# CENTRAL FLORIDA EXPRESSWAY AUTHORITY

Final Alternative Corridor Evaluation Report December 2018

Lake/Orange County Connector (US 27 to SR 429) Feasibility/Project Development & Environment Study CFX Project No. 599-225

#### **Table of Contents**

#### SECTION PAGE NO. 1. INTRODUCTION 1-1 Project Information ..... 1-1 1.1 Project Description/Background 1.2 1-1 Purpose of this Report ..... 1.3 1-5 2. PURPOSE AND NEED..... 2-1 2.1 Purpose..... 2-1 Need ..... 2.2 2-1 2.2.1 System Connectivity/Linkage..... 2-1 2.2.2 Anticipated Transportation Demand ..... 2-2 2.2.3 Consistency with Local and Regional Plans ..... 2-32.2.4 Economic Viability and Job Creation ..... 2-5 2.2.5 Support Intermodal Opportunities ..... 2-5 2.2.6 Evacuation and Emergency Services ..... 2-5 3. METHODOLOGICAL APPROACH 3-1 3.1Task 1 – Data Collection 3-2 Task 2 – Corridor Development Process..... 3.2 3-2 3.2.1 Identification of Project Segments ..... 3-2 3.2.2 Identification of Preliminary Segmental Corridors ..... 3-5 Task 3 – Alternative Corridor Evaluation 3.3 3-8 3.3.1 Initial Screening/Purpose and Need Compliance..... 3-8 3.3.2 Preliminary Alternative Corridor Evaluation ..... 3-11 Engineering Evaluation ..... 3.3.2.1 3-13 3.3.2.1.2 Results of Engineering Evaluation ..... 3-15 3.3.2.2 Environmental Evaluation ..... 3-15 3.3.2.3 Socio-Economic Evaluation 3-17 3.3.2.4 3.3.2.5 3.3.3 Pre-Final Alternative Corridor Evaluation..... 3-21 3.4 3.5 4. RECOMMENDED CORRIDOR AREA 4-1

i

## **List of Figures**

#### FIGURE NO.

1-1	Project Location	1-2
1-2	Western Extension Study Corridors	1-3
1-3	SR 429 to US 27 Connector Study Corridors	1-3
3-1	Methodological Approach	3-1
3-2	Segmental Breakdown	3-3
3-3	Preliminary Segmental Corridors	3-6
3-4	Alternative Selection Process	3-9
3-5	Remaining Superior Corridors	3-23
3-6	AHP Results	3-27
3-7	Sensitivity Analysis Results	3-29
3-8	Recommended Top Alternatives	3-35
3-9	Recommended Corridor Area with Top Alternatives	3-37
4-1	Recommended Corridor Area	4-2

### List of Tables

#### TABLE NO.

#### 2-1 Local Planning Consistency..... 2-4 Purpose and Need Evaluation 3-1 3-10 3-2 3-3 Preliminary Engineering Evaluation..... 3-14 Preliminary Environmental Evaluation 3-4 3-16 3-5 Preliminary Composite Results.... 3-6 3-19 3-7 3-8 3-9 Pre-Final Alternative Corridor Elimination..... 3-24 3-10 3-11 Public Outreach and Agency Coordination Summary...... 3-30 3-12 Advanced Notification Comment Summaries and Reponses ...... 3-31 3-13

#### **List of Appendices**

Appendix A – GIS Data Layers Appendix B – Evaluation Data Appendix C – Analytical Hierarchical Process (AHP) Results Appendix D – Coordination Information

# PAGE NO.

#### PAGE NO.

#### 1. INTRODUCTION

#### 1.1 **Project Information**

The proposed Lake/Orange County Connector is a strategic transportation investment aimed at supporting existing and future growth in south Lake and west Orange counties. It has been identified as a system expansion project need in the last four consecutive Central Florida Expressway Authority (CFX) master plans, the most current being the 2040 CFX Master Plan. The Orlando-Orange County Expressway Authority (OOCEA), now CFX, completed the 2007 SR 429 to US 27 Connector Concept Development and Evaluation Study which developed various viable corridors/alternatives and identified an unmet need for an east-west connection between US 27 and SR 429. This study will confirm the feasibility of the connector and will conduct a Project Development and Environment (PD&E) Study on defined alignments. **Figure 1-1** illustrates the location of the project.

#### 1.2 Project Description/Background

The purpose of the Lake/Orange County Connector PD&E Study is to develop a proposed improvement strategy that is technically sound, environmentally sensitive and publicly acceptable. As with every PD&E Study, emphasis has been placed on the development, evaluation and documentation of detailed engineering and environmental studies including data collection, conceptual design, environmental analyses, project documentation and the preparation of a Preliminary Engineering Report (PER).

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#### **Project Background**

The vision of this critical east-west corridor has been documented in prior concept studies. In 2002, the OOCEA first investigated the potential to extend SR 408 (East-West Expressway) to the west to address the transportation needs of west Orange and east Lake counties. A report titled "Western Extension Concept Development and Feasibility Study" was prepared which investigated the feasibility of a limited-access toll road. Four primary corridors were identified (see **Figure 1-2**): a "Northern Corridor", a "SR 50 Corridor", a "Hartwood-Marsh Corridor" and a "Southern Corridor". The study concluded that only the "Southern Corridor" connecting SR 429 with US 27 in the general area of Schofield Road offered any long-term opportunity for Expressway Authority participation.



In 2007, a <u>Concept Development and Evaluation Study for a potential SR 429 to US 27</u> <u>Connector</u> was prepared by the OOCEA. The purpose of the study was to determine the feasibility and viability of a potential SR 429 to US 27 expressway connection within an area south of Hartwood Marsh Road and north of US 192. Four distinct corridors were investigated (see **Figure 1-3**). The study found that Corridor B was not viable due to significant wetland and surface water impacts and relatively low traffic attraction. Corridor A (the southernmost option) had the largest traffic attraction but extended through an environmentally sensitive area while Corridor D (the northernmost option) had the lowest traffic attraction. Corridor C, which generally traversed the area adjacent to Schofield Road within the central portion of the study area, offered a potential balance between traffic attraction and minimization of environmental impacts.



#### **1.3** Purpose of this Report

The purpose of the Alternative Corridor Evaluation Report (ACER) is to document and link activities for use in the environmental analysis in accordance with the Planning and Environment Linkages described under Fixing America's Surface Transportation (FAST) Act. The goal of the Alternative Corridor Evaluation (ACE) is to eliminate unreasonable corridors based on factors such as: not meeting the purpose and need, travel demand, and disproportionate and/or significant impacts.

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#### 2. PURPOSE AND NEED

#### 2.1 Purpose

The primary objectives of this transportation improvement project are to: expand regional system linkage and connectivity in Lake and Orange counties; enhance mobility between US 27 and SR 429; and accommodate the expected increase in traffic due to population and employment growth within the study area, while being consistent with accepted local and regional plans. As such, the proposed improvements include the construction of a limited-access facility that provides a new east-west connection from US 27 in south Lake County to SR 429 in west Orange County.

#### 2.2 Need

There are six project needs that serve as justification for the proposed improvements. These needs are: 1) Provide improved system connectivity/linkage; 2) Accommodate anticipated transportation demand; 3) Provide consistency with local and regional plans; 4) Support economic viability and job creation; 5) Support intermodal opportunities; and 6) Enhance evacuation and emergency service. The following sections describe the needs in more detail.

#### 2.2.1 System Connectivity/Linkage

System linkage is defined as linking two or more existing transportation facilities or types of modal facilities between geographic areas or regional traffic generators.

**Figure 1-1** illustrates the existing roadway network within the vicinity of the proposed project. There are two major north-south facilities serving the project area, SR 429, a four-lane limited-access rural toll road at the eastern project terminus and US 27, a four-lane divided rural arterial at the western project terminus. In the east-west direction, SR 50, a six-lane urban arterial facility located approximately 7 miles to the north, and US 192, a six-lane urban divided arterial located approximately 7 miles south, connect Lake County to the Orlando urban core. These existing east-west facilities not only serve through traffic but also provide significant local access, thus limiting their ability to provide effective overall mobility.

At the present time, the east-west connectivity within the study area is deficient with Schofield Road, an unpaved 20-foot wide rural facility, providing the only connection between US 27 on the west and SR 429 on the east. A new limited-access, direct connection expressway facility would not only provide the much-needed connectivity in the area but would also significantly improve regional mobility and travel time.

A PER was completed in 2016 for Wellness Way, a new four-lane divided arterial extending from US 27 and connecting to New Independence Parkway in the vicinity of SR 429. It should be noted that the 2007 SR 429 to US 27 Connector Concept Development and Evaluation Study prepared by the OOCEA stated that a network of east-west six-lane roadway arterials could also meet the capacity need of the study area. The proposed Wellness Way facility alone will not be sufficient to provide the necessary east-west linkage to meet the anticipated growth of the area when compared to a new limited-access, direct connection expressway facility.

Interchanges are proposed at US 27 in Lake County, SR 429 in Orange County, and the future extension of CR 455 in Lake County. Lake County's Visionary Map shows a southerly extension of CR 455 from its current terminus to the future extension of Sawgrass Bay Boulevard.

#### 2.2.2 Anticipated Transportation Demand

According to the Central Florida Expressway Authority's 2040 Master Plan, Lake County's population is projected to increase by 56% (to 493,000 residents) and employment is projected to increase by 60% (to 212,700) by 2040. During the same time period, the population and employment growth within Orange County are expected to each increase by more than 50%. Two of the main areas of development generating additional population are the Wellness Way Area Plan (WWAP) in south Lake County and the Horizon West Special Planning Area (HWSPA) in southwestern Orange County. The WWAP includes more than 16,000 acres. Horizon West is a growing community of several villages occupying more than 20,000 acres and projected to house over 60,000 residents when completed. Horizon West also features the future site of a Valencia College satellite campus.

