

## 2.0 Alternatives

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### 2.1 Analysis of Alignment Alternatives

Before the PD&E Study team developed initial alignment concepts in Orange, Lake, and Seminole Counties, a comprehensive data collection effort was undertaken within and adjacent to the study area. Controlled aerial photography of the corridor was used for base mapping. Along with property parcel lines/numbers, street names, geographic features and other identifiers, the data collected on such items as the locations of community facilities, public lands, known or potential historic sites, wetlands, floodplains, wildlife habitat, potential contamination sites, and others were put on the base map. Avoidance or minimization of impact to these facilities and sensitive areas, as well as homes and businesses, to the greatest extent possible was key in the development of the alignment alternatives.

The initial alternatives were presented at three Public Workshops held in Orange, Lake, and Seminole Counties in November 2005. After the first Public Workshops and meetings with local and state governmental agencies and other stakeholders on the initial alternatives, the project team began the process of alternatives evaluation and refinement. The concepts and impact assessments developed in the initial alternatives phase of the study served as the basis for identification of potential viable alternatives. The Viable Alternatives were presented at July/ August 2006 Public Workshops held in Orange, Lake, and Seminole Counties. Two documents (*Technical Memorandum – Development and Analysis of Initial Alternatives* and *Technical Memorandum – Identification and Evaluation of Viable Alternatives*) were prepared in December 2006 to provide information on the process that was completed during the initial and viable alternatives phases of the PD&E Study.

Based upon comparative assessment of the results of the engineering/environmental analysis and the evaluation of impacts/costs, and after extensive coordination with multiple stakeholders, the proposed alignment alternative was identified by the Expressway Authority and FDOT in April 2007. Subsequent coordination with state and local agencies resulted in some revisions to that alternative.

Following the identification of the proposed alignment alternative for the overall project, extensive discussions on funding options reached a crucial decision point. Due to declining transportation dollars available to FDOT, it was determined that the preliminary estimated cost of the project (\$1.8 billion) would not be financially feasible to fund without tolls on the Wekiva Parkway. In response to residents in the east Lake County area who expressed concerns over paying a toll for a local trip, FDOT and the Expressway Authority analyzed options to provide a non-tolled alternative for local trips. After several meetings with area residents, local government officials, the Florida Department of Environmental Protection (FDEP) and members of the environmental community, a two-lane, two-way service road concept parallel to the Wekiva Parkway was developed. To minimize impacts, the service road is proposed to be within the previously identified Wekiva Parkway right-of-way. The

service road would extend from just north of the Wekiva Parkway interchange near Neighborhood Lakes to just east of the Wekiva River in Seminole County; that concept was presented at a Public Workshop in Lake County on December 17, 2009. Public comments resulting from the workshop were reviewed and incorporated into the preliminary design of the service road and the Wekiva Parkway mainline.

The proposed alignment alternative will be presented at three Public Hearings to be held in Orange, Lake, and Seminole Counties in 2010. Coordination with federal, state, and local agencies, the project advisory group, the environmental advisory committee, the public and other stakeholders has been ongoing and will continue throughout the study.

The previously prepared *Programmatic Section 4(f) Evaluation* includes a section on the alternatives considered from the Orange/Lake County line in the Neighborhood Lakes area to east of the Wekiva River in Seminole County. That is the project area within which the Seminole State Forest, Rock Springs Run State Reserve, Lower Wekiva River Preserve State Park, and the Wekiva Wild and Scenic River are located. The following sections include excerpts from that document specific to the Wekiva River Section 4(f) recreation resource.

## 2.2 No Build Alternative

The No Build Alternative assumes that the proposed project is not implemented within the study area. Only those projects for which funding is committed in the Expressway Authority's 2030 Expressway Master Plan, METROPLAN ORLANDO's 2025 Long Range Transportation Plan Update, and the Lake-Sumter MPO 2025 Long Range Transportation Plan are assumed to be provided to meet the transportation need. The results of the No Build Alternative analysis form the basis of the comparative analysis with the viable Build Alternatives, which are discussed in greater detail in the *Programmatic Section 4(f) Evaluation*.

The benefits of the No Build Alternative include the absence of long term impacts such as residential displacements and natural environmental intrusion, as well as short term impacts associated with actual construction of a major new expressway.

Long term benefits associated with serving future traffic demand and improved safety will not be realized with the No Build Alternative. Furthermore, wildlife deaths due to vehicle collisions are anticipated to be higher in the No Build Alternative without the enhanced habitat connectivity provided by wildlife bridges in the proposed alternative. Some of the existing roadways within the project study area are currently operating at less than desirable service levels, and operating/safety conditions are projected to worsen in the future as congestion would increase under the No Build Alternative. Nearly all roadways in the study area would be operating at level of service E or F conditions in 2032 under the No Build Alternative. The *SR 429-Wekiva Parkway/SR 46 Realignment PD&E Study Traffic Report* states "the No Build Alternative does not meet the transportation needs within the study area. This alternative does not relieve traffic congestion along SR 46 or along US 441." The No Build Alternative would not meet the stated purpose and need for the project.

