit ramp off of eastbound Wekiva Pkwy that will split. The right split will merge in with the contra flow ramp from northbound SR 417 and will merge into the westbound general use lanes. The right split will ramp up and braid over eastbound and westbound Wekiva Pkwy. Then it will ramp under and across all of I-4 and merge with the two lane ramp from northbound SR 417. From here the left lane will ramp off and braid over the eastbound general use lanes and merge into the eastbound express. The other two lanes will merge into the eastbound general use lanes. Additional right-of-way requirements for the Wekiva Parkway interchange will be purchased under the Wekiva Parkway Project. Some additional right-of-way will be required for the modified I-4 / SR 417 interchange. This alternative is depicted on the concept plans for Segment 3 which are included in Appendix A of the *Preliminary Engineering Report* (June 2017) prepared for this project.

SR 46 Interchange

The Preferred Alternative identified in the original PD&E study/FEIS for the SR 46 interchange proposed maintaining the full access diamond with I-4 eastbound to SR 46 movement provided via a C-D ramp that exits just east of CR 46A. Proposed modifications would add a loop ramp for SR 46 westbound to I-4 westbound; this loop ramp would begin the westbound C-D roadway that would serve the SR 46, SR 417 and CR 46A interchanges and realigning Oregon Street in the northwest quadrant. Portions of this design concept were constructed under a separate project after the completion of the study but prior to the I-4 BtU study.

The Recommended Alternative from I-4 BtU will leave the existing interchange as it is with a widening of eastbound SR 46 for an additional left turn lane from eastbound SR 46 to eastbound I-4. The existing 2-lane eastbound C-D road between CR 46A and SR 46 will be removed. A new 2-lane exit ramp will be added for I-4 eastbound general use traffic to SR 46. The 1-lane eastbound on ramp will connect to the I-

4 eastbound general use lanes. The SR 46 and I-4 eastbound ramp connection intersection will be changed so that there are two left turn lanes from SR 46 eastbound onto I-4 eastbound and will continue to have three through lanes. The westbound I-4 general use will have a 2-lane exit ramp connecting to SR 46 around the outside of the loop ramp in the northeast quadrant. The 1-lane SR 46 westbound loop on ramp will connect to the I-4 westbound C-D road. No additional right of way will be required for this concept. This alternative is depicted on the concept plans for Segment 3 which are included in Appendix A of the *Preliminary Engineering Report* (June 2017) prepared for this project.

US 17-92 Interchange

The Preferred Alternative identified in the original PD&E study/FEIS for the US 17-92 interchange proposed maintaining the full access partial cloverleaf design with all movements occurring at US 17-92 as they are today, instead of being split between US 17-92 and Orange Boulevard. The US 17-92 to eastbound I-4 and westbound I-4 to US 17-92 ramps were constructed as part of the I-4 Six Laning and St. Johns River Bridge Project.

The Recommended Alternative from I-4 BtU is a Tight Urban Diamond Interchange (TUDI) that realigns US 17-92 to directly align with Monroe Road. The existing US 17-92 roadway that travels to Downtown Sanford, Florida will be renamed and will remain but will tee into the new US 17-92 alignment. The new alignment of US 17-92 will provide grade separation between US 17-92 and SunRail. The existing at grade crossing of Monroe Road and SunRail will be eliminated in this alternative. A new road will be added to connect Orange Boulevard and School Street to the east of the new US 17-92 and existing Monroe Road alignments. The existing westbound single lane off ramp and on ramp will connect to the general use lanes. The existing eastbound single lane off ramp and on ramp will also connect to the general use lanes. Additional right of way will be required to construct the new extension of Orange Blvd. to Monroe Rd. and the new US 17-92 alignment. This alternative is depicted on the concept plans for Segment 3 which are included in Appendix A of the *Preliminary Engineering Report* (June 2017) prepared for this project.

EE Williamson Road Bridge Alternatives

In addition, the existing overpass of EE Williamson over I-4 will need to be redesigned to meet the project needs. The original PD&E Study Preferred Alternative proposed a reconstruction of this overpass to accommodate the wider typical section. The Recommended Alternative for I-4 BtU proposes a new bridge section over I-4 which replaces the two existing bridges with a single bridge that will carry both highway and pedestrian traffic. The proposed bridge will accommodate one 11-foot travel lane in each direction with a 14-foot two-way left turn lane. In addition, 6-foot and 10-foot sidewalks are proposed on the south and north sides of the road, respectively. No additional right of way is required to construct this alternative. This overpass is depicted on the concept plans for Segment 3 which are included in Appendix A of the *Preliminary Engineering Report* (June 2017) prepared for this project.

Segment 4

The project limits for Segment 4 are within an approximately ten (10) mile segment of I-4 which extends from east of US 17-92 to east of SR 472, from Milepost 0.086 to 10.227 in Volusia County (herein referred to as I-4, Segment 4). Although, the interstate is a designated east-west corridor, the alignment follows a

southwest to northeast orientation through the limits of Segment 4. This section from east of US 17-92 to east of SR 472 includes the bridge over the St. Johns River and the interchanges at Dirksen Drive/Debary Avenue, Saxon Boulevard and SR 472/Howland Boulevard. The I-4 Six Laning and St. Johns River Bridge Replacement Project was constructed after the completion of the original PD&E Study and included two new bridges that will accommodate the BtU GUL lanes and the substructure for the proposed SULs. The BtU project only includes the columns and bridge deck required for the SUL Express Lanes. A new interchange with I-4 providing direct access only to the express lanes is proposed to be constructed at Rhode Island Avenue, approximately halfway between Saxon Boulevard and SR 472, with the Rhode Island Avenue extension. The results of the traffic analysis performed for the I-4 corridor and cross-streets indicated that additional access to I-4 was warranted in Segment 4. Due to the existing interchange spacing between Dirksen Drive and SR 472, the only place this access could be provided with a direct connect to the express lanes was at the proposed Rhode Island Avenue extension. The existing typical section for the I-4 mainline consists of three 12-foot travel lanes in each direction. The outside and inside shoulders are 12 feet wide with 10 feet paved. The median width varies from 37 feet to 375 feet and the existing right-of-way (ROW) varies from 300-feet to 630-feet. The typical section in the proposed condition will have three 12-foot general use travel lanes with a 10-foot inside and 12-foot outside shoulder and two 12-foot express lanes with a 4-foot inside and 10-foot outside shoulder, in each direction. A barrier wall between adjacent 10-foot shoulders will separate the express lanes from the general use lanes. A 44-foot transit envelope will be provided in the median for the entire length of Segment 4 (as a reservation for future use) and, auxiliary lanes in both the eastbound and westbound directions will be provided in some areas.

The footprint of the original design concept for the mainline remains essentially the same in the BtU concept. The original design proposed interchange alternatives at Dirksen Drive / DeBary Avenue, Saxon Boulevard, and SR 472. The I-4 Six Laning and St. Johns River Bridge Project would construct the bridge substructure and superstructure for the proposed GUL's and the substructure for the HOV lanes. Additionally, that project would construct the Ultimate improvements to the I-4 mainline, with the exception of the HOV pavement to a point approximately 900 feet north of the St. Johns River Bridge.

The I-4 BtU project proposes alternative concepts for the interchanges at Dirksen Drive / DeBary Avenue, Saxon Boulevard, SR 472, and the proposed Rhode Island Extension.

Dirksen Drive / DeBary Avenue

The Preferred Alternative identified in the original PD&E study for the Dirksen Drive/Debary Avenue interchange proposed maintaining the existing interchange concept with widening of the I-4 eastbound exit ramp to two lanes. No new right-of-way would be required for this alternative.

The Recommended Alternative for I-4 BtU would maintain the existing I-4 westbound on and off ramps as they are today. The I-4 eastbound on ramp would also be maintained as it is today. The I-4 eastbound off ramp would be modified so that the current off ramp only serves motorists that wish to head westbound on Dirksen Drive. A new 1-lane exit ramp from the I-4 eastbound general use lanes which will connect directly to eastbound Dirksen Drive is proposed. This alternative will impact the park and ride lot

that is currently located just east of the interchange. A new park and ride lot is proposed on a vacant parcel located on the west side of the interchange. Additional right of way will need to be purchased to construct this alternative. This alternative is depicted on the concept plans for Segment 4 which are included in Appendix A of the *Preliminary Engineering Report* (June 2017) prepared for this project.

Saxon Boulevard Interchange Alternatives

The Preferred Alternative identified in the original PD&E study for the Saxon Boulevard interchange proposed maintaining the existing full access partial cloverleaf interchange concept with minor ramp gore modifications and reconstruction to consolidate the two I-4 eastbound exit ramps to a single off-ramp.