The January 2018 Bureau of Economic and Business Research (BEBR) population projections show from 2017 to 2045 a 54% growth in population is anticipated for both Lake and Orange counties.

The study area traverses all five of the WWAP Future Land Use Categories (FLUC); Town Center and Wellness Way 1, 2, 3 and 4. The planning horizon for the WWAP is projected to be 2040 with a build-out of 16,500 dwelling units and a projected employment of 36,000. CEMEX, a multinational building materials supply company, submitted an updated permit for the proposed Four Corners Sand Mine in August 2017. They propose to operate on 1,200 acres within the WWAP, on property divided by Schofield Road. The permit allows mining approximately 525 acres over a 22-year period.

The study area also falls within the Town Center and Village H (Hickory Nut) of Horizon West. The Town Center will be a regional employment center with a projected employment force of over 27,000 and home to a host of new developments including a satellite campus of Valencia College and Orlando Health hospital. Overall, Horizon West has an anticipated build-out of 40,000 dwelling units and a projected commercial area of 9.5 million square feet.

An origin and destination (OD) study conducted by CDM Smith in 2017 for CFX revealed that much of the potential traffic for a new toll road would come from planned developments. In the year 2045, there is a potential for 34,000 daily trips traveling between US 27 and SR 429 in the vicinity of Schofield Road. With the proposed project as a tolled expressway, approximately 19,000 daily trips would be diverted from local roadways.

The proposed connector is anticipated to help accommodate the expected increase in traffic due to population and employment growth within the study area by expanding the limited-access expressway system.

#### 2.2.3 Consistency with Local and Regional Plans

Planning consistency of the proposed project is documented in various local comprehensive plans (see **Table 2-1**). A brief explanation of each follows.

<u>CFX 2040 Master Plan and Five-Year Work Plan:</u> The subject project is a major component of the Authority's plan to provide additional capacity to address the area's increasing projected population and employment growth. The Lake/Orange County Connector would support the economic vitality of the WWAP and the HWSPA developments and is widely supported among local landowners and community leaders. The project is listed in the five-year work plan and funded for PD&E in years 2018/2019 and for potential design in years

2021/2022 and 2022/2023.

Lake-Sumter Metropolitan Planning Organization (MPO) – 2040 Long Range Transportation Plan (LRTP): The Lake-Sumter MPO provides a forum for cooperative decision making concerning transportation issues throughout the urbanized area of Lake and Sumter counties. The latest draft list of priority projects (May 2018) shows that a "New Road Alternative Corridor Evaluation" between US 27 and SR 429 is listed as priority #20 under the Preliminary Engineering projects. In addition, the portion of the Lake/Orange Parkway project extending from US 27 to the Lake/Orange County line is included in the Lake-Sumter 2040 LRTP as a cost feasible element and as an Emerging Regional Significant Corridor.

West Orange South Lake Transportation and Economic Development Task Force (WOSLTED): This task force was initiated in 2000 with the goal of promoting transportation in the West Orange/South Lake (WOSL) region. In 2008, the task force started a planning process to ensure coordinated transportation and housing development which eventually resulted in a proposed system of new roadways and roadway improvements which included the provision of a proposed east-west connector from US 27 to SR 429. This connector has always been a main focus of this organization.

<u>MetroPlan Orlando:</u> MetroPlan Orlando is the metropolitan planning organization for the greater Orlando area. It coordinates and leads transportation planning efforts in Orange, Osceola and Seminole Counties. The subject project is listed on the 2040 LRTP Plan Development Cost Feasible projects (updated June 2017) as a funded project for both PD&E and design.

Agency	Remarks
Central Florida Expressway Authority (CFX)	Included in the 2040 Master Plan and the Five-Year Work Plan
Lake-Sumter MPO	Identified the proposed project in the 2040 LRTP Needs Plan
West Orange/South Lake Transportation and Economic Development Task Force	Identified a connection between US 27 to Orange County in its Transportation Plan
MetroPlan Orlando	Identified in its Technical Report 3: "Plan Development and Cost Feasible Projects"

#### Table 2-1 – Local Planning Consistency

#### 2.2.4 Economic Viability and Job Creation

The proposed facility is needed to further support the economic viability of the WWAP. This 16,000-acre service area has been recognized for many years as having significant potential for economic development in southeast Lake County. It is projected to be an economic engine for job creation in the region and is envisioned to strengthen its connectivity with other regional economic hubs. With an anticipated buildout of over 16,000 residential units, this important planned development is expected to generate over 26,800 jobs in the future.

The proposed connector will also directly benefit the economic and job creation potential of the Horizon West development by expediting the efficient delivery of goods and services in this developing area of west Orange County.

#### 2.2.5 Support Intermodal Opportunities

The Horizon West Town Center is proposed as an intermodal and freight staging facility potentially providing access to trucks, rails, airports and/or ports. Its presence enhances the integration and connectivity of the multimodal transportation system. The proposed connector would link this freight staging facility with two major Strategic Intermodal System (SIS) highways (US 27 and SR 429) and thus connect Lake County to a network of limited-access facilities that provide access to the Orlando International Airport and Port Canaveral. In addition, the MetroPlan Orlando's "Regional Freight and Goods Movement Facilities Profile" noted that there is "limited existing east-west highway and rail connectivity within the region – which provides logistical challenges for some shippers". The proposed project will add a valuable east-west mobility link to the area's transportation network.

#### 2.2.6 Evacuation and Emergency Services

The East Central Florida Region has been identified by the National Oceanic and Atmospheric Administration (NOAA) as a high hurricane-vulnerable area within the United States and thus requires sufficient and efficient evacuation routes. There are no existing designated east-west evacuation routes within the immediate project area. Only SR 50, approximately 7 miles to the north, and US 192 (SR 530), approximately 7 miles to the south, provide effective east-west evacuation connection to important north-south SIS routes in the area (US 27 and SR 429). The provision of an additional high-speed, limited-access east-

west facility will afford desirable redundancy of the highway network to accommodate diverted local and regional traffic during times of natural or man-made emergencies.

Another critical issue deals with potential delays of fire and emergency services. There are two fire stations just north and south of the study area along US 27 but their linkage to the east is ineffective due to the lack of a paved or limited-access facility connecting to SR 429, potentially resulting in additional delays. The proposed connector would facilitate prompt fire and emergency response.

#### 3. METHODOLOGICAL APPROACH

**Figure 3-1** illustrates the proposed methodological approach involving five distinct tasks. A brief description of each task is included in the following pages.



#### 3.1 Task 1 – Data Collection

The initial task included the collection and review of pertinent data within the study area. It involved an on-site and desktop inventory and verification of existing conditions as well as the collection of data that would serve as the basis for evaluation.

The data used to evaluate the social, cultural, natural and physical environmental impacts of each corridor was derived from Geographic Information System (GIS) datasets, literature and field reviews where appropriate. Various GIS datasets within the Florida Geographical Data Library (FGDL), the Florida Fish and Wildlife Conservation Commission (FWC) and County data sources were utilized. A list of GIS data layers which were used in the assessment of the project study area is provided in **Appendix A**.

The following features were identified as important considerations: potential land use changes, well-field impacts, socio-economic impacts, and impacts to potential historic/archaeological sites, recreational areas, wetlands, water quality, floodplains, wildlife and habitat, conservation areas, and planned developments, among others.

#### 3.2 Task 2 – Corridor Development Process

This corridor development process is inherently dynamic in nature and generally requires frequent modifications resulting from the identification of new constraints and opportunities, input from agencies, etc. The following sections provide specific details concerning the distinct components of the corridor development process.

#### 3.2.1 Identification of Project Segments

Initially, the study area was divided into three segments to facilitate the analysis. The segmental breakdown approach ensures that the generated corridor alternatives are more responsive to the needs of each segment rather than only to the generalized project needs. **Figure 3-2** illustrates the study segments and provides a description of each. Each segment has unique characteristics as well as differences in environmental, engineering and socio-economic features.



<u>Segment 1</u> comprises the project's western 2 miles and generally extends from US 27, a rural four-lane north-south facility, to just west of Cook Road, a minor north-south rural road just east of Lake Island. Some of the main features within this first segment include various lakes (e.g., Trout, Pike, Adain, Island), the WWAP Town Center, Wellness Way 1, the proposed CEMEX Four Corners Sand Mine and portions of Wellness Way 2.

<u>Segment 2</u> comprises the central portion of the study area and extends from Cook Road to the Lake/Orange county line for a total length of approximately 1.8 miles. This generally

rural segment exhibits lower traffic generation potential than the other two segments. Some of the main features within this segment include the Schofield Tract, portions of Wellness Way 2 and 3 and Southern Hill Farms north of Schofield Road, a rural two-lane east-west facility projected to be widened to four lanes in the future.

<u>Segment 3</u> extends for approximately 1 mile from the Lake/Orange county line to the study's eastern terminus at SR 429, a four-lane CFX north-south toll facility. Some of the principal features within Segment 3 include the Horizon West Town Center and Village H, the proposed Valencia Community College Horizon West Campus, Zanzibar Planned Development, and Lake Needham.

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#### 3.2.2 Identification of Preliminary Segmental Corridors

Next, preliminary segmental corridor options were developed for the proposed Lake/Orange County Connector (see **Figure 3-3**). These corridors were developed based on constraint mapping, and local agency, stakeholder and public input. Each corridor is 800 feet wide for the purpose of assessing the potential social, cultural, natural, and physical impacts of each corridor option. As shown on **Figure 3-3**, seven distinct corridor options were generated within <u>Segment 1</u>, six within <u>Segment 2</u>, and four within <u>Segment 3</u>. A brief description of all the preliminary corridor options follows:

Segment 1: As previously stated, there are seven preliminary corridors within Segment 1.