## 2.3 Proposed Alternative

The Wekiva Parkway & Protection Act (Chapter 369, Part III, Florida Statutes) required that SR 46 in east Lake County west of the Wekiva River not be a continuous roadway for environmental reasons. As recommended by the Lake County Commission, the Wekiva River Basin Commission, and the Florida Department of Environmental Protection (in keeping with the mandates of the Act), the plans for Wekiva Parkway in east Lake County eliminated SR 46 as a through road from the Neighborhood Lakes area eastward to the Wekiva River. At the time the Act was passed, it was assumed the Wekiva Parkway would not be a tolled roadway. However, after an extensive financial analysis conducted in 2007 estimated the total cost of construction of the project at \$1.8 billion, and with declining transportation dollars available to the Florida Department of Transportation (FDOT), it became evident that the Wekiva Parkway from SR 429 near Apopka in northwest Orange County through east Lake County to I-4 near Sanford in west Seminole County would not be financially feasible without tolls.

Citizens in the east Lake County area who live and work along existing SR 46 expressed concerns over having to pay a toll for a local trip. Local and state elected officials also expressed those concerns on behalf of their constituents. In mid 2009, the Expressway Authority and FDOT began analyzing options to provide a non-tolled service road in east Lake County along the Wekiva Parkway route. In response to those citizen and elected official concerns, a service road concept was developed. The service road, which would be parallel to and on the north side of the Wekiva Parkway in east Lake County, is within the 300 foot right-of-way previously identified for the Wekiva Parkway. The alignment of the Wekiva Parkway has not been changed. The previous Wekiva Parkway alternative had two local access interchanges west of the Wekiva River in east Lake County due to the elimination of SR 46. With the service road, those interchanges are no longer needed. However, a service road bridge over the Wekiva River will be needed for a non-tolled connection between Lake and Seminole Counties. The two-lane service road bridge would also accommodate a regional trail crossing of the river.

### ***Fulfills Purpose and Need***

The proposed alternative will achieve regional connectivity through implementation of the missing segment of the Western Beltway (SR 429) and provide a safe, high capacity east-west travel facility to replace portions of SR 46. The *SR 429–Wekiva Parkway/SR 46 Realignment PD&E Study Traffic Report* determined that the existing roadway network is inadequate and traditional widening of SR 46 will not accommodate projected demand. The proposed improvements will meet the increased travel demand from population growth in an environmentally sensitive and compatible manner, including enhanced wildlife habitat connectivity.

### ***Unavoidable Section 4(f) Land Impacts Due to Proximity to Existing SR 46***

The existing SR 46 right-of-way width varies from approximately 66 feet to 100 feet from the Neighborhood Lakes area to west of the Wekiva River. The proposed alignment requires a 300-foot right-of-way for a rural expressway. The two-lane, two-way service road parallel to the Wekiva Parkway would be constructed within the previously identified right-of-way for Wekiva Parkway. The existing SR 46 right-of-way for the two-lane rural arterial is not

sufficient to accommodate a limited access expressway, and the existing horizontal alignment does not meet the curve criteria for an expressway typical section. In addition to requiring additional right-of-way for an expressway typical section, existing SR 46 will need to remain open during construction of Wekiva Parkway, as it is the only east-west corridor between the Mount Dora area in Lake County and the I-4/ Sanford area in Seminole County.

Seminole State Forest and Rock Springs Run State Reserve are on the north and south sides, respectively, of existing SR 46 right-of-way through east Lake County. Lower Wekiva River Preserve State Park is adjacent to the northern right-of-way of SR 46 in Seminole County, east of the Wekiva River. The proposed Wekiva Parkway is to be constructed on essentially the same alignment through the area where the Section 4(f) properties are located. To minimize impacts, the proposed Wekiva Parkway alignment alternative would cross the Wekiva River at the location of the existing SR 46 bridge; however, impacts to the state lands are unavoidable as the geometric constraints prevent utilizing only the existing two-lane SR 46 right-of-way. Efforts to minimize environmental impacts and to balance impacts to private property and publicly owned land through this section of the project study area have been the primary focus in identifying alternative alignments and access concepts.

A description of the existing and proposed Wekiva River crossing is provided in subsection 3.1. Use of the existing crossing location will avoid additional impacts associated with construction of a roadway on new alignment through the remaining undeveloped, natural environment of the Wekiva Wild and Scenic River. The proposed alternative would fulfill the stated project purpose and need.

## 2.4 Avoidance Alternatives

Impacts to the Wekiva Wild and Scenic River and the Section 4(f) lands adjacent to the Wekiva River are unavoidable by roadway alignment shifts. In Seminole County, alternative alignments would result in substantial adverse social and economic impacts; in east Lake County, alternative alignments would require the use of even more Section 4(f) lands resulting in impacts of greater magnitude when compared to the use of Section 4(f) lands by the proposed alternative. The Wekiva River system is bordered by Section 4(f) lands for more than 17 miles north and south of the location of the existing /proposed bridge location.

Since it is on the same alignment as existing SR 46, the proposed Wekiva Parkway is generally perpendicular to the Wekiva River. The river extends approximately five and one half miles north to its confluence with the St. Johns River. To the south, the river extends approximately seven and one half miles to its headwaters at the confluence of Wekiwa Springs and Rock Spring Run. Avoidance of impacts to the Wekiva River Section 4(f) resource would require locating the alignment such that it does not cross the river. Any such alignment would not meet the purpose and need for the project, and would have significant impacts on Section 4(f) conservation lands. Therefore, there is no potential for an avoidance alternative that would meet the stated project purpose and need. Measures to minimize harm to the Wekiva River Section 4(f) recreation resource are discussed in Section 5 of this Addendum.