The Recommended Alternative for I-4 BtU proposes a modified alignment of the interchange and will widen Saxon Boulevard on the south side from four through lanes to six through lanes from the park and ride lot, west of I-4 to Normandy Boulevard, east of I-4. The original northern edge of the roadway would remain the same and the southern edge of the roadway will move by 24 feet, while the ponds will be added to the southern side of the roadway. Additional right-of-way will be needed only on the south side of Saxon Boulevard to accommodate the additional roadway width and proposed pond sites. The existing loop ramps and outer connector ramps in the northwest and southwest quadrants will remain providing connections to and from the I-4 westbound general use lanes. The existing single-lane eastbound off ramp in the southeast quadrant and the I-4 eastbound loop off ramp in the northeast quadrant will be modified due to proposed ponds in both quadrants. Both eastbound ramps are single-lane off ramps that will flare to two lanes and align at a single signalized intersection with Saxon Boulevard. The free-flow right turn from the I-4 eastbound loop ramp will be eliminated. Additional right-of-way will be needed in the southeast quadrant for the new off ramp and floodplain compensation pond, along the south side of Saxon Boulevard to accommodate the additional roadway width and along the north side for proposed ponds. This alternative is depicted on the concept plans for Segment 4 which are included in Appendix A of the *Preliminary Engineering Report* (June 2017) prepared for this project.

SR 472 Interchange Alternatives

The Preferred Alternative identified in the original PD&E study for the SR 472 Boulevard interchange proposed maintaining the existing interchange concept with minor modifications to the ramp gore areas on I-4 and addition of dual left turn lanes for the SR 472 westbound to I-4 westbound entrance ramp. The eastbound on-ramp and off-ramp at SR 472 was re-designed and constructed under a separate project in 2003/2004.

The Recommended Alternative for the BtU is a DDI. A DDI is designed so that each direction of the crossing roadway traffic is split and then crosses over itself. The traffic will temporarily drive on the left hand side of the roadway and then cross back over on the other side of the interchange. In order to avoid wrong way movements through this type of interchange, the opposite directions of the roadway are intersected at an angle that is large enough to appear to the driver as if they are making a through movement and that the other side of the roadway is an intersecting street. This design changes the terminals of the interchange from three phase cycles to two phase cycles as the left turn movements from the roadway are now free flow movements. For this interchange, the I-4 off-ramp movements are signalized due to

high volumes and short weaving distance available. The right turn movements onto I-4 are also signal controlled due to the high volume of left hand movements and short merging distances available. Bike lanes have been provided along SR 472 through the interchange. Improvements to the Kentucky Avenue and Graves Avenue intersections with SR 472 are also incorporated into this alternative. The improvements to the intersections are in the form of additional turn lanes and additional through lanes at the intersections to improve traffic flow. Dual left turn lanes as well as two through lanes will be provided for all legs of the SR 472 and Kentucky Avenue intersection. A right turn lane will be added, providing dual right lanes from northbound Kentucky Avenue onto eastbound SR 472. A dedicated right turn lane will be added at eastbound SR 472 to southbound Graves Avenue and an additional left turn lane, resulting in dual left lanes, will be provided for westbound SR 472 to southbound Graves Avenue traffic. Additional right of way will be required along Graves Avenue, Kentucky Avenue, SR 472 and along I-4 for this interchange concept. This alternative is depicted on the concept plans for Segment 4 which are included in Appendix A of the *Preliminary Engineering Report* (June 2017) prepared for this project.

Rhode Island Avenue Interchange Alternative

An extension to Rhode Island Avenue is being proposed as part of the SR 400 (I-4) BtU PD&E project. This was not proposed during the original PD&E Study. The limits of improvement are from the existing east terminus of Rhode Island Avenue at Veterans Memorial Parkway in Orange City, extending eastward approximately 1¼ miles to Normandy Boulevard in Deltona. The current proposed extension follows the same alignment proposed in plans that were previously completed by Volusia County in 2009. The County has purchased some of the needed right-of-way for the previously proposed alignment; any additional parcels will be acquired under the I-4 BtU project. The proposed Rhode Island Avenue typical section consists of a four-lane urban roadway divided by a 22-foot landscape median, with two 12-foot travel lanes and a 4-foot bike lane in each direction. Eight-foot wide sidewalks, which will be separated from the bike lane by a landscape buffer, will be provided on both sides of the roadway. A direct connect interchange is proposed at I-4 which will provide direct access from the I-4 eastbound express lanes to Rhode Island Avenue and from Rhode Island Avenue to the I-4 westbound express lanes. The Rhode Island Avenue extension and interchange improvements are intended to increase connectivity in this region by providing access between I-4 and US 17-92 (S. Volusia Avenue) to the west and Normandy Boulevard to the east.

A new direct access interchange to the I-4 express lanes is being considered for the future Rhode Island Avenue extension that will also provide a connection between Veterans Memorial Parkway and Normandy Boulevard. Direct access to the express lanes will be provided from a single intersection on the Rhode Island Avenue Bridge. A single lane off-ramp will connect the I-4 eastbound express lanes to Rhode Island Avenue and a single lane on-ramp will provide direct access from Rhode Island Avenue to the I-4 westbound express lanes. A new park and ride facility will be added along Normandy Boulevard to the south of Rhode Island Avenue. To date, Volusia County has purchased 74% of the parcels required to accommodate the future roadway and interchange and has confirmed that all of the parcels acquired for this project were purchased in accordance with the Uniform ROW Relocation Act. The remaining 26% of the parcels still need to be purchased in order to build the roadway. Additional right of way will also need to be purchased along Normandy Boulevard to accommodate the additional lanes needed for

turning movements. This alternative is depicted on the concept plans for Segment 4 which are included in Appendix A of the *Preliminary Engineering Report* (June 2017) prepared for this project.

Environmental Impact Analysis

Impacts identified in the 2002 FEIS and RODs (2002 and 2005) for the portion of the I-4 Ultimate Project currently under construction are to be considered approved and existing conditions. The project has secured the appropriate permits, provided the necessary mitigation, and has carried out the commitments identified to satisfactorily offset the impacts identified. The following discusses those impacts that have been identified in the study update document found in the Evaluation Matrix Tables 3.80, 3.81, and 3.82 and apply to Segments 2, 3 and 4 of the I-4 BtU Project Area.

Land Use Impacts

The I-4 BtU project is not expected to alter future land use designation as established in the previous study. The majority of the project corridor had already been developed at the time of the previous study, with even more development occurring in the ensuing years. Right-of-way acquisitions for the project are primarily proposed for stormwater ponds, as the roadway expansion has been designed to utilize the existing right-of-way wherever possible. Impacts to land use may occur due to access changes resulting from the addition of and removal of ramps along the interstate. Indirect land use impacts may occur due to residents moving away from their homes as the interstate and stormwater ponds encroach on neighborhoods in some locations.

Displacements and Relocations

The I-4 BtU project will require impacts to parcels in all three segments as follows:

- Segment 2 will impact 30 parcels (approximately 25 acres) including 1 business and 1 residence
- Segment 3 will impact 49 parcels (approximately 41 acres) including 1 business and 3 residences
- Segment 4 will impact 127 parcels (approximately 72 acres) including 1 business and 40 residences
- There is the potential for relocations at 47 parcels (3 businesses and 44 residences)

Of the 206 parcels proposed to be impacted, the majority (159) are undeveloped and do not require any relocation of either a business or residence. The FDOT does not anticipate a disproportionate impact on minority or low income communities as a result of the potential relocations. The FDOT will carry out a right-of-way and relocation program in accordance with Florida Statute 339.09 and the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Public Law 91-646, as amended by Public Law 100-17.) This project has been developed in accordance with Title VI and other federal and state nondiscrimination authorities. The project will not discriminate against anyone on the basis of race, color, national origin, age, sex, religion, disability, or family status.

Wetlands

The I-4 BtU project preliminary estimates suggest that 4.43 acres of jurisdictional wetlands and 9.32 acres of other surface waters will be impacted by the proposed project in Segment 2, 11.86 acres of jurisdictional wetland communities and 6.75 acres of other surface waters will be impacted in Segment 3, and 68.61 acres of jurisdictional wetland communities and 45.24 acres of other surface waters will be

impacted by the proposed I-4 improvements and Rhode Island Avenue extension in Segment 4. A conceptual mitigation plan was developed for the project satisfying the requirements of Part IV Chapter 373, F.S. and 33 U.S.C.s.1344. The mitigation plan includes the use of mitigation bank credits to offset the unavoidable impacts proposed by the project. Mitigation Bank service areas were utilized in the plan and mitigation credit availability for the Shingle Creek Basin of the Kissimmee River Hydrologic Basin, the Wekiva River, Lake Jesup, the St. Johns River (Canaveral Marshes to Wekiva), and St. Johns River (Wekiva to Walaka) Basins was analyzed to ensure that sufficient credits are available for this project. FDOT has initiated the process of securing bids for mitigation credits from approved mitigation banks in the impacted basins for this project.