<u>Corridor 1-1</u>: This corridor commences in the immediate vicinity of the Lake Louisa State Park entrance on US 27. This corridor extends southeasterly generally bordering the north edge of Lake Trout, and then easterly within the vicinity of Schofield Road and north of Lake Island.

<u>Corridor 1-2</u>: This corridor commences approximately 2,000 feet north of the southern terminus of the South Bradshaw Road intersection on US 27 and extends northeasterly between Lake Trout and Lake Pike before merging into Corridor 1-1.

<u>Corridor 1-3</u>: This corridor begins approximately one mile north of Frank Jarrell Road on US 27 and proceeds northeasterly between Lake Pike and Lake Adain turning due east and merging into Corridor 1-1.

<u>Corridor 1-4</u>: This corridor is similar to Corridor 1-3 from its begin point on US 27 to the area just north of Lake Adain where it turns due east crossing Lake Adain approximately 2,500 feet south of Schofield Road.

<u>Corridor 1-5</u>: This corridor begins on US 27 just north of the Frank Jarrell Road intersection and proceeds northeasterly between Lake Adain and Lake Sawgrass before merging into Corridor 1-4.

<u>Corridor 1-6</u>: This corridor is similar to Corridor 1-5 from its begin point on US 27 to the area between Lake Adain and Lake Sawgrass where it then turns more easterly, generally bordering the southern limit of the study area.



### Lake/Orange County Connector Feasibility/PD&E Study

<u>Corridor 1-7</u>: This corridor was generated in order to consider an option with maximum directness within the first segment. This option begins in the same general vicinity as Corridor 1-2 on US 27 and extends due east just north of Lake Adain where it merges with Corridor 1-4.

<u>Segment 2</u>: This central segment features six distinct corridors as follows:

<u>Corridor 2-1</u>: This east-west corridor generally follows the existing Schofield Road alignment except in the vicinity of the Schofield Tract, an environmentally sensitive site, where this option dips farther south in order to avoid impacting the site (see **Section 3.3.2.5**).

<u>Corridor 2-2</u>: This corridor starts in the same location as Corridor 2-1 and continues in a southeasterly direction eventually merging with Corridor 2-4.

<u>Corridor 2-3</u>: This corridor starts at a point approximately 2,500 feet south of Schofield Road then it veers northeasterly and eventually merges with Corridor 2-1.

<u>Corridor 2-4</u>: This east-west corridor alternative is initially similar to Corridor 2-3 but then continues eastward along the central portion of Segment 2.

<u>Corridor 2-5</u>: This corridor generally borders the southern study area limits just north of Lake Sawgrass.

<u>Corridor 2-6</u>: This corridor is similar to Corridor 2-5 from Cook Road to just west of the Lake/Orange county line, where it veers northeasterly and merges with Corridor 2-4.

<u>Segment 3</u>: There are four preliminary alternative corridors as follows:

<u>Corridor 3-1</u>: This corridor extends northeasterly from the Lake/Orange county line in the vicinity of Schofield Road to just southeast of the existing SR 429/Avalon Road overpass.

<u>Corridor 3-2</u>: This east-west corridor generally follows the existing Schofield Road alignment from the Lake/Orange county line to the existing SR 429/Schofield Road interchange.

<u>Corridor 3-3</u>: Corridor 3-3 extends from the Lake/Orange county line at a point approximately 1,500 feet south of Schofield Road and veers northeast terminating at the existing SR 429/Schofield Road interchange.

<u>Corridor 3-4</u>: This corridor alternative extends from the Lake/Orange county line just north of the southern study area limits to just south of the existing SR 429/Schofield Road interchange.

#### 3.3 Task 3 – Alternative Corridor Evaluation

The objective of this task is to eliminate all inferior or suboptimal alternatives. As illustrated on **Figure 3-4**, a multi-phase corridor evaluation and selection process was employed to properly assess all possible alternative corridors within the study area.

#### 3.3.1 Initial Screening/Purpose and Need Compliance

An initial screening to assess how well each alternative corridor satisfies the previously established project's purpose and need was conducted. An alternative that does not satisfy the project's purpose and need may be eliminated from further consideration.

In order to avoid elimination, each corridor alternative would need to provide improved connectivity/linkage as compared to the No-Build (or No Action) Alternative. In addition, each corridor option was evaluated for traffic volume accommodated, planning consistency, support of economic development and job creation, and enhanced intermodal opportunities and emergency services.

**Table 3-1** provides the screening criteria and results related to the purpose and need compliance. In order to better appreciate the obtained outcome, color values were assigned to the results as follows: Green cells (generally high compliance); Yellow cells (generally moderate compliance) and Orange cells (generally low compliance). In addition, the evaluation was conducted by segments in order to more clearly judge the performance of each corridor option within each individual segment it traverses rather than its "overall" performance. This approach provides a more in-depth evaluation by showing where the corridor ranks higher and lower segmentally. The results from **Table 3-1** show that, generally, all the corridors have green cells except for three corridors with yellow cells. Corridor 1-1 crosses over the Ridgeview PUD within Segment 1. Corridors 3-1 and 3-4 impact the Valencia Community College Horizon West Campus and the Zanzibar PUD, respectively, within Segment 3. These potential impacts could affect the support of economic vitality and job creation.



	DESCR	
	PHASE DESIGNATION	PURPOSE
ER CORRIDOR	INITIAL SCREENING/ PURPOSE AND NEED COMPLIANCE (See Page 3-8)	ELIMINATION OF ALTERNATIVES WHICH FAIL TO MEET THE STATED PROJECT'S PURPOSE AND NEED
ALTERNATIVE 20 (1-7)+(2-4)+(3-3)	PRELIMINARY ALTERNATIVE CORRIDOR EVALUATION (See Page 3-11)	EVALUATION WITH RESPECT TO ENGINEERING, SOCIO-ECONOMIC, AND ENVIRONMENTAL FACTORS TO ELIMINATE INFERIOR CORRIDORS
	PRE-FINAL ALTERNATIVE CORRIDOR EVALUATION (See Page 3-21)	REMAINING CONCEPTUAL ALTERNATIVE CORRIDORS ARE FURTHER SCREENED USING A NUMERICAL / DESCRIPTIVE MATRIX APPROACH
	FINAL ALTERNATIVE CORRIDOR EVALUATION (See Page 3-26)	DETERMINATION OF THE OPTIMUM ALTERNATIVE CORRIDOR USING THE ALTERNATIVE HIERARCHY PROCESS EVALUATION TECHNIQUE
Selection	Process	Figure 3-4



#### Basis of Evaluation

А	
В	
С	
D	
Е	
F	1

- Based on the provision of effective connection to the existing/proposed major transportation facility/network within the project area

- Projected traffic volume diverted from existing/projected congested transportation facilities

- Consistency with existing/proposed local/regional transportation plan

- Based on the perceived likelihood of desirable economic development adjacent to the proposed interchange locations and their compatibility with existing/proposed abutting land use

- Based on typical section design speed, high speed facility and strategic intermodal system criteria

- Based on access, safety and design measures

	S	GMENT 3 -	CORRIDOR	S
2-6	3-1	3-2	3-3	3-4

In summary, although some corridors address the purpose and need more efficiently than others, it was determined that all of the established corridors do generally address the purpose and need.

#### 3.3.2 Preliminary Alternative Corridor Evaluation

The preliminary alternative corridor evaluation was based on their potential impact with respect to engineering, socio-economic, and environmental issues. As previously stated, the objective of this preliminary evaluation is to eliminate inferior or suboptimal alternatives. In order to simplify the nomenclature of the various corridor options, the previous segmental corridors were aggregated to produce alternative corridors spanning all three project segments. According to **Table 3-2**, twenty different aggregated corridors extending from US 27 to SR 429 resulted from these combinations.

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Segment 1 Corrido	rs	Segment 2 Corridors	Segment 3 Corridors	Preliminary Corridor Alternatives
		2-1 +	3-1 =	Alternative 1
1-1	т		3-2 =	Alternative 2
	+	2-2 +	3-3 =	Alternative 3
		2-1 +	3-1 =	Alternative 4
1-2	+	2-1 +	3-2 =	Alternative 5
	+	2-2 +	3-3 =	Alternative 6
		24 +	3-1 =	Alternative 7
1-3	+		3-2 =	Alternative 8
	+	2-2 +	3-3 =	Alternative 9
		· · · +	3-1 =	Alternative 10
1-4	+	2-3 +	3-2 =	Alternative 11
	+	2-4 +	3-3 =	Alternative 12
			3-1 =	Alternative 13
1-5	+	2-3 +	3-2 =	Alternative 14
	+	2-4 +	3-3 =	Alternative 15
4.6	+	2-5 +	3-4 =	Alternative 16
0-1	+	2-6 +	3-3 =	Alternative 17
	+	2.2 +	3-1 =	Alternative 18
1-7	+	2-3 +	3-2 =	Alternative 19
	+	2-4 +	3-3 =	Alternative 20

Table 3-2 – Preliminary Project Corridors

In order to better appreciate the obtained results, numerical values/scores were assigned to the results of the evaluation tables (**Tables 3-3** through **3-5**) as follows: Green cells (generally desirable or positive impacts = +2); Yellow cells (generally minor or moderate impacts = +1) and Orange cells (generally undesirable or negative impacts = 0). In addition, each evaluation component was assigned a percentage value (weight) depending on its perceived degree of importance. For example, the importance of the total engineering component was judged to merit 37% (see **Table 3-3**) of the total decision while the environmental (see **Table 3-4**) and socio-economic components (see **Table 3-5**) were assigned relative weights of 25% and 38%, respectively. These parameter weightings were developed from the average of individual weighting sets prepared by members of the consultant's team, reflecting a broad range of professional backgrounds. A more complete description of the evaluation criteria used in the analyses is included in **Appendix B**.

