Parkway is 20.94 miles, with 8.16 miles in Orange County, 7.37 miles in Lake County and 5.41 miles in Seminole County.

- SR 46 Reconstruction and Realignment, which would begin at the SR 46/US 441 interchange in Lake County and extend along the existing SR 46 corridor to the east, then turning southeast on a new alignment and entering Orange County with a systems interchange connection at the Wekiva Parkway. It is expected that the SR 46 improvements would provide six-lane divided controlled access along the existing alignment from US 441 to east of Round Lake Road, while the remaining alignment to the southeast is expected to be limited access. The approximate length of the SR 46 Reconstruction and Realignment is 4.79 miles, with 4.01 miles in Lake County and 0.78 mile in Orange County.
- **CR 46A Realignment**, a two-lane rural (expandable to four-lane rural) roadway, which would begin on existing CR 46A in east Lake County and extend to the south on a new alignment and tie into existing SR 46 with an access connection to the Wekiva Parkway. The approximate length of the CR 46A realignment is 2.72 miles.
- Wekiva Parkway Access Improvements would be required between the realignment of CR 46A in Lake County and Orange Boulevard in Seminole County to allow access to the private property along existing SR 46. A two-lane, non-tolled service road would be parallel to the Wekiva Parkway from north of the Wekiva Parkway interchange near Neighborhood Lakes to just east of the Wekiva River in Seminole County. Two-lane, one-way non-tolled frontage roads would be parallel to the Wekiva River to Orange Boulevard in Seminole County. Those service and frontage roads would provide access to properties while also providing a non-tolled alternative for local trips.

# 1.4 Analysis of Alignment Alternatives

The following sections provide a brief summary of the process whereby the alignment alternatives for the proposed Wekiva Parkway (SR 429)/SR 46 Realignment project were developed and analyzed.

### 1.4.1 Initial 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 the primary focus 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.

#### 1.4.2 Viable Alternatives

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 initial alternatives presented at the Public Workshops in November of 2005 were analyzed and evaluated in greater detail, their impacts were assessed more thoroughly, and they were scrutinized for negative aspects. This resulted in the elimination or modification of some alternatives and the further evaluation of others as 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.

### 1.4.3 Recommended Preferred Alternative

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 Preferred Alternative was identified by the Expressway Authority and FDOT in April 2007. Subsequent coordination with state and local agencies, homeowners associations, and other stakeholders resulted in some refinements to that alternative.

Following the identification of the Preferred Alternative for the overall project, extensive discussions on funding options reached a crucial decision point in early 2009. 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 Lake and Seminole Counties. 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 during mid to late 2009 with area residents, local government officials, the Florida Department of Environmental Protection, and representatives of the environmental stakeholder 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 overall recommended Preferred Alternative, depicted in **Exhibit 1-3**, will be presented at three Public Hearings to be held in Orange, Lake, and Seminole Counties. 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 PD&E Study.





#### LEGEND



Floodplain Compensation Ponds

- Municipal Boundaries
- Proposed Bridge
- Preferred Alternative R/W
- Existing R/W
  - Existing Parcel Line

Exhibit 1-4 Orange County Preferred Alternative









Proposed Bridge





#### LEGEND

Stormwater Ponds Floodplain Compensation Ponds Municipal Boundaries Proposed Bridge

- Preferred Alternative R/W
- Existing R/W
- Existing Parcel Lines

Exhibit 1-7 Seminole County Preferred Alternative



## 1.5 Purpose of the Water Quality Impact Evaluation

The purpose of this *Water Quality Impact Evaluation* is to identify and document water quality issues associated with this project to produce designs that are in compliance with the goals of the Clean Water Act, as amended, Public Law 92-500. This report has been prepared in accordance with the requirements set forth in FDOT's PD&E Manual, Part 2, Chapter 20. The project study area wherein this investigation was conducted is shown in the previously referenced Exhibit 1-1.