A draft copy of the Evaluation and Assessment of the I-4 Ultimate and Beyond the Ultimate 2002 FEIS and RODs (2002 and 2005) was provided to the USACE for review under their regulatory policies and to determine if the project met Corps requirements. Concurrence with the project assessment of Waters of the U.S. was provided via an email dated June 2, 2017, a copy of which can be found in the Agency Coordination Section 6.1.2. of the Evaluation Document. The evaluation conducted has determined that there is no practicable alternative to the use of wetlands and that all reasonable and feasible measures to minimize harm to the wetlands have been included in the project.

Threatened and Endangered Species

The I-4 BtU PD&E Study included updated evaluations of the project study area for listed species based upon the most current regulatory listings. Study findings and potential effects determinations were documented in three Endangered Species Biological Assessment reports (one for each segment). In a letter dated February 28, 2016, USFWS concurred with the determinations of may affect, not likely to adversely affect for the sand skink, eastern indigo snake, wood stork, Florida manatee, and listed plant species. Previously at a meeting conducted December 17, 2015, USFWS staff concurred with the “no effect” determinations for the crested caracara, snail kite, and red-cockaded woodpecker. The I-4 BtU project identified occupied Florida scrub-jay habitat within Segment 4 and provided a “May Affect, Likely to Adversely Affect” determination for this species. A separate package requesting formal consultation on the Florida scrub-jay with this determination was submitted by FHWA to USFWS on February 16, 2016. A Biological Opinion dated July 5, 2016 was issued by USFWS to address the project impacts to and corresponding mitigation measures for the Florida Scrub-Jay. The USFWS concluded that the project “May Affect, but was not Likely to Jeopardize” the continued existence of the Florida Scrub-Jay. A copy of the concurrence letter and Biological Opinion can be found in the Comments and Coordination section (Section 6.0) of the EIS Update Document.

As a result of the consultation with USFWS for threatened and endangered species, FDOT has agreed to the following commitments:

- The project identified occupied 4.68 acres of Florida scrub-jay habitat which is proposed to be impacted. FDOT commits to provide compensatory mitigation to offset the potential impacts to occupied territory in the form of contribution to The Nature Conservancy fund for the West Volusia County Metapopulation at a ratio of 2:1 in accordance with the USFWS Florida Scrub-Jay

Umbrella Habitat Conservation Plan, as described in the Biological Opinion issued by USFWS on July 5, 2016 for this project.

- FDOT commits to include a construction commitment to prevent clearing and grubbing within the areas of occupied scrub-jay habitat during nesting season (March 1 – June 30) to avoid any potential harm to individual birds should they be present. These areas are identified on the project exhibits in the ESBA and EIS Update and will be identified on the design plans.
- Unauthorized take of Florida-scrub-jays associated with the proposed activities should be immediately reported by notifying the Jacksonville Ecological Services Field Office at (904) 731-3336. If a dead Florida scrub-jay is found in the project area, the specimen should be thoroughly soaked in water and frozen for later analysis of cause of death.
- Eastern indigo snake habitat has been identified within the project limits. The project will utilize the US Fish and Wildlife Service Standard Protection Measures for the Eastern Indigo Snake, at the US Fish and Wildlife Service
Link:http://www.fws.gov/northflorida/IndigoSnakes/20130812_Eastern_indigo_snake_Standard_Protection_Measures.htm.
- During permitting, all potential gopher tortoise habitat that could be impacted by the project will be systematically surveyed according to the current guidelines published by the Florida Fish and Wildlife Conservation Commission. If gopher tortoise burrows are found, all practicable design measures will be employed to avoid impacts to the burrows. For burrows which cannot be avoided, a permit will be obtained from FWC for relocation of gopher tortoises and commensals, and relocation will be performed at a time as close as practicable to the start of construction activities at the site of the burrows.
- During permitting, FDOT will coordinate with the permitting agencies to quantify and provide compensation for any unavoidable impacts to wood stork suitable foraging habitat (SFH). Mitigation for these impacts will be provided within the service area of a USFWS-approved wetland mitigation bank that provides an amount of habitat and foraging function equivalent to that of the impacted SFH in accordance with the *Corps of Engineers and U.S. Fish and Wildlife Service Effect Determination Key for the Wood Stork in Central and North Peninsular Florida*.
- As required by FDOT Standard Specifications, the construction of equipment staging areas for storage of oils, greases, fuel, road bed material, and equipment maintenance will be sited in previously disturbed areas not adjacent to any streams, wetlands, or surface water bodies. The staging areas will be surveyed for listed species prior to their use. Also as required by FDOT Standard Specifications, if protected species are identified unexpectedly within the construction area during construction, coordination will be initiated with the appropriate resource agencies to avoid or mitigate impacts.

The proposed project will avoid and minimize impacts to wildlife and their habitat to the greatest practicable extent. Unavoidable impacts will be mitigated through a combination of actions designed to enhance local and regional ecological and hydrologic connectivity where possible. Those actions constitute the current recommendations developed and refined by staff and consulting environmental scientists representing various federal and state agencies and nongovernmental organizations, using the most current record and project specific scientific information available. The FDOT routinely reevaluates PD&E Study results and commitments prior to and during the project design phase, and again prior to right of way acquisition and construction. Therefore, the wildlife and habitat recommendations proposed will be subject to reevaluation in the future. Appropriate modifications to the recommended actions may be made in the event that the latest science, design constraints or other relevant changes in circumstance so dictate.

Essential Fish Habitat (EFH)

Research and analysis conducted during the I-4 BtU Study indicated that a portion of Segment 4 is considered to be within the South Atlantic Fishery Management Council's (SAFMC) area of jurisdiction. Only one of the representative species (White shrimp (*Litopenaeus setiferus*)) managed under the Magnuson-Stevens Fishery Conservation and Management Act (16 USC 1801 et seq. Public Law 104-208) has a potential for occurrence in the project area.

The project proposes to expand the current six-lane configuration to the ultimate ten-lane design which will impact areas on both sides of the highway at Lake Monroe and the St. Johns River. The expansion of the travel lanes and the addition of treatment swales are anticipated to impact both EFH and non-EFH wetlands along the corridor. 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-EFH wetlands in other areas. Mitigation is being proposed to offset the EFH impacts, and would involve adding connections between Lake Monroe and the wetlands west of I-4. This will be accomplished via the addition of a minimum 100-foot long bridged section in each direction.

Coordination relating to EFH and potential impacts took place during the study with staff from NMFS. The draft *Essential Fish Habitat Technical Memorandum* (June 2015) was submitted for review and comment. Based upon the comments received, the proposed improvements were modified to reflect the bridge structures described previously and the UMAM analysis addressing the impacts and mitigation was revised. Upon review of this new information, NMFS staff concurred with the analysis and provided approval of the design and authorization of the proposed impacts in the letter dated June 16, 2016, with the provision that FDOT would commit to a monitoring program to assess tidal exchange at the bridge locations and allow resource agencies to assess performance standards and provide a basis for corrective actions if necessary. The consultation has been completed in accordance with the Magnuson-Stevens Fishery Conservation and Management Act. A copy of the letter can be found in the Comments and Coordination section of the EIS Update Document.

Cultural Resources

The I-4 BtU PD&E Study conducted updated Cultural Resource Assessment Surveys (CRASs) for each segment (Segments 2, 3, and 4) of the project in accordance with the procedures contained in 36 CFR Part

800 and including background research and a field survey coordinated with the State Historic Preservation Officer (SHPO). These CRASs serve as an addendum to three previous reports: the 1997 report by Archaeological Consultants Inc. (ACI) titled *Cultural Resource Assessment Survey, Interstate 4 Section 3 Project Development and Environment Study from SR 472 to West of I-95 in Volusia County, Florida* (Florida Master Site File [FMSF] Survey No. 5249) (ACI 1997), the 1998 report by ACI titled *I-4 (S.R. 400) Project Development and Environmental Study from C.R. 532 (Osceola-Polk Line Road) to S.R. 528 (Beeline Expressway) in Osceola and Orange Counties, Florida* (Florida Master Site File [FMSF] Survey No. 5287) (ACI 1998a), and a subsequent report titled *Cultural Resource Assessment Survey, Interstate 4 Section 2 Project Development and Environment Study from Bee Line Expressway (S.R. 528) to S.R. 472 Interchange, Orange, Seminole, and Volusia Counties, Florida* (FMSF Survey No. 5707) (ACI and Janus Research 1999). The regional prehistory and history of the current project area are consistent with those described in the previous reports and were not repeated in the current study. The purpose of these surveys was to update the previous I-4 corridor studies, which involves locating, identifying, and bounding archaeological resources within proposed pond locations, and updating the inventory of historic structures and potential districts within the project APE. Previously undocumented resources identified in the APE were assessed for their potential for listing in the NRHP.