#### 3.3.2.1 Engineering Evaluation

The engineering considerations used to screen the corridor alternatives are listed in **Table 3-3**. Engineering factors such as major utility conflicts, geometric considerations, floodplain encroachment, and traffic considerations were evaluated.

#### 3.3.2.1.1 Traffic Forecasting

The design traffic forecasted for the Lake/Orange County Connector PD&E Study ACE was developed using the CFX 3.0 model that was created for the purpose of evaluating the Osceola County Master Plan projects: Osceola Parkway Extension, Northeast Connector Expressway, Southport Connector Expressway, and the Poinciana Parkway/I-4 Connector projects. The CFX 3.0 model was based on the Central Florida Regional Planning Model (CFRPM) v6.1 model. CFX 3.0 was validated for a 2015 base year with a concentration on the sub-area of Osceola County and south Orange County. This model covers all of Orange, Seminole, Osceola, Lake Sumter, Marion, Volusia, Flagler, Polk, Brevard counties, as well as connected portions of Indian River County. The future (or forecast) years for CFX 3.0 are 2025, 2035 and 2045, and comprises a total of 5,406 traffic analysis zones (TAZs) including the 56 external zones.

#### • 2045 Design Network

The future year networks in the model contain the transportation improvements identified in the CFX, FDOT and county work programs, as well as the improvements included in the cost feasible plan from the LRTP for year 2040. In addition to these improvements, additional network links were added, specifically in the high growth areas and the study area. As previously mentioned, to ensure proper loading and distribution of trips on the Lake/Orange County Connector, there was zonal disaggregation in the study area. These zones are supported in part by a network of "development" roads or roads not considered in the 2040 LRTP or County transportation plans. The 2045 network improvements of note include:

RATING											TA	BLE 3-3											
GOOD = +2 POINTS																							
FAIR = +1 POINT									PRE	LIMINA	RY ENG	INEERIN	NG EVAL										
FOOR = 0 POINTS	_																						
EVALUATION COMPONEI	NTS	QUANTITATIVE	MENT	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5	Alternative 6	Alternative 7	Alternative 8	Alternative 9	Alternative 10	Alternative 11	Alternative 12	Alternative 13	Alternative 14	Alternative 15	Alternative 16	Alternative 17	Alternative 18	Alternative 19	Alternative 20
	Component Weight	MEASURE	SEG	(1-1)+(2-1)+ (3-1)	(1-1)+(2-1)+ (3-2)	(1-1)+(2-2)+ (3-3)	(1-2)+(2-1)+ (3-1)	(1-2)+(2-1)+ (3-2)	(1-2)+(2-2)+ (3-3)	(1-3)+(2-1)+ (3-1)	(1-3)+(2-1)+ (3-2)	(1-3)+(2-2)+ (3-3)	(1-4)+(2-3)+ (3-1)	(1-4)+(2-3)+ (3-2)	(1-4)+(2-4)+ (3-3)	(1-5)+(2-3)+ (3-1)	(1-5)+(2-3)+ (3-2)	(1-5)+(2-4)+ (3-3)	(1-6)+(2-5)+ (3-4)	(1-6)+(2-6)+ (3-3)	(1-7)+(2-3)+ (3-1)	(1-7)+(2-3)+ (3-2)	(1-7)+(2-4)+ (3-3)
			1	18 PP, 2 WPS, & 1	18 PP, 2 WPS, & 1	18 PP, 2 WPS, & 1	14 PP, 1 WPS, & 1	14 PP, 1 WPS, & 1	14 PP, 1 WPS, & 1	14 PP, 1 WPS, & 1	14 PP, 1 WPS, & 1	14 PP, 1 WPS, & 1	4 PP										
Major Utility Conflicts		No. of potential impacts	2	1 WPS	1 WPS	1 WPS	1 WPS	1 WPS	1 WPS	1 WPS	1 WPS	1 WPS	4 PP										
	70/		3	11 PP	26 PP, 1 WPS	8 PP	11 PP	26 PP, 1 WPS	8 PP	11 PP	26 PP, 1 WPS	8 PP	11 PP	26 PP, 1 WPS	8 PP	11 PP	26 PP, 1 WPS	8 PP	8 PP	8 PP	11 PP	26 PP, 1 WPS	8 PP
	1%		1																				2
Geometric Considerations		Interchange Location &	2																				
	11%	Potential Effects	3																				
EloodPlain Energeohment		Acros	1	9.91	9.91	9.91	15.58	15.58	15.58	32.90	32.90	32.90	35.06	35.06	35.06	41.22	41.22	41.22	37.52	37.52	44.17	44.17	44.17
	7%	Aues	3	1.87	3.20	46.30	1.87	3.20	46.30	1.87	3.20	46.30	1.87	3.20	46.30	1.87	3.20	46.30	47.05	46.30	1.87	3.20	46.30
Troffic Considerations		Troffic Volumoo	1																				
	12%	manic volumes	3										×										
Total Engineering Weight	37%																						
Total Engineering So (higher score = higher	ore for each Aler performing a	Iternative Corridor Iternative corridor)		1.50	1.65	1.61	1.65	1.44	1.47	1.54	1.33	1.29	1.68	1.47	1.47	1.32	1.47	1.47	1.61	1.47	1.79	1.58	1.58
	REMARKS			Highest scorir     Lowest scorin	ng Alternatives 1 Ig Alternatives 9	8 and 10 are ge and 13 had gen	nerally highest ir erally the lowest	all criteria with scores due to p	the exception of otential utility co	the interchange nflict issues and	location conside somewhat lower	rations within se traffic attraction	egment 3. Is.		10								<u>.</u>
Sample Calcuation for A	Iternative 1 (Se	gment 2) under Major Utility Co	onflicts											Legend		1							
Relative Segmental Score = Segmental	2 (Points)	x Major Utility Conflicts	7%	= 0.14									WPS	Water Pu	mp Station								
Rating		Component Weight	0										LS	Lift S Powe	Station r Poles	9							

- o 6-lane SR 429 from Seidel Road to SR 414
- o 6-lane US 27 from Hartwood Marsh Road to Green Cove Boulevard
- 2-lane New Independence Parkway Extension to US 27
- o 4-lane CR 455 extended to Western Way Extension
- o 2-lane Schofield Road from SR 429 to US 27
- o 4-lane Avalon Road from US 192 to New Independence Parkway
- o 4-lane Lake/Orange County Connector Project, and;
- o 4-lane Western Way Extension to Sawgrass Bay Boulevard

The future Schofield Road Spur to US 27 was not included. Build and No-Build networks were created using the corridor alternative alignments and include the other improvements and development roads.

Tolls

For the analysis, the toll rate was set to \$0.18 per mile in 2017 for design traffic, consistent with the toll rate established for other planning studies. Toll rates were escalated at 1.5% per year according to the CFX Customer First Toll Policy. **Appendix B** includes the results of the traffic modeling efforts conducted for this evaluation.

#### 3.3.2.1.2 Results of Engineering Evaluation

Based on the results of the preliminary engineering evaluation (**Table 3-3**), Alternative 18 with a score of 1.79 and Alternative 10 with a score of 1.68 generally scored the highest in most criteria. Alternative 9 was the least effective option with a score of 1.29.

#### 3.3.2.2 Environmental Evaluation

The potential direct, indirect, and cumulative effects on the environment of all competing corridors were considered next. The following parameters were evaluated: impacts to wetlands, wildlife and habitat, conservation lands/mitigation banks, farmlands, and contamination. **Table 3-4** illustrates the results of the evaluation of these environmental parameters. According to the results obtained, Corridor 5 had the highest ranking with a score of 1.29 closely followed by Corridors 2 and 4, both with a score of 1.27. Corridor 16 was the least effective option with a score of 0.96.

RATING											ТА	BLE 3-4											
									PREL	IMINAR	Y ENVIR	ONMEN	TAL EV	ALUATIO	)N								
FAIR = +1 POINT																							
EVALUATION COMPONE	INTS		ENT	Alternative	Alternative	Alternative	Alternative	Alternative	Alternative	Alternative	Alternative	Alternative	Alternative	Alternative	Alternative	Alternative	Alternative	Alternative	Alternative	Alternative	Alternative	Alternative	Alternative
			N.	1	2	3	4	5	o	/	o	9	10	11	12	13	14	15	10	17	18	19	20
	Component Weight	MEASURE	SEG	(1-1)+(2-1)+ (3-1)	(1-1)+(2-1)+ (3-2)	(1-1)+(2-2)+ (3-3)	(1-2)+(2-1)+ (3-1)	(1-2)+(2-1)+ (3-2)	(1-2)+(2-2)+ (3-3)	(1-3)+(2-1)+ (3-1)	(1-3)+(2-1)+ (3-2)	(1-3)+(2-2)+ (3-3)	(1-4)+(2-3)+ (3-1)	(1-4)+(2-3)+ (3-2)	(1-4)+(2-4)+ (3-3)	(1-5)+(2-3)+ (3-1)	(1-5)+(2-3)+ (3-2)	(1-5)+(2-4)+ (3-3)	(1-6)+(2-5)+ (3-4)	(1-6)+(2-6)+ (3-3)	(1-7)+(2-3)+ (3-1)	(1-7)+(2-3)+ (3-2)	(1-7)+(2-4)+ (3-3)
			1	7.94	7.94	7.94	10.89	10.89	10.89	23.34	23.34	23.34	25.74	25.74	25.74	32.29	32.29	32.29	29.92	29.92	20.59	20.59	20.59
Wetlands (using Land Use Data)		Acres	2	14.36	14.36	1.52	14.36	14.36	1.52	14.36	14.36	1.52	15.45	15.45	3.39	15.45	15.45	3.39	10.51	10.52	15.45	15.45	3.39
(	7%		3	0.77	0.8	11.88	0.77	0.8	11.88	0.77	0.8	11.88	0.77	0.8	11.88	0.77	0.8	11.88	3.53	11.88	0.77	0.80	11.88
		Average Wildlife Index	1	2.18	2.18	2.18	2.48	2.48	2.48	2.57	2.57	2.57	2.54	2.54	2.54	2.89	2.89	2.89	2.92	2.92	2.59	2.59	2.59
Wildlife and Habitat		Ranking: Ranked 1-10, 10	2	1.91	1.91	2.06	1.91	1.91	2.06	1.91	1.91	2.06	1.91	1.91	2.08	1.91	1.91	2.08	1.91	1.95	1.91	1.91	2.08
	5%	is the most important	3	2.33	2.28	2.13	2.33	2.28	2.28	2.33	2.28	2.13	2.33	2.28	2.13	2.33	2.28	2.13	1.69	2.13	2.33	2.28	2.13
	070		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Conservation Lands/Mitigation Banks	S 00/	Acres	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8%		3	0	0	3.72	0	0	3.72	0	0	3.72	0	0	3.72	0	0	3.72	8.46	3.72	0	0	3.72
Farmlands (NRCS Data, Prime		Acres	2	170.7	170.7	170.7	151.24	151.24	151.24	153.26	153.26	153.26	119.56	119.56	119.56	139.27	139.27	139.27	126.73	126.73	129.75	129.75	129.75
Farmland)	2%	Acies	3	108.82	81.77	47.35	108.82	81.77	47.35	108.82	81.77	47,35	108.82	81.77	51.38	108.82	81.77	47.35	51,38	47,35	108.82	81.77	47.35
			1	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	1	1	1
Contamination	20/	No. of Sites	2	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	1	1	2	2	2
	3%		3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
Total Environmental Weight	25%			T		r		1		1		-	1										ſ
Total Environmental (higher score = high	Score for each a ler performing a	Alternative Corridor Iternative corridor)		1.25	1.27	1.19	1.27	1.29	1.21	1.20	1.22	1.14	1.14	1.16	1.08	1.14	1.16	1.08	0.96	1.07	1.14	1.16	1.08
	REMARKS			Alternative 5     On the other     Initial wetland	generally scored hand Alternative impacts are bas	the highest in al 16 was the least ed on Land Use	l criteria, closely desirable with s Data and/or NW	followed by Alte significant wetlan /I and may chan	rnatives 2 and 4 d impacts within ge as wetlands a	segment 1 and are surveyed and	conservation lar d assessed.	ds/mitigation ba	nks impacts with	in Segment 3						1			

Sample Calcuation for Alternative 1 (Segment 2) under Wetlands

 Relative Segmental Score = Segmental
 1 (Point)
 x Wetlands Component
 7%
 = 0.07

 Rating
 Weight

#### 3.3.2.3 Socio-Economic Evaluation

The potential short and long-term effects of each corridor alternative on the adjacent communities and their resources are of vital importance. The following parameters were evaluated: impacts to approved developments/future land use, historical/archaeological, parks/recreational facilities, and right-of-way impacts. **Table 3-5** illustrates the results of the preliminary socio-economic evaluation. According to the results obtained, Corridor 12 had the highest ranking with a score of 1.41 closely followed by Corridors 15 and 17 both with a score of 1.34. Corridor 7 was the least effective option with a score of 0.76.

#### 3.3.2.4 Preliminary Evaluation Elimination Process

**Table 3-6** summarizes the results obtained previously on **Tables 3-3** (engineering evaluation), **3-4** (environmental evaluation), and **3-5** (socio-economic evaluation). The resulting total scores of these previous tables are shown in the last row of **Table 3-6**. The higher ranking "superior" alternative corridors are highlighted in yellow in **Table 3-7**.

According to **Table 3-7**, Alternative Corridors 2, 5, 12, 15, 16, 17, 18, 19 and 20 were selected for further evaluation based on the criteria that they exceeded the group median value of 3.77 and are within the standard deviation of 0.19. As previously noted, the objective of this phase is not necessarily to determine which options are the best but rather to identify which alternatives are clearly inferior so that they can be eliminated before even more stringent evaluation criteria and procedures are used during the next evaluation phase. The results obtained show that Alternative Corridors 1, 3, 4, 6, 7, 8, 9, 10, 11, 13, and 14 are clearly inferior and were thus eliminated from further consideration.