The CRAS reports for Segments 2, 3, and 4 were submitted to FHWA and SHPO under a single transmittal letter from FDOT dated February 25, 2016.

The survey resulted in 55 properties being identified. The Federal Highway Administration, after application of the National Register Criteria of Significance, found that the site(s) 8SE00077 (Lake Monroe Bridge), 8SE02138 (CSX Railroad), 8SE02823 (ACL Railroad Bridge over St. Johns River) were eligible for listing on the National Register of Historic Places, and the remaining resources were not eligible for listing. The SHPO rendered the same opinion (DHR concurrence from May 23, 2016, with an additional letter providing concurrence to an addendum to Segment 3 CRAS signed on May 17, 2017). Furthermore, SHPO determined that SE2755 is eligible for the NRHP as a contributing resource to 8SE02138. SHPO also determined that resource 8SE02823 is individually eligible for the NRHP and contributes to 8SE02138.

Based on the fact that no archaeological or historical sites or properties are expected to be encountered during subsequent project development, the Federal Highway Administration, after consultation with the SHPO, has determined that no National Register properties would be impacted. The SHPO coordination and concurrence letters are included in the Comments and Coordination section of the EIS update document.

Noise

For the I-4 BtU Noise Study, the study was conducted utilizing the revised regulations established by FHWA in 23 CFR 772 and the procedures established in Part 2, Chapter 17 "Noise", of the FDOT PD&E Manual. The Federal Highway Administration's (FHWA) Traffic Noise Modeling (TNM) Version 2.5 computer program was used to determine if noise abatement was warranted, and, if so, considered reasonable and feasible for any noise-sensitive sites. During the Noise Studies for the I-4 BtU project, noise related impacts (sound levels that were predicted to approach or exceed the Noise Abatement Criteria) were

predicted for all three segments. Noise abatement measures were evaluated for the noise sensitive sites predicted to approach or exceed FHWA criteria. The results were detailed in the 3 Noise Study Reports and are shown in Section 3.4.2 of the Evaluation and Assessment of the I-4 Ultimate and Beyond the Ultimate 2002 FEIS and RODs (2002 and 2005) document.

- Segment 2 contained eight (8) Noise Sensitive Areas (NSAs), with 77 potential noise-sensitive sites with predicted traffic noise impacts. Two noise barriers were considered reasonable and feasible in this segment; a 22-foot tall wall at the Monterey Lakes Apartments and a 14-foot tall wall at the Sea Isle Luxury Apartments which will provide abatement for 16 and 30 receptors, respectively. The barrier analysis also indicated that no reasonable or feasible measures are achievable for the remaining 31 impacted sites within the impacted NSAs (NSA B, NSA E, NSA F, or NSA G). The barriers for these sites either did not meet the noise reduction goal or failed to meet the cost per benefited receptor criteria established by FDOT.
- Segment 3 contained fifteen (15) NSAs, with 130 potential noise-sensitive sites with predicted traffic noise impacts. One noise barrier was considered reasonable and feasible in this segment; a 10-foot or 12-foot tall barrier at the Pine Bay Drive Subdivision providing abatement to 25 impacted receptors. The barrier analysis also indicated that no reasonable or feasible measures are achievable for the remaining 105 impacted sites within the impacted NSAs (NSA C, NSA D, NSA E, NSA F, NSA G, NSA H, NSA L, and NSA O). The barriers for these sites either did not meet the noise reduction goal or failed to meet the cost per benefited receptor criteria established by FDOT.
- Segment 4 contained eight (8) NSAs, with 399 potential noise sensitive sites with predicted traffic noise impacts. Two noise barriers were considered reasonable and feasible in this segment; a 14-foot tall barrier along the shoulder of westbound I-4 at Dirksen Drive and a 16-foot tall barrier at the right-of-way between Enterprise Road and Haversham Road providing abatement for 44 and 24 receptors, respectively. Existing sound barriers will remain in place and continue to provide abatement for 233 receptors. The barrier analysis also indicated that no reasonable or feasible measures are achievable for the remaining 98 impacted sites within the impacted NSAs (NSA B, NSA D, NSA F, and NSA H). The barriers for these sites either did not meet the noise reduction goal or failed to meet the cost per benefited receptor criteria established by FDOT.

Contamination

The I-4 BtU Study identified potential contamination sites within Segments 2, 3, and 4 that may have existed at the time of the original study or occurred after the completion of the study.

- Segment 2 could require partial or total right-of-way acquisition of 8 Medium Risk sites and has 4 Medium Risk Pond sites.
- Segment 3 could require partial or total right-of-way acquisition of 13 Medium Risk sites and 2 High Risk sites, and has 4 Medium Risk Pond sites and 2 High Risk Pond sites.
- Segment 4 could require partial or total right-of-way acquisition of 8 Medium Risk sites and has 6 Medium Risk Pond sites.

Level II Contamination Screenings were performed on all Medium and High Risk sites as a supplement to the CSER that was conducted during the study. Though it is not determined with certainty if there will be any impacts from the project to any known contamination sites, the recommendations made in the Level II studies will be carried forward into design to ensure that proper measures will be taken should any of the identified parcels be required for any portion of the project. This proposed project contains no known significant contamination.

Air Quality

For the I-4 BtU PD&E Study, the proposed project segments were reviewed for air quality impacts consistent with the most current guidance provided by the FHWA. Each segment of the project was subjected to FDOT's screening model, CO Florida 2012 (as part of the *Air Quality Analysis Technical Memorandum* completed in June 2015) to produce estimates of one-hour and eight-hour CO at default air quality receptor locations. Estimates of CO were predicted for the default receptors which are located 10 feet to 150 feet from the edge of the roadway. Based on the results from the screening model run for each segment, the highest project-related CO one-hour and eight-hour levels are not predicted to meet or exceed the one-hour or eight-hour NAAQS for this pollutant for either the Build or No-Build alternatives. As such, the project "passes" the screening model.

Orange County, Seminole County, and Volusia County are currently designated as being attainment under the Clean Air Act for the following air pollutants: *ozone, nitrogen dioxide, particulate matter (2.5 microns in size and 10 microns in size), sulfur dioxide, carbon monoxide and lead*. Therefore, the Clean Air Act conformity requirements do not apply to the project. Therefore, the project will not have negative impacts on air quality as a result of the proposed improvements.

Floodplains and Floodways

The I-4 BtU Study conducted pursuant to Executive Order 11988, "Floodplain Management", identified floodplain impacts in Segments 3 and 4 but not in Segment 2. Segment 3 is anticipated to have impacts to 6.43 acre-feet of floodplains, while Segment 4 will have 71.0 acre-feet of floodplain impacts.

In accordance with FDOT's PD&E Manual, Part 2, Chapter 24, Section 24-2.1, Figure 24.1 "Floodplain" Statements, the proposed corridor has been evaluated to determine the impact of the proposed hydraulic modifications. Hydraulic improvements are grouped into six categories based upon the type of the hydraulic improvements and estimated floodplain impact. The proposed project can be best described in two categories:

Category 3: Projects involving modification to existing drainage structures. The proposed project does not involve the replacement of any existing drainage structures or the construction of any new drainage structures. Projects that affect flood heights and flood limits, even minimally, may require further evaluation to support statements that emphasize the insignificance of the modifications (FDOT PD&E Manual, Part 1, Chapter 24). "The modifications to drainage structures included in this project will result in an insignificant change in their capacity to carry floodwater. This change will cause minimal increases in flood heights and flood limits. These minimal increases will not result in any significant adverse impacts on the natural and beneficial floodplain values or any significant change in flood risks or damage. There

will not be a significant change in the potential for interruption or termination of emergency service or emergency evacuation routes. Therefore, it has been determined that this encroachment is not significant.”

Category 4: Projects on existing alignment involving replacement of existing drainage structures with no record of drainage problems. The proposed project does not involve replacement activities that would reduce the hydraulic performance of existing facilities. Also, there should be no record of drainage problems and no unresolved complaints from residents in the area (FDOT PD&E Manual, Part 1, Chapter 24). “The proposed structure will perform hydraulically in a manner equal to or greater than the existing structure, and backwater surface elevations are not expected to increase. As a result, there will be no significant adverse impacts on natural and beneficial floodplain values. There will be no significant change in flood risk, and there will not be a significant change in the potential for interruption or termination of emergency service or emergency evacuation routes. Therefore, it has been determined that this encroachment is not significant.”