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RATINGGOOD= +2 POINTSFAIR= +1 POINTPOOR= 0 POINTS																							
EVALUATION COMPONENT	rs	QUANTITATIVE	BMENT	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5	Alternative 6	Alternative 7	Alternative 8	Alternative 9	Alternative 10	Alternative 11	Alternative 12	Alternative 13	Alternative 14	Alternative 15	Alternative 16	Alternative 17	Alternative 18	Alternative 19	Alternative 20
	Component Weight	MEROOKE	SEG	(1-1)+(2-1)+ (3-1)	(1-1)+(2-1)+ (3-2)	(1-1)+(2-2)+ (3-3)	(1-2)+(2-1)+ (3-1)	(1-2)+(2-1)+ (3-2)	(1-2)+(2-2)+ (3-3)	(1-3)+(2-1)+ (3-1)	(1-3)+(2-1)+ (3-2)	(1-3)+(2-2)+ (3-3)	(1-4)+(2-3)+ (3-1)	(1-4)+(2-3)+ (3-2)	(1-4)+(2-4)+ (3-3)	(1-5)+(2-3)+ (3-1)	(1-5)+(2-3)+ (3-2)	(1-5)+(2-4)+ (3-3)	(1-6)+(2-5)+ (3-4)	(1-6)+(2-6)+ (3-3)	(1-7)+(2-3)+ (3-1)	(1-7)+(2-3)+ (3-2)	(1-7)+(2-4)+ (3-3)
Approved Developments/Euture Land			1	109.95	109.95	109.95	43.27	43.27	43.27	24.35	24.35	24.35	3.68	3.68	3.68	1.09	1.09	1.09	0.00	0.00	3.68	3.68	3.68
Use		Acres	2	69.83	69.83	70.72	69.83	69.83	76.17	69.83	69.83	70.72	75.28	75.28	72.64	75.28	75.28	72.64	72.63	72.4	75.28	75.28	72.64
	15%		3	36.82	16.36	0	36.82*	16.36	0	36.82*	16.36	0	36.82*	16.36	0	36.82*	16.36	0	44.71	0	36.82*	16.36	0
			1	No previously recorded cultural resources intersecting	No previously recorded cultural resources intersecting	No previously recorded cultural resources intersecting	No previously recorded cultural resources intersecting	No previously recorded cultural resources intersecting	No previously recorded cultural resources intersecting	No previously recorded cultural resources intersecting	No previously recorded cultural resources intersecting	No previously recorded cultural resources intersecting	No previously recorded cultural resources intersecting	No previously recorded cultural resources intersecting	No previously recorded cultural resources intersecting	1 small archaeological site intersecting (not eligible)	No previously recorded cultural resources intersecting	No previously recorded cultural resources intersecting	No previously recorded cultural resources intersecting				
Historical/Archaeological		Number of Sites	2	1 historic structure within 100m/330ft (not eligible)	1 historic structure within 100m/330ft (not eligible)	1 medium archaeological site intersecting (not eligible) 1 historic structure within 100m/330ft (not eligible)	1 historic structure within 100m/330ft (not eligible)	1 historic structure within 100m/330ft (not eligible)	1 medium archaeological site intersecting (not eligible) 1 historic structure within 100m/330ft (not eligible)	1 historic structure within 100m/330ft (not eligible)	1 historic structure within 100m/330ft (not eligible)	1 medium archaeological site intersecting (not eligible) 1 historic structure within 100m/330ft (not eligible)	1 medium archaeological site intersecting (not eligible)	1 medium archaeological site intersecting (not eligible)	1 historic structure within 100m/330ft (not eligible)	1 medium archaeological site intersecting (not eligible)	1 medium archaeological site intersecting (not eligible)	1 historic structure within 100m/330ft (not eligible)	2 medium archaeological sites intersecting (not eligible)	2 medium archaeological sites intersecting (not eligible)	1 medium archaeological site intersecting (not eligible)	1 medium archaeological site intersecting (not eligible)	1 historic structure within 100m/330ft (not eligible)
	7%		3	1 small archaeological site intersecting (not eligible)	1 small archaeological site intersecting (not eligible)	No previously recorded cultural resources intersecting	1 small archaeological site intersecting (not eligible)	1 small archaeological site intersecting (not eligible)	No previously recorded cultural resources intersecting	1 small archaeological site intersecting (not eligible)	1 small archaeological site intersecting (not eligible)	No previously recorded cultural resources intersecting	1 small archaeological site intersecting (not eligible)	1 small archaeological site intersecting (not eligible)	No previously recorded cultural resources intersecting	1 small archaeological site intersecting (not eligible)	1 small archaeological site intersecting (not eligible)	No previously recorded cultural resources intersecting	No previously recorded cultural resources intersecting	No previously recorded cultural resources intersecting	1 small archaeological site intersecting (not eligible)	1 small archaeological site intersecting (not eligible)	No previously recorded cultural resources intersecting
			1	YES	YES	YES	YES	YES	YES	YES	YES	YES	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Parks/Recreational Facilities		Interaction with Planned Recreational Trail or State	2	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	NO	YES	YES	NO	NO	NO	YES	YES	NO
		Park																					
	7%		3																				
				AGRICULTURE 86.64 NATURAL 3.77 HYDRIC 4.15 TOTAL 94.56	AGRICULTURE 86.64 NATURAL 3.77 HYDRIC 4.15 TOTAL 94.56	AGRICULTURE 86.64 NATURAL 3.77 HYDRIC 4.15 TOTAL 94.56	AGRICULTURE 86.95 NATURAL 48.96 HYDRIC 8.62 TOTAL 144.53	AGRICULTURE 86.95 NATURAL 48.96 HYDRIC 8.62 TOTAL 144.53	AGRICULTURE 86.95 NATURAL 48.96 HYDRIC 8.62 TOTAL 144.53	AGRICULTURE 93.63 NATURAL 49.34 HYDRIC 26.10 TOTAL 172.07	AGRICULTURE 93.63 NATURAL 49.34 HYDRIC 26.10 TOTAL 172.07	AGRICULTURE 93.63 NATURAL 49.34 HYDRIC 26.10 TOTAL 172.07	AGRICULTURE 95.62 NATURAL 49.37 HYDRIC 32.81 TOTAL 177.80	AGRICULTURE 95.62 NATURAL 49.37 HYDRIC 32.81 TOTAL 177.80	AGRICULTURE 95.62 NATURAL 49.37 HYDRIC 32.81 TOTAL 177.80	AGRICULTURE 98.62 NATURAL 42.29 HYDRIC 37.18 TOTAL 178.09	AGRICULTURE 98.62 NATURAL 42.29 HYDRIC 37.18 TOTAL 178.09	AGRICULTURE 98.62 NATURAL 42.29 HYDRIC 37.18 TOTAL 178.09	AGRICULTURE 82.25 NATURAL 42.12 HYDRIC 34.62 TOTAL 158.99	AGRICULTURE 82.25 NATURAL 42.12 HYDRIC 34.62 TOTAL 158.99	AGRICULTURE 79.34 NATURAL 56.34 HYDRIC 40.5 TOTAL 176.18	AGRICULTURE 79.34 NATURAL 56.34 HYDRIC 40.5 TOTAL 176.18	AGRICULTURE 79.34 NATURAL 56.34 HYDRIC 40.5 TOTAL 176.18
Right-of-way Impacts		Acres per land use type; hydric (wetlands and waterbodies )	2	AGRICULTURE 85.87 NATURAL 1.92 HYDRIC 21.75 TOTAL 109.54	AGRICULTURE 85.87 NATURAL 1.92 HYDRIC 21.75 TOTAL 109.54	AGRICULTURE 105.02 HYDRIC 4.91 TOTAL 109.93	AGRICULTURE 85.87 NATURAL 1.92 HYDRIC 21.75 TOTAL 109.54	AGRICULTURE 85.87 NATURAL 1.92 HYDRIC 21.75 TOTAL 109.54	AGRICULTURE 105.02 HYDRIC 4.91 TOTAL 109.93	AGRICULTURE 85.87 NATURAL 1.92 HYDRIC 21.75 TOTAL 109.54	AGRICULTURE 85.87 NATURAL 1.92 HYDRIC 21.75 TOTAL 109.54	AGRICULTURE 105.02 HYDRIC 4.91 TOTAL 109.93	AGRICULTURE 84.21 NATURAL 1.92 HYDRIC 21.78 TOTAL 107.91	AGRICULTURE 84.21 NATURAL 1.92 HYDRIC 21.78 TOTAL 107.91	AGRICULTURE 96.86 HYDRIC 5.92 TOTAL 102.78	AGRICULTURE 84.21 NATURAL 1.92 HYDRIC 21.78 TOTAL 107.91	AGRICULTURE 84.21 NATURAL 1.92 HYDRIC 21.78 TOTAL 107.91	AGRICULTURE 96.86 HYDRIC 5.92 TOTAL 102.78	AGRICULTURE 82.36 HYDRIC 22.16 TOTAL 104.52	AGRICULTURE 91.12 HYDRIC 17.04 TOTAL 108.16	AGRICULTURE 84.21 NATURAL 1.92 HYDRIC 21.78 TOTAL 107.91	AGRICULTURE 84.21 NATURAL 1.92 HYDRIC 21.78 TOTAL 107.91	AGRICULTURE 96.86 HYDRIC 5.92 TOTAL 102.78
	9%		3	AGRICULTURE 51.95 NATURAL 18.37 HYDRIC 0.77 TOTAL 71.09	AGRICULTURE 46.45 NATURAL 17.49 HYDRIC 0.8 TOTAL 64.65	AGRICULTURE 47.25 NATURAL 26.46 HYDRIC 12.49 TOTAL 86.2	AGRICULTURE 51.95 NATURAL 18.37 HYDRIC 0.77 TOTAL 71.09	AGRICULTURE 46.45 NATURAL 17.49 HYDRIC 0.8 TOTAL 64.65	AGRICULTURE 47.25 NATURAL 26.46 HYDRIC 12.49 TOTAL 86.2	AGRICULTURE 51.95 NATURAL 18.37 HYDRIC 0.77 TOTAL 71.09	AGRICULTURE 46.45 NATURAL 17.49 HYDRIC 0.8 TOTAL 64.65	AGRICULTURE 47.25 NATURAL 26.46 HYDRIC 12.49 TOTAL 86.2	AGRICULTURE 51.95 NATURAL 18.37 HYDRIC 0.77 TOTAL 71.09	AGRICULTURE 46.45 NATURAL 17.49 HYDRIC 0.8 TOTAL 64.65	AGRICULTURE 53.28 NATURAL 26.45 WETLANDS 12.48 TOTAL 92.21	AGRICULTURE 51.95 NATURAL 18.37 HYDRIC 0.77 TOTAL 71.09	AGRICULTURE 46.45 NATURAL 17.49 HYDRIC 0.8 TOTAL 64.65	AGRICULTURE 47.25 NATURAL 26.46 HYDRIC 12.49 TOTAL 86.2	AGRICULTURE 40.62 NATURAL 0.08 HYDRIC 5.72 TOTAL 46.42	AGRICULTURE 47.25 NATURAL 26.46 HYDRIC 12.49 TOTAL 86.2	AGRICULTURE 51.95 NATURAL 18.37 HYDRIC 0.77 TOTAL 71.09	AGRICULTURE 46.45 NATURAL 17.49 HYDRIC 0.8 TOTAL 64.65	AGRICULTURE 47.25 NATURAL 26.46 HYDRIC 12.49 TOTAL 86.2
Total Socio-Economic Weight	38%						1				1		1					1					
Total Socio-Economic Sc (higher score = higher p	Total Socio-Economic Score for each Alternative Corridor (higher score = higher performing alternative corridor)       0.85       0.94       0.92       0.85       1.09       1.07       0.76       1.00       0.98       0.90       1.14       1.41       0.83       1.07       1.34       1.28       1.34       0.90       1.14												1.14	1.41									
R	• Alternative 12 had the highest total score generally due to its avoidance of significant impacts in two of the three segments to approved developments, historical/archaeological, and park and recreational facilities. • Alternative 1 on the other hand ranked the lowest with potential significant land use impacts within segment 1 and potential impacts to parks and recreational facilities within the first two segments.																						
Sample Calcuation for Alternative 1 (Segment 2) under Approved Developments/Future Land Use         Relative Segmental Score = Segmental 1 (Point)       x Approved 15% = 0.15         Rating       Developments/Future Land																							

	TABLE 3-6 PRELIMINARY COMPOSITE RESULTS																			
ALTERNATIVES	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5	Alternative 6	Alternative 7	Alternative 8	Alternative 9	Alternative 10	Alternative 11	Alternative 12	Alternative 13	Alternative 14	Alternative 15	Alternative 16	Alternative 17	Alternative 18	Alternative 19	Alternative 20
CRITERIA	(1-1)+(2-1)+ (3-1)	(1-1)+(2-1)+ (3-2)	(1-1)+(2-2)+ (3-3)	(1-2)+(2-1)+ (3-1)	(1-2)+(2-1)+ (3-2)	(1-2)+(2-2)+ (3-3)	(1-3)+(2-1)+ (3-1)	(1-3)+(2-1)+ (3-2)	(1-3)+(2-2)+ (3-3)	(1-4)+(2-3)+ (3-1)	(1-4)+(2-3)+ (3-2)	(1-4)+(2-4)+ (3-3)	(1-5)+(2-3)+ (3-1)	(1-5)+(2-3)+ (3-2)	(1-5)+(2-4)+ (3-3)	(1-6)+(2-5)+ (3-4)	(1-6)+(2-6)+ (3-3)	(1-7)+(2-3)+ (3-1)	(1-7)+(2-3)+ (3-2)	(1-7)+(2-4)+ (3-3)
Engineering	1.50	1.65	1.61	1.65	1.44	1.47	1.54	1.33	1.29	1.68	1.47	1.47	1.32	1.47	1.47	1.61	1.47	1.79	1.58	1.58
Environmental	1.25	1.27	1.19	1.27	1.29	1.21	1.20	1.22	1.14	1.14	1.16	1.08	1.14	1.16	1.08	0.96	1.07	1.14	1.16	1.08
Socio-Economic	0.85	0.94	0.92	0.85	1.09	1.07	0.76	1.00	0.98	0.90	1.14	1.41	0.83	1.07	1.34	1.28	1.34	0.90	1.14	1.41
TOTAL	3.60	3.86	3.72	3.77	3.82	3.75	3.50	3.55	3.41	3.72	3.77	3.96	3.29	3.70	3.89	3.85	3.88	3.83	3.88	4.07