As part of the design process, an analysis of avoidance and minimization for impacts to floodplains was conducted. Because the project involves the expansion of an existing limited access facility, the design of the mainline improvements was constrained by the existing right-of-way and alternatives were not considered outside of the existing corridor. The location of proposed interchanges and stormwater ponds considered locations outside of the existing right-of-way in some instances, though many ponds and interchange concepts involve the use of existing facilities where feasible. As the corridor contains significant development, there is limited space available for use for the required stormwater treatment and storage needs. The project team based the final recommended location of pond sites and interchange improvements on locations that provided the appropriate goals of the project while balancing impacts to wetlands, surface waters, floodplains, and listed species, as well as the availability of the land for project use. In those areas where floodplain impacts were unavoidable, appropriate compensatory storage is proposed per the regulatory guidelines that govern floodplain use. When possible, regional facilities or joint use facilities were proposed in an effort to not only reduce impacts but to provide innovative use of the available land with adjacent development needs. Further refinement of floodplain impacts will occur during permitting with state regulatory agencies.

Regulatory Floodways

FEMA’s regulations (Section 9.4) state: “Floodway means that portion of the floodplain which is effective in carrying flow, within which this carrying capacity must be preserved and where the flood hazard is generally highest, i.e. where water depths and velocities are the greatest. It is that area which provides for the discharge of the base flood so the cumulative increase in water surface elevation is no more than one foot.” FEMA's standards allow for no more than a 1 foot increase in the base flood elevation and no increase on the regulatory floodway elevation as a result of a project. It has been determined, through consultation with local, state, and federal water resources and floodplain management agencies that there is no regulatory floodway involvement on the project and that the project will not support base floodplain development that is incompatible with existing floodplain management programs.

Utilities

A number of additional utility lines have been identified within the project corridor during the current I-4 BtU Study.

- Segment 2 has 274 utilities identified within the project corridor.
- Segment 3 has 289 utilities identified within the project corridor.
- Segment 4 has 244 utilities identified within the project corridor.

Most utility companies have the capability to adjust their services without causing major inconveniences to the customers. As a result, mitigation measures, to the maximum extent feasible, will include the following:

- Maintaining utility connections in temporary locations;
- Minimizing the time without service;
- Installing alternative or new service before disconnecting the existing service; and
- Allowing service disruption only during periods of non-usage or minimum usage.

Section 4(f), Water Quality, and Public Controversy

The proposed project does not propose any impacts to any Section 4(f) properties, and with the strict adherence to the use of Best Management Practices, State Permit Conditions, and FDOT's *Standard Specifications for Road and Bridge Construction*, is not expected to have any impacts on water quality. The project has been subjected to an intense Public Involvement Process and no items of controversy have arisen through this process, which was documented earlier in this document and is detailed in Section 6.1 of the Evaluation and Assessment of the I-4 Ultimate and Beyond the Ultimate 2002 FEIS and RODs (2002 and 2005) document.

Cumulative Effects

The summation of all direct and indirect effects over time is collectively referred to as cumulative effects or impacts. The CEE Handbook defines cumulative effects as "...the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time" (40 CFR 1508.7). There are numerous regulatory agencies and an even greater number of differing regulations or guidance regarding cumulative effects, all with varying definitions and implementation strategies. For the purpose of this study, the evaluation of the cumulative effects is based on and structured to comply with NEPA.

The results of the analysis indicated that the cumulative effects would not have substantial local, regional, or national impact to the human environment. A number of additional projects have either been proposed or constructed in the interim since the original study was completed, contributing both negative and positive cumulative effects. The I-4 BtU Project proposes improvements to intermodal transportation

via rail envelope or transit corridors. In coordination with other planned initiatives in the area proposed by others, these represent a beneficial cumulative effect.

All of the impacts proposed for the I-4 improvements from SR 435 to SR 434 which is currently under construction are now considered as 'existing conditions.' There has been a significant amount of development that has occurred within the project corridor since the completion of the original study, further impacting the natural, physical, and social environments. Because of the stringent local, state, and federal regulatory guidelines for development, impacts from these projects have all been appropriately mitigated for. The proposed project has been adopted into the LRTP by MetroPlan Orlando and has been presented and given concurrency from the various municipal entities under their local Comprehensive Plans or growth plans.

However, the continued development along the corridor has reduced or eliminated many natural features adjacent to I-4. The cumulative effects analysis for the I-4 BtU project examined the project's proposed direct and indirect impacts to the communities, wetlands, floodplains, listed species and habitat, and essential fish habitat. As there are no direct impacts anticipated from Section 4(f) properties or Water Quality, there are no associated cumulative effects. FHWA finds that, while there were significant social impacts associated with the Ultimate portion of the project, these impacts were addressed and have been or are being acceptably mitigated. There are no additional direct, indirect, or cumulative significant impacts associated with the BtU project that would be considered significant. Further, there will be positive benefits to local communities and the region related to the easing of traffic congestion and adding more predictability to travel times.

Communities

Direct impacts to communities will be minimal for this project. The impacts identified in the original FEIS study were all to occur within the project segment from SR 435 to SR 434 which is currently under construction. All mitigation measures that were approved have been implemented during the current construction phase for the project. The I-4 BtU project does not propose any significant adverse impacts to communities or other social-cultural areas. The impacts proposed to parcels outside of the existing right-of-way will be primarily for stormwater pond sites which provide both water quality treatment and water storage, and the project will utilize the existing right-of-way for the mainline improvements. The effect of relocations and right-of-way acquisition is generally consistent with the growth trends that have and will occur within the project study area. Neighborhood and community cohesion is not expected to be impacted in any significant way, and areas of impact (noise, access management) are being abated to the extent possible.

Benefits such as economic growth for the Orlando Metropolitan area, better travel time expectations for commuters, regional connectivity, and improved public safety will be provided to the local communities as a result of this project and are considered beneficial cumulative effects. Managed Express Lanes are proposed to meet the Level of Service demand and satisfy the traffic demands of the corridor. Improvements to cross-streets and arterial roadways surrounding the interchanges serve to improve the traffic operations. The results of public input, both from citizens attending the public meetings and from the municipal governments and planning boards have been incorporated into the project to meet the

local desires. This has been incorporated into the selection of preferred locations for pond sites and shaped the design of improvements for the interchanges and arterial roadways that serve the local communities along the corridor. As it is primarily these communities and the associated growth that provides the demand for the improvements, the project is proposed to improve travel for the users. With “time” being a core value for the local citizens, improvements that lead to enhanced mobility and improved traffic operations work to benefit the users.

Wetlands

As Florida’s natural communities have been developed over many years to support population growth, water quality has been degraded due to the introduction of fuel, oil, and other pollutants associated with the improvements. Roadway construction and an increase in the number of vehicles on the roads has increased the amount of pollution carried by runoff into adjacent waterways and wetlands. However, the project study area has seen tremendous growth since the original study was completed, and the majority of natural areas have been converted via development. With this in mind, the potential for cumulative impacts to wetlands is limited, as those that remain have already been affected (directly or indirectly) by all of the development. However, coordination with state and federal regulatory agencies and the identification of any significant resources within the project study area was beneficial in shaping the design. Discussion with SJRWMD regarding drainage basins and the Wekiva River was important in keeping stormwater facilities and drainage outfalls away from this resource. Coordination with both USACE and NMFS regarding impacts to the wetlands associated with the St. Johns River resulted in the proposal of linear drainage facilities along the portion of the roadway at the DeBary Bayou. In addition, existing regulations govern effects to water resources, which minimizes the potential effects. Wetland resources in Segments 2 and 3 have already experienced a decline through development, and the trend continues in Segment 4, though Federal, State, and local protections already aid in minimizing the cumulative impacts beyond the project boundaries. Mitigation measures for impacts are required and are intended to off-set degradation of natural resources. As a result, cumulative effects to wetlands and water resources are not anticipated to be significant. Improvements in stormwater engineering, Best Management Practices, and construction engineering and inspections have led to a reduction in both direct and indirect impacts to water resources, and provide a benefit to area water quality. This would at the least offset any cumulative impacts, and in the best case, provide beneficial cumulative effects as a result of the project.

Floodplains

Floodplains are sparsely present within the study limits of Segments 2 and 3, with more coverage in Segment 4; however, no floodways are located within the project area. An analysis of floodplain impacts for this project in Segments 3 and 4 was conducted (there are no floodplain impacts in Segment 2). Floodplain compensation ponds are being proposed to replace (at a minimum) the capacity that is being lost by the project impacts. Any drainage structures that are being impacted are to be modified or replaced to provide the required capacity according to the regulatory guidelines. The analysis has demonstrated that the modifications to drainage structures included in this project will result in an insignificant change in their capacity to carry floodwater. The proposed structures will perform hydraulically in a manner equal to or greater than the existing structure, and backwater surface elevations

are not expected to increase. Any changes will cause minimal increases in flood heights and flood limits. These minimal increases will not result in any significant adverse impacts on the natural and beneficial floodplain values or any significant change in flood risks or damage. There will not be a significant change in the potential for interruption or termination of emergency service or emergency evacuation routes. Therefore, it has been determined that this encroachment is not significant. As a result, the project impacts are not anticipated to have any local or regional impacts to floodplains, and will not result in any cumulative impacts.