PREL	TABLE 3-7 PRELIMINARY ALTERNATIVE CORRIDOR ELIMINATION STANDARD													
Alternative	SCORE	MEDIAN	STANDARD DEVIATION	REASONS FOR ELIMINATION										
1	3.60			Failed Criterion #1										
2	3.86			Remains Viable										
3	3.72			Failed Criterion #1										
4	3.77			Failed Criterion #1										
5	3.82			Remains Viable										
6	3.75			Failed Criterion #1										
7	3.50			Failed Criterion #1										
8	3.55			Failed Criterion #1										
9	3.41			Failed Criterion #1										
10	3.72	2 77	0.10	Failed Criterion #1										
11	3.77	3.77	0.19	Failed Criterion #1										
12	3.96			Remains Viable										
13	3.29			Failed Criterion #1										
14	3.70			Failed Criterion #1										
15	3.89			Remains Viable										
16	3.85			Remains Viable										
17	3.88			Remains Viable										
18	3.83			Remains Viable										
19	3.88			Remains Viable										
20	4.07			Remains Viable										

Selection Criteria

#1 - Only those alternatives which score higher than the median value for the group will be selected #2 - The maximum gap between the last selected alternative and the next must not be greater than one standard deviation

### Lake/Orange County Connector Feasibility/PD&E Study

#### 3.3.2.5 Initial Agency/Public Presentation and Modifications

At this juncture of the project schedule, a presentation of preliminary findings was conducted to seek additional input from various agencies, stakeholders and the public in general. Details concerning this presentation and the results of the public involvement effort are shown in **Section 3.4** of this report. As a result of this meeting, the following segmental alternative modifications were implemented.

<u>Modification #1</u>: The original western terminus of segmental alternatives 1-5 and 1-6 was near the project's southwestern limit very close to Frank Jarrell Road. This close proximity created access management problems for the potential placement of an interchange at this site. It was thus recommended to modify the terminus of both alternatives slightly to the north around Lake Adain and away from Frank Jarrell Road.

<u>Modification #2</u>: Although the original alignment of Corridor 2-1 generally followed Schofield Road, it introduced a significant curve around the Schofield Tract in order to avoid potential impacts to that Florida Forever conservation resource. Additional research revealed that the parcel abutting Schofield Road is not part of the Schofield Tract. In view of this fact, Corridor 2-1 was modified to provide a straighter and more direct alignment closely following Schofield Road.

It should be noted that these relatively minor modifications do not appreciably change any of the results previously presented in this report.

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#### 3.3.3 Pre-Final Alternative Corridor Evaluation

In order to refine the previous analysis, a multi-objective approach using a weighted numerical/descriptive technique was used for the remaining alternative corridors. Table **3-8** is a numerical/descriptive matrix, which describes and evaluates the features of the remaining corridor alternatives (see Figure 3-5). The evaluation used involved the generation of a weighting scheme for each of the evaluation parameters. The evaluation parameters generally fall within three general criteria categories: engineering, environmental and socio-economic. Ten (10) different evaluation sub-criteria were used. Each sub-criteria was assigned a value depending on its perceived degree of importance. These criteria and sub-criteria weightings were developed from the average of individual weighting sets prepared by members of the consultant team reflecting a broad range of professional backgrounds. In addition, the alternative performance with respect to each parameter was compared using two benchmarks: 1) the overall effect on the specified parameter and/or; 2) the relative effect between the competing alternatives. The overall effect received one of the five judgmental values (++ = 1.00, + = 0.80, o = 0.60, - = 0.40, - - = 0.20). If, however, any of the alternatives had an overall negative effect, then the worst alternative received a (- -) and the relatively better alternative received a higher score (-). If any two values were approximately equal then they both received the relatively lowest score. If the alternatives had an overall positive effect then the best alternative received a (++) and the relatively worse alternative received a lower score (+). A common value, therefore, signifies an equal overall and relative effect. This evaluation involves a combination of both qualitative and quantitative values resulting in an overall score. Each score indicated on the matrix is the result of multiplying the judgmental analysis rating times the relative weight for that parameter. For example, on **Table 3-8**, Corridor 2 under the "Geometric Features" parameter was given a (-) designation (judgmental value = 0.4) due to the potential access management issue resulting from its close proximity to Lake Louisa State Park's main entrance and the potential operational issues due to the close proximity of the proposed CR 455 interchange to Schofield Road. This judgmental value of 0.4 was then multiplied by the relative weight of the "Geometric Features" parameter (12.0) resulting in an overall score of 4.8. Those alternative options found most feasible, which merited further development and evaluation, are shown in yellow.