Listed Species and Habitat

The study has identified occupied Florida scrub-jay habitat within Segment 4, and the state-threatened gopher tortoise occurs throughout the project corridor (FDOT has made a commitment to re-survey and relocate gopher tortoise burrows identified as being impacted by the project). Consultation with USFWS to address proposed direct impacts to occupied Florida scrub-jay habitat has resulted in the determination that the project will impact 4.68 acres of occupied habitat in Segment 4, and that mitigation will be provided to the Volusia County portion of the Nature Conservancy Umbrella Plan to offset these impacts at a two to one ratio. A Biological Opinion to address the potential impacts for all federally listed species was issued on July 5, 2016 to formally address the impacts. The BO concluded the project may affect the Florida scrub-jay, while through informal consultation determined that the project may affect but would not likely adversely affect the sand skink, eastern indigo snake, wood stork, Florida manatee, and federally listed plants.

The primary impacts to listed species comes from the conversion of wildlife habitat to residential, commercial, and public infrastructure development, and potential fragmentation of habitat. Since I-4 is an already existing corridor, and the improvements proposed are primarily within the existing right-of-way, impacts to potential habitat are limited to stormwater pond sites. The evaluation conducted in coordination with the USFWS has determined that the project will not have any significant effect on listed species. The impacts to Florida scrub-jay habitat are proposed in an area that has already undergone development in the recent years, where a small sub-population exists. Numerous projects in this area have impacted the habitat, which represents a small area of suitability in Western Volusia County. Much of the Florida scrub-jay population in the County occurs away from the project area, where several preserves have been established for the birds. The impacts proposed do not represent a significant impact to Florida scrub-jays, nor any other listed species. The mitigation contribution made by the project to offset the proposed impact to Florida scrub-jay habitat provides support to the management of the larger populations residing within the preserves managed by the Nature Conservancy in Volusia County. The ongoing effort made by these preserves for the Florida scrub-jay far outweighs the negligible impact to habitat proposed by this project.

Essential Fish Habitat

The project as proposed would impact both Essential Fish Habitat (EFH) and non-EFH wetlands along the roadway at Lake Monroe and the DeBary Bayou in Segment 4. These areas have been classified as EFH within the South Atlantic Fishery Management Council's (SAFMC) area of jurisdiction. 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-EFH wetlands in other areas. Mitigation is

being proposed to offset the EFH impacts, and would involve adding connections between Lake Monroe and the wetlands west of I-4. This will be accomplished via the addition of a minimum 100-foot long bridged section in each direction of the roadway. Staff from the National Marine Fisheries Service has reviewed the EFH Assessment and project plans and approved the concept design, impacts, and mitigation proposal. The location of the project at Lake Monroe represents the terminus of designated essential fish habitat for the St. Johns River. Impacts at this location would not produce cumulative effects to the habitat as there is no additional habitat downstream. The mitigation that is proposed will result in a benefit to over 250 acres of adjacent EFH in the DeBary Bayou west of I-4. The improvements to this habitat represent a beneficial cumulative effect as it relates to essential fish habitat.

Measures to Minimize Harm

Avoidance and minimization measures are intended to avoid and/or reduce the adverse impacts of an action to the social, physical, and natural environment. The project incorporated all practical measures to avoid or minimize environmental harm. Although some impacts are to occur, every effort will continue to be made to minimize those impacts through the institution of reasonable and feasible measure that are applicable to each situation. FDOT has included the following commitments to minimize impacts to the human and natural environment:

1. Displacements and Relocations – FDOT will carry out a relocation assistance program in accordance with The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, Public Law 91-646, as amended, for Federal and Federally Assisted Programs (23 CFR and 49 CFR, Part 24, Sections 334.048, 339.09 and 421.55, Florida Statutes Rule 14-66, Florida Administrative Code).
2. Cultural Resources - FDOT commits to documenting and evaluating any structures that reach historic age prior to project completion as part of a supplemental CRAS. FDOT commits to avoidance of the potentially eligible Paola Church Cemetery (8SE02326) and the eligible Lake Monroe Outlet Midden Site (8VO00053). The staging of construction equipment, materials, or vehicles will be prohibited during the project. The limits of the archaeological midden will be identified on all project plans to ensure compliance. The Lake Monroe Outlet Midden Site extends adjacent to and beneath I-4 from Lake Monroe to approximately .45 miles north; the northern and southern edges of the site boundary will be demarcated in the field in proximity to the Interstate to further ensure avoidance.
3. Wildlife and Habitat – The utilization of the following specific wildlife and habitat commitments and mitigation measures for unavoidable impacts are recommended to minimize the overall impacts to wildlife from this project:
 - a. As required by FDOT Standard Specifications, the construction equipment staging areas for storage of oils, greases, fuel, road bed material and equipment maintenance will be sited in previously disturbed areas not adjacent to any streams, wetlands, or surface water bodies. The staging areas will be surveyed for listed species prior to their use. Also, as required by FDOT Standard Specifications, if protected species are identified unexpectedly within the construction area during construction, coordination will be initiated with the appropriate resource agencies to avoid or mitigate impacts.

- b. Eastern indigo snake habitat has been identified within the project limits. Utilize the US Fish and Wildlife Service (USFWS) Standard Protection Measures for the Eastern Indigo Snake, at the US Fish and Wildlife Service Link:
http://www.fws.gov/northflorida/IndigoSnakes/20130812_Eastern_indigo_snake_Standard_Protection_Measures.htm
- c. During permitting, all potential gopher tortoise habitat that could be impacted by the project will be systematically surveyed according to the current guidelines published by the Florida Fish and Wildlife Conservation Commission (FFWCC). If gopher tortoise burrows are found, all practicable design measures will be employed to avoid impacts to the burrows. For burrows which cannot be avoided, a permit will be obtained from FFWCC for relocation of gopher tortoises and commensals, and relocation will be performed at a time as close as practicable to the start of construction activities at the site of the burrows.
- d. During permitting, FDOT will coordinate with the permitting agencies to quantify and provide compensation for any unavoidable impacts to wood stork suitable foraging habitat (SFH). Mitigation for these impacts will be provided within the service area of a USFWS-approved wetland mitigation bank that provides an amount of habitat and foraging function equivalent to that of the impacted SFH in accordance with the *Corps of Engineers and U.S. Fish and Wildlife Service Effect Determination Key for the Wood Stork in Central and North Peninsular Florida*.
- e. During permitting, FDOT will re-survey for listed species to ensure no changes have occurred since the completion of the PD&E Study.
- f. FDOT has incorporated the findings from the Biological Opinion from USFWS addressing impacts to listed species for the project, including:
 - Providing compensatory mitigation to offset the 4.68 acres of impacts to occupied scrub-jay habitat in Segment 4 at a ratio of 2:1 to the Nature Conservancy Umbrella Plan mitigation fund.
 - Including a construction commitment to prevent clearing and grubbing within the areas of occupied scrub-jay habitat during nesting season (March 1 – June 30) to avoid any potential harm to individual birds should they be present. These areas will be identified on the project exhibits in the ESBA and EIS Update and will be identified on the design plans.
 - Unauthorized take of Florida-scrub-jays associated with the proposed activities should be immediately reported by notifying the Jacksonville Ecological Services Field Office at (904) 731-3336. If a dead Florida scrub-jay is found in the project area, the specimen should be thoroughly soaked in water and frozen for later analysis of cause of death.
4. Wetlands – The following commitments are proposed – to ensure that the project does not result in adverse impacts to wetland communities and the functions they provide:
 - a. During the permitting process, FDOT will coordinate with federal and state agency personnel to ensure minimization and reduction of adverse wetland impacts have been explored to the fullest extent of the project while meeting engineering standards and practice.

- b. Wetland impacts (direct and secondary) that will result from the construction of this project will be mitigated pursuant to requirements of Part IV. Chapter 373, F.S. and 33 U.S.C.s.1344, as appropriate. Where feasible, the FDOT is committed to minimize direct, secondary, and temporary impacts.
 - c. During the development of the final design, a Quality Enhancement Strategies (QES) plan addressing the avoidance and minimization for losses of waters of the United States and alternative design changes to minimize wetland impacts (without jeopardizing safety) will be committed by others.
5. Essential Fish Habitat – The following commitments are a result of the coordination with NMFS to address the proposed 38.4 acres of impacts in Lake Monroe and the DeBary Bayou for areas classified as EFH.
- a. To offset impacts to EFH, FDOT commits to constructing a 100-foot long bridge in each direction along I-4 in the area of Lake Monroe and the DeBary Bayou to provide for the enhancement of tidal wetlands.
 - b. As a condition of the coordination, FDOT commits to a monitoring program that allows resource agencies to assess performance standards and the need for corrective actions if the anticipated connectivity is not achieved.
6. Contamination – Project commitments to address potential contamination sites include:
- a. FDOT commits to conducting Level II Contamination Screenings on all Medium and High Risk Rated sites before establishing a final determination. This will include investigating previous PD&E Studies and Design Projects covering the project area and its surroundings.
 - b. All bridges and other structures which will require possible demolition or retrofit should be tested for asbestos containing materials, lead-based paint or any other hazardous materials prior to construction.
 - c. Should any parcels containing medical facilities, doctor offices, hospitals, or drug stores be acquired, they should be tested for asbestos, lead-based paint, x-ray equipment, lead-lined walls, chemicals and pharmaceuticals prior to demolition.
7. Noise – FDOT is committed to the construction of feasible and reasonable noise abatement measures at Sea Isle, McKinley at Monterey Lakes, Pine Bay Drive, Riverside Drive Apartments, and Kettering Road as shown on the Noise Maps in each Segment’s Noise Study Report contingent upon the following conditions:
- Cost analysis indicates that the cost of the noise barriers will not exceed the cost-reasonable criterion.
 - Community input supporting types, heights and locations of noise barriers is provided to the District Office.
 - Safety and engineering aspects as related to the roadway user and the adjacent property owner have been reviewed and any conflicts or issues resolved.
8. Section 4(f) - FDOT commits to avoidance of any Section 4(f) resources along the I-4 BtU corridor. The staging of construction equipment, materials, or vehicles will be prohibited within these areas during the project.

9. Padgett Creek Bridge – The US Coast Guard issued an Advanced Approval Letter for the bridge crossing over Padgett Creek stating that the replacement of the bridge would not require a USCG permit. To comply with the conditions of this letter, FDOT commits to:
 - Comply with all applicable federal, state, and local laws and regulations.
 - The lowest portion of the bridge over the waterway must clear the 100-year flood height and should match or exceed the lowest portion of the existing to-be-replaced I-4 Bridge.
 - Upon Completion of construction provide, to the local US Coast Guard Bridge Office in Miami, a set of “as-built” drawings which include the horizontal and vertical clearance of the bridge across the waterway.
 - When the bridge is no longer used for transportation purposes, it must be removed in its entirety and FDOT must notify the USCG that the waterway has been cleared.
 - If construction of the bridge is not commenced by March 22, 2019, an updated “Bridge Project Questionnaire” must be submitted to the USCG Bridge Office for reconsideration.
10. Trails, Sidewalks, and Bicycle Lanes – FDOT commits that during the construction of the project, connectivity to trails, sidewalks, and bicycle lanes will be maintained.
11. Aesthetics – FDOT commits to use 1.5% of the construction cost for the enhancement of the aesthetics of the new structures (hardscape) to keep the same look established by the I-4 Ultimate Project.

Monitoring and Enforcement Program

FDOT currently employs an internal system of monitoring and enforcing the commitments that are made for each project as follows:

- After the environmental document has been finalized, the commitments are entered into a Project Commitment Record (PCR) for the PD&E and uploaded into Project Suite.
- The PCR is passed to the design team, once that phase has started or upon LDCA, if the phases are overlapping.
- After the first re-evaluation (or if the design nos./segments are known at the time of LDCA), a new PCR is created for each design segment with only the commitments associated with that segment included.
- The commitments are updated at each re-evaluation, which occurs at every phase change or major design change. The updated PCR is then updated in Project Suite.
- The PCR is transmitted to the next phase’s PM as the project moves forward. The PCR is stored in the internal project page for each project so that it is accessible to everyone involved with the project.
- During Construction Final Acceptance, the project manager updates the PCR which is then updated in Project Suite where it will remain with the project record (which forwards uploaded documents into the Electronic Document Management System [EDMS]). If there are no Operation and Maintenance commitments, then the PCR is finalized at this stage.
- The Operation and Maintenance PM reviews the PCR in the event that there should be commitments that are carried through to this phase and will update/finalize the PCR, if necessary.

- It is the responsibility of the PM at each phase to ensure that the commitments for that phase are satisfied, though all re-evaluations involve updating the status of the commitments providing a second source to ensure compliance. The Construction Office is responsible for ensuring that the commitments have been satisfied at the end of construction.
- The commitment chapter (Part 2, Chapter 22) of the PD&E Manual provides guidance on maintaining commitments, commitment tracking, commitment documentation, and commitment fulfillment.

Other Government Actions and Permits Required

The construction and operation of the proposed improvements to I-4 will require permits from federal and state agencies prior to the construction of the BtU project. Those permits would be required for wetland impacts, stormwater discharge, treatment, and attenuation, and water use as shown in the table below. Due to FDOT having sovereign immunity from local permits within its jurisdiction, the project would not require permits from Orange County, Seminole County, or Volusia County. With the project complying with all federal and state regulations concerning impacts to wetlands and water resources, it would satisfy the county ordinances pertaining to those types of impacts. It is not likely that any additional authorization will be required for Sovereign Submerged Lands since the St. Johns River Bridge project was completed during the previous six-laning project, though coordination with State Lands of FDEP will confirm that during permitting. Since the Ultimate project is currently under construction, all required permits have either already been secured or are in the process of review for that segment, while the applications for the permits for the segments of the I-4 BtU will be submitted during the design phases.

Agency	Permit / Approval
US Army Corps of Engineers	Federal Dredge and Fill Section 404b permit
US Coast Guard	Advance Approval Waterway
St. Johns River Water Management District / South Florida Water Management District	Environmental Resource Permit (ERP), Clean Water Act Section 401 Water Quality Certification, Water Use / Consumptive Use (Dewatering) Permit
Florida Department of Environmental Protection	National Pollutant Discharge Prevention and Elimination System (NPDES) Permit
US Fish and Wildlife Service	Endangered Species Act Section 7 Consultation
Florida Fish and Wildlife Conservation Commission	Gopher Tortoise Conservation Permit
Florida State Historic Preservation Officer	National Historic Preservation Act Section 106 Compliance
National Marine Fisheries Service	Magnuson-Stevens Fishery Conservation and Management Act – Essential Fish Habitat

Consistency with Federal, State, or Local Government Authority

MetroPlan Orlando Metropolitan Planning Organization (MPO) is responsible for transportation planning in Orange, Osceola, and Seminole Counties. The MPO provides the forum through which all levels of government (state, federal, local governments) work together to identify and address local, county, and regional transportation needs. Roadway, transit, freight, and transportation alternative projects are chosen by MetroPlan Orlando through the Priority process. The goal of the MPO is to develop transportation plans that prioritize and facilitate projects receiving state and federal funds.

MetroPlan Orlando’s 2040 Long Range Transportation Plan (LRTP) identifies projects that are of importance in the next 25 years. The SR 400 (I-4) Beyond the Ultimate project has been identified in the LRTP as a project with an implementation year of 2013 – 2025.

MetroPlan Orlando and FDOT also maintain a Transportation Improvement Plan (TIP) and a State Transportation Improvement Plan (STIP). Both the current FDOT STIP and the MetroPlan TIP have an effective date of October 1, 2016.

All three project segments are currently planned as Design-Build projects, with an expected total cost for all three segments at \$1.85 Billion. Funding sources are both state and federal as documented on both the Implementation Table shown below and the Planning Consistency Tables included in Appendix of the Evaluation and Assessment of the I-4 Ultimate and Beyond the Ultimate 2002 FEIS and RODs (2002 and 2005) Document. The project is included in the TIP, STIP, and LRTP, the relevant pages are also included for reference in the Appendix.

Table R1 – Implementation Summary

I-4 Segments	Phase	Estimated Total Cost	Fiscal Year Implementation Date	Funding Source
Segment 2	PE	\$12M	2015	Federal / State
	ROW	\$42M	2017	
	CST	\$521M	2020	
Ultimate	Construction	\$2.2B	Under Construction	Federal / State
Segment 3	PE	\$11.5M	2015	Federal / State
	ROW	\$40M	2022	
	CST	\$582M	2026	
Segment 4	PE	\$9M	2015	Federal / State
	ROW	\$42M	2026-2030	
	CST	\$589M	2026 2030	

Construction of the I-4 Ultimate portion is currently underway, with costs for all phases of implementation of this segment totaling \$2.2 billion. This amount is exclusive of the estimated total \$1.85 billion cost to complete Segments 2, 3 and 4 of the I-4 BtU.

For Segment 2, the current STIP and MetroPlan Orlando TIP have programmed \$4 million of the \$12 million estimated as needed for overall design costs; the entire \$42 million estimated for Segment 2 right-of-way, though none of the construction costs have been programmed. The newly adopted TIP (which becomes effective October 1, 2017) has programmed \$332 million of the \$521 million estimated as needed for construction. The MetroPlan Orlando LRTP identifies sufficient funding for all phases of Segment 2 by the year 2025, which is estimated to total to \$577 million.

For Segment 3, the current STIP MetroPlan Orlando TIP have programmed \$1 million of the estimated \$11.5 million needed for design, but none of the costs for right-of-way is included in the current plans.

The newly adopted TIP (which becomes effective October 1, 2017) has \$11.5 million of the estimated \$40 million needed for right-of-way. Construction of Segment 3, which is estimated to cost \$582 million, is not yet programmed in the STIP and TIP. The MetroPlan Orlando Cost Feasible LRTP, however, includes sufficient funding (estimated at \$634 million) for the implementation of all three phases of Segment 3 by the year 2025.

For Segment 4, \$1 million has been programmed for design in the STIP and River to Sea TIP, which is a portion of the estimated \$8.8 million needed. ROW is estimated at \$42 million and construction is estimated to cost \$589 million, and is reflected in the River to Sea TPO Cost Feasible LRTP (with an estimated cost of \$640 million), but not yet programmed in the TIP and STIP.

The project will be implemented in phases, with Segment 2 as the first segment to be constructed beginning in FY 2020 to align with the segment from SR 435 to SR 434 that is presently under construction. This segment will operate in an acceptable manner with the project to the north as they will be of like design, and will not rely on the construction of Segments 3 and 4 as they are geographically separated from it by the project segment currently under construction. Segment 3 is anticipated to begin construction in FY 2026-2027, with Segment 4 beginning construction after FY 2027 unless additional funding can be obtained earlier.

The project meets the planning implementation requirements for planning consistency as all phases of all three segments are fully funded in the respective Cost Feasible LRTPs, and the NEPA and planning documents are consistent.

Probable Adverse Environmental Effects Which Cannot Be Avoided

When examining the potential impacts from the I-4 BtU project, impacts were anticipated to the natural and physical environments within the project area, though cultural and socioeconomic impacts are not anticipated. The approved I-4 Ultimate Project did involve impacts to the human environment within the greater Orlando metropolitan area, specifically in Downtown Orlando. The I-4 BtU project is proposed both north and south of Downtown Orlando, where similar cultural and socioeconomic situations were not encountered. Mitigation to offset all proposed impacts has also been defined through commitments in the EIS Update Document and has been accommodated under the project currently under construction (I-4 Ultimate).

In both cases, the impacts caused by the Preferred Alternative, along with the associated actions to minimize or mitigate the impacts, are balanced with the benefits derived through enhancement of long-term productivity associated with improving I-4, likely the most critical transportation link in Central Florida, with commensurate improvements in travel time and efficiency.

The improvements proposed in the I-4 Ultimate were identified as a top priority in both MetroPlan Orlando and the Volusia County MPO 2020 LRTPs to enhance connectivity and mobility. Since the I-4 Ultimate is currently under construction, the proposed I-4 BtU project which will match that configuration is seen as essential to provide the connectivity and sustained transportation needs for the region.

Enhancement of the mobility and safety of I-4 through focusing on the movement of people and goods within both the Ultimate and Beyond the Ultimate project corridors required careful consideration of the type of improvement, the operation of the facilities, and the design criteria applied to the Preferred Alternatives. Through that effort, it is concluded that the local short-term impacts and the use of resources associated with the implantation of the project is consistent with the maintenance and enhancement of long-term productivity within the region, which will be realized with the proposed improvements.

The following represents the sum total of all of the proposed impacts to the natural, physical, and social environments.

- There is no anticipated involvement with any cultural, archeological, or historic properties, structures, or Districts.
- There is no anticipated involvement with any Section 4(f) properties.
- Though it is not determined with certainty if there will be any impacts from the project to any known contamination sites, the study identified 29 Medium Risk sites and 2 High Risk sites that may be involved with the proposed improvements, and 14 Medium Risk and 2 High Risk proposed pond sites.
- 77.43 acre-feet of floodplain impacts are proposed.
- 84.9 acres of jurisdictional wetland impacts and 61.31 acres of other surface water impacts are proposed.
- 606 potential noise receptors are predicted to be impacted with 234 of those that the project cannot reasonably provide abatement for.
- 206 parcels totaling approximately 138 acres are proposed to be impacted for right-of-way acquisition for mainline and stormwater pond improvements.
- 47 potential parcels (44 residences, 3 businesses) may involve relocation.
- One listed species (Florida scrub-jay) has 4.68 acres of occupied habitat proposed to be impacted.

This is in comparison to the original I-4 PD&E – Section 2 FEIS and RODs (2002 and 2005) which proposed:

- 362 parcels (111 full acquisition and 251 partial acquisition) totaling 97 acres of proposed right-of-way.
- 258 parcels relocated (63 businesses and 195 residential).
- 40 acre-feet of floodplain and one regulated floodway impacted.
- 82 acres of jurisdictional wetlands impacted.
- 1,506 noise receptors impacted.
- 21 Medium and High Risk contaminated sites involved.
- 2 Historic Districts being impacted, both of which were considered to be Section 4(f) impacts
- Environmental Justice impacts to 3 community facilities where significant direct use impacts would occur.
- Significant impacts to neighborhoods and community cohesion at the SR 408 / I-4 Interchange with a high number of relocations, significant changes to access, and Section 106 impacts.

Irretrievable and Irreversible Commitment of Resources

During the study, it was determined that the implementation of the project would involve the commitment of a range of natural, physical, human, and fiscal resources. Land used in the construction of the projects is considered an irreversible commitment during the time period that the land is used for a highway facility. However, if a greater need arises for use of the land or if the highway facility is no longer needed, the land can be converted to another use. At present, there is no reason to believe that such a conversion will ever be necessary or desirable.

Considerable amounts of fossil fuels, labor, and highway construction materials such as cement, aggregate, and bituminous materials will be expended. Additionally, large amounts of labor and natural resources will be used in the fabrication and preparation of construction materials for the projects. These materials will generally not be retrievable. However, they are not in short supply and their use will not have an adverse effect upon continued availability of these resources. Any construction will also require a substantial one-time expenditure of both state and federal funds, which are not retrievable. The commitment of these resources is based on the concept that residents in the immediate area, state, and region will benefit by the improved quality of the transportation system. These benefits will consist of improved accessibility and safety, savings in time, and greater availability of quality services, which are anticipated to outweigh the commitment of these resources.

Short-term Impacts Versus Long-term Environmental Benefits

The Ultimate project improvements to I-4 as well as the I-4 BtU project would clearly involve impacts to the human environment within the greater Orlando metropolitan area. The types and general extent of the impacts to the socioeconomic, cultural, natural, and physical environments have been detailed within the EIS Update Document. The primary impacts included those to the existing land use (residential and commercial) and to natural systems. Those impacts would be mitigated through appropriate actions defined through the commitments included in this document. The impacts attributed to the Ultimate project and I-4 BtU project, along with the associated actions to minimize or mitigate the impacts, are balanced with the benefits derived through enhancement of long-term productivity associated with improving I-4, likely the most critical transportation link in Central Florida, with commensurate improvement in travel time and travel efficiency.

During the original study, METROPLAN ORLANDO and the Volusia County MPO's 2020 L RTPs identified improvements to I-4 as a top priority for the region to enhance connectivity and mobility. Furthermore, each of the study area local government Comprehensive Plans clearly identified (both then and now) improvements to I-4 as an important priority to serve sustained positive economic conditions for the region. Enhancement of the efficiency and safety of I-4 through focusing on the movement of people and goods within the corridor has required careful consideration of the type of improvement, the operation of the facility, and the design criteria applied to both the Ultimate and BtU projects. Through these efforts, it is concluded that the local short-term impacts and the use of resources associated with the implementation of the project is consistent with the maintenance and enhancement of long-term productivity within the region that will be realized with the proposed improvements.

Conclusion

For the foregoing reasons, and based upon the consideration of all the social, economic, and environmental evaluation contained in the EIS Update Document and this Record of Decision, with the input received from other agencies, organizations, and the public; the FHWA has determined that preferred alternative, namely three General Use Lanes with the addition of two new Express Lanes in each direction, resulting in a total of ten dedicated lanes in the three segments (Segment 2 from West of SR 528 Beachline Expressway to West of SR 435 Kirkman Road in Orange County, Segment 3 from 1 Mile East of SR 434 to East of SR 15-600/US 17-92 (Seminole/Volusia County Line) in Seminole County, and Segment 4 from East of SR 15-600/US 17-92 (Seminole/Volusia County Line) to ½ Mile East of SR 472 in Volusia County), is hereby the selected alternative.

8-24-17
Date


ACTING Division Administrator
Federal Highway Administration

A federal agency may publish a notice in the Federal Register, pursuant to 23 USC § 139(1), indicating that one or more Federal Agencies have taken final action on permits, licenses, or approvals for a transportation project. If such notice is published, claims seeking judicial review of those Federal agency actions will be barred unless such claims are filed within 150 days after the date of publication of the notice, or within such shorter time period as is specified in the Federal laws pursuant to which judicial review of the Federal agency action is allowed. If no notice is published, then the periods of time that otherwise are provided by the Federal laws governing such claims will apply.