	LEGEND						TABLE 3-8				
++ SUE + GI O G - GEN GE	STANTIALLY POSITIVE EFFECT OF ENERALLY POSITIVE EFFECT OR G ENERALLY NO EFFECT OR MODER IERALLY NEGATIVE EFFECT OR INF NERALLY NEGATIVE EFFECT OR W	R BEST ALTERNATIVE COOD ALTERNATIVE TATE ALTERNATIVE FERIOR ALTERNATIVE CORST ALTERNATIVE	1.0 0.8 0.6 0.4 0.2			PRE-FINA	L ALTERNATIVE CORF	RIDOR EVALUATION			
		ENGINE	EERING	4	3	ENVIRONMENTAL		26	SOCIO-ECONOMIC	31	
ALTERNATIVES	GEOMETRIC FEATURES	TRAFFIC ATTRACTIONS	CONNECTIVITY/ DIRECTNESS	UTILITY IMPACTS	CONSERVATION LANDS	WETLAND IMPACTS	RECREATIONAL RESOURC	APPROVED DEVELOPMENT IMPAC	TS CONTROVERSY POTENTIAL	RIGHT-OF-WAY IMPACTS	TOTAL SCORE
<b>2</b> (1-1) + (2-1) + (3-2)	Potential access management issue due to the close proximity of Lake Louisa State Park main entrance. Potential operational issues due to the close proximity of the proposed CR 455 interchange to Schofield Road.	<ul> <li>Projected to attract 24,300</li> <li>AADT (generally higher).</li> </ul>	+ Provides systems connectivity / Good directness.	<ul> <li>Potential to impact 3.5 miles of major utilities along Schofield Road and other minor utilities (highest overall).</li> </ul>	<ul> <li>No direct impacts to conservation lands.</li> </ul>	<ul> <li>Potentially 30.29 acres of wetland impacts (least overall).</li> </ul>	<ul> <li>Potentially minor visual and noise impacts due to close proximity to Lake Louisa State Park cabins.</li> </ul>	o Potential impacts to Ridgeview PUD (moderate), CEMEX sand mine (minor) and Valencia College campus (minor).	<ul> <li>Highest controversy caused by the potential impacts to the Ridgeview PUD, to the parcels that are located in the Horizon West Town Center that front Schofield Road, the Southern Hills Farms, and a limited access facility located in close proximity to Schofield Road.</li> </ul>	Potentially 334.46 acres + of right-of-way impacts (moderate).	56.8
	4.8	B Decide at a stress to 22,700	9.6 6	.4 2.2		8.0	6.4	4.8	k.8	1.8 8.0	
<b>5</b> (1-2) + (2-1) + (3-2)	Potential operational issues due to the close proximity of the proposed CR 455 interchange to Schofield Road.	AADT (generally medium).	o Provides systems connectivity / Good directness.	<ul> <li>Potential to impact 3.5 miles of - major utilities along Schofield Road and other minor utilities (highest overall).</li> </ul>	- No direct impacts to conservation lands.	<ul> <li>Potentially 33.24 acres of wetland impacts (relatively minor).</li> </ul>	<ul> <li>Potentially minor Visual and noise impacts due to close proximity to Lake Louisa State Park cabins.</li> </ul>	o Potential impacts to CEIVEX sand mine (minor) and Valencia College campus (minor).	o Frigh controversy potential due to the potential impacts to the parcels that are located in the Horizon West Town Center that front Schofield Road, the Southern Hills Farms, and a limited access facility located in close proximity to Schofield Road.	<ul> <li>Potentially 394.43 acres o of right-of-way impacts (moderate).</li> </ul>	59.0
	7.2	2	7.2 6	.4 2.2	2	8.0	6.4	4.8	7.2	3.6 6.0	
<b>12</b> (1-4) + (2-4) + (3-3)	Potential access management issue on US 27 with S Bradshaw Road and potential geometric issues due to the S-Curve around Lake Pike approaching US 27 in Segment 1.	AADT (generally medium).	o Provides systems connectivity / Good directness.	+ Potential to impact minor utilities.	<ul> <li>Potentially 3.72 acres of impacts to conservation lands (moderate).</li> </ul>	o Potentially 41.01 acres of wetland impacts (moderate).	o Potentially minor visual and noise impacts due to close proximity to Lake Louisa State Park cabins.	o Potential impacts to CEMEX sand mine (moderate).	<ul> <li>Moderate controversy potential due to the potential impacts through the middle of the CEMEX Four Corners Sand Mine. Lower controversy potential with reduced impacts to the parcels that front Schofield Rd in the Horizon West Town Center.</li> </ul>	o Potentially 372.79 acres o of right-of-way impacts (moderate).	61.4
<b>15</b> (1-5) + (2-4) + (3-3)	Low potential for geometric issues due to the S-Curve around Lake Pike approaching US 27 in Segment 1.	+ Projected to attract 23,100 AADT (generally medium).	O Provides systems connectivity / Low directness.	Potential to impact minor     utilities.	Potentially 3.72 acres of impacts to conservation lands (moderate).	o Potentially 68.25 acres of wetland impacts (relatively high).	No impacts to recreational resources.	+ Potential impacts to CEMEX sand mine (moderate).	Moderate controversy potential due to the potential impacts through the middle of the CEMEX Four Corners Sand Mine. Lower controversy potential with reduced impacts to the parcels that front Schofield Rd in the Horizon West Town Center.	O Potentially 370.11 acres o of right-of-way impacts (moderate).     54     60	60.6
<b>16</b> (1-6) + (2-5) + (3-4)	Potential interchange spacing isssue at SR 429.	<ul> <li>Projected to attract 24,100 AADT (generally higher).</li> </ul>	+ Provides systems connectivity / Low directness.	- Potential to impact minor - utilities.	Potentially 8.46 acres of impact to conservation lands (highest overall).	<ul> <li>Potentially 65.02 acres of wetland impacts (relatively high).</li> </ul>	<ul> <li>No impacts to recreational resources.</li> </ul>	+ Potential impacts to CEMEX sand mine (moderate) and Zanzibar PD (minor).	<ul> <li>Moderate controversy potential due to the potential impacts to the Zanzibar PD (currently under construction), but impacting the CEMEX Four Corners Sand Mine in the south. Lower controversy potential with reduced impacts to the parcels that front Schofield Rd in the Horizon West Town Center.</li> </ul>	o Potentially 323.76 acres + of right-of-way impacts (lowest overall).	58.2
<b>17</b> (1-6) + (2-6) + (3-3)	4.8 Low potential for geometric issues due to the S-Curve around Lake Pike approaching US 27 in Segment 1.	<ul> <li>Projected to attract 23,100</li> <li>AADT (generally medium).</li> <li>AADT (generally medium).</li> </ul>	9.6 3 o Provides systems connectivity / Low directness.	2   8.8 - Potential to impact minor utilities.	<ul> <li>Potentially 3.72 acres of impacts to conservation lands (moderate).</li> </ul>	A.0     O Potentially 72.98 acres of wetland impacts (highest overall).	No impacts to recreational resources.		1.8 O Low controversy potential due to potential impacts to the CEMEX Four Corners Sand Mine in the south. Lower controversy potential with reduced impacts to the parcels that front Schofield Rd in the Horizon West Town Center.	5.4     8.0       + Potentially 356.18 acres     o       of right-of-way impacts (moderate).     0	64.8
<b>18</b> (1-7) + (2-3) + (3-1)	Potential operational issues due to the close proximity of the proposed CR 455 interchange to Schofield Road. Potential interchange spacing issue at SR 429.	- Projectedd to attract 23,700 AADT (generally medium).	o Provides systems connectivity / slightly better than low directions.	O Potential to impact 1 mile of major utilities along Schofield Road and other minor utilities.	No direct impacts to conservation lands.	+ Potentially 36.81 acres of wetland impacts (relatively minor).	+ No impact to recreational resources.	+ Potential impacts to CEMEX sand mine (moderate) and Valencia College campus (major).	<ul> <li>Highest controversy potential due to the potential impacts to the parcels that are located in the Horizon West Town Center that front Schofield Road, the Valencia College Future Campus, the Southern Hills Farms, and a limited access facility located in close proximity to Schofield Road.</li> </ul>	Potentially 355.18 acres o of right-of-way impacts (moderate).	52.2
<b>19</b> (1-7) + (2-3) + (3-2)	Low potential for detrimental geometric issues on US 27 but potential operational issues due to close proximity of the porposed CR 455 interchange to Schofield Road.	- Projected to attract 23,700 AADT (generally medium).	O Provides systems connectivity / Good directness.	Potential to impact 1.5 miles of major utilities along Schofield Road and other minor utilities.	No direct impacts to conservation lands.	+ Potentially 36.84 acres of wetland impacts. (relatively minor).	+ No impacts to recreational resources.	+ Potential impacts to CEMEX sand mine (moderate) and Valencia college campus (minor).	<ul> <li>High controversy potential due to the potential impacts to the parcels that are located in the Horizon West Town Center that front Schofield Road, and through the middle of the CEMEX Four Corners Sand Mine.</li> </ul>	Potentially 348.74 acres o of right-of-way impacts (moderate).	58.0
<b>20</b> (1-7) + (2-4) + (3-3)	Lowest potential for geometric + issues.	AADT (generally medium).	O Provides systems connectivity / Good directness.     7.2     6	+ Potential to impact minor utilities.	Potentially 3.72 acres of impacts to conservation lands (moderate).	O Potentially 35.86 acres of wetland impacts (relatively minor).      6.0	<ul> <li>Potentially minor visual and noise impacts due to close proximity to Lake Louisa State Park cabins.</li> <li>6.4</li> </ul>	O Potential impacts to CEMEX sand mine (moderate).	Moderate controversy potential due to the potential impacts through the middle of the CEMEX Four Corners Sand Mine. Lower controversy potential with reduced impacts to the parcels that front Schofield Rd in the Horizon West Town Center.	O Potentially 365.4 acres of right-of-way impacts (moderate).	67.8

# Lake/Orange County Connector Feasibility/PD&E Study


## Lake/Orange County Connector Feasibility/PD&E Study

According to **Table 3-9**, both the group median scores and standard deviation were initially used as the basis for elimination of inferior options. The results obtained show that Alternative Corridors 2, 5, 16, 18 and 19 are clearly inferior since they do not meet selection criterion #1. In addition, Alternative 15 was eliminated for further consideration due to failing Criterion #3.

Corridor	Score	Median	Standard Deviation	Reasons for Elimination				
2	56.8			Failed Criterion #1				
5	59.0			Failed Criterion #1				
12	61.4			Remains Viable				
15	60.6	1		Failed Criterion #3				
16	58.2	59.0	4.09	Failed Criterion #1				
17	64.8			Remains Viable				
18	54.6			Failed Criterion #1				
19	58.0			Failed Criterion #1				
20	67.8			Remain Viable				

 Table 3-9 – Pre-Final Alternative Corridor Elimination

## Selection Criteria

#1 – Only those alternatives which score higher than the median value for the group will be selected.

#2 – The maximum gap between the last selected alternative and the next must not be greater than one standard deviation.

#3 – Only the top three alternatives which comply with the previous criteria (#1 and #2) will be selected for further consideration.

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**Table 3-10** illustrates the general performance of the three top remaining alternatives. According to the table, Alternative 20 is the best option in terms of engineering features, but only "fair" (i.e. - moderately effective) in terms of avoiding potential environmental and socio-economic impacts. Alternative 12 is generally "fair" in all three decisional components and Alternative 17 is "fair" in terms of engineering features and avoidance of potential environmental impacts but is the highest ranked in terms of socio-economic issues. In summary, the total resulting scores of these three top alternatives are indeed very close and indicate that each could potentially provide a superior solution with an adequate balance between the three decisional components (engineering, environmental and socio-economic).

DECISIONAL COMPONENTS				
ALTERNATIVES	ENGINEERING	ENVIRONMENTAL	SOCIO-ECONOMIC	SUMMARY
12	<ul> <li>Provides medium traffic attraction (23,700 AADT).</li> <li>Minor potential utility impacts generally similar to alternatives 17 and 20.</li> <li>Provides systems connectivity/moderate directness.</li> <li>Potential access management issues with US 27 and S. Bradshaw Road.</li> </ul>	<ul> <li>Generally minor visual and noise impacts due to its close proximity to Lake Louisa State Park cabins.</li> <li>41.01 acres of potential wetland impacts.</li> <li>Only moderate impacts (3.72 acres) of impacts to conservation lands.</li> </ul>	<ul> <li>Moderate controversy potential due to the potential impacts through the middle of the CEMEX Four Corners Sand Mine.</li> <li>Potential right-of-way impact = 373 acres±</li> </ul>	<ul> <li>Although this alternative was not the best in any of the 3 decisional categories (engineering, environmental and socio-economic) it was the second best in engineering, resulting in a relatively high total score.</li> </ul>
17	<ul> <li>Provides medium traffic attraction (23,100 AADT).</li> <li>Minor potential utility impacts generally similar to Alternatives 12 and 20.</li> <li>Not as direct as Alternatives 12 and 20.</li> </ul>	<ul> <li>Moderate impacts to conservation lands (3.72 acres) and no impacts to recreational resources but with higher wetland impacts (72.98 acres).</li> </ul>	<ul> <li>Good alternative with only minor potential impacts to approved developments and the CEMEX Four Corners Sand Mine</li> <li>Potential right-of-way impact = 356 acres±</li> </ul>	<ul> <li>Good alternative but not as direct as some of the other corridors.</li> <li>Good option in terms of potential avoidance of impacts to approved developments (only minor impacts).</li> </ul>
20	<ul> <li>Provides medium traffic attraction (23,700 AADT) generally similar to alternatives 12 and 17.</li> <li>Minor potential utility impacts generally similar to the other two alternatives.</li> <li>Most direct of all alternatives.</li> </ul>	• Adequate alternative with only relatively minor impacts to wetlands (36 acres <u>+</u> ) and conservation lands (3.7 acres).	<ul> <li>Similar to Alternative 12 with moderate controversy potential due to the impacts to the middle of the CEMEX Four Corners Sand Mine.</li> <li>Potential right-of-way impact = 365 acres<u>+</u></li> </ul>	<ul> <li>Generally best solution in terms of engineering issues (most direct, minimal utility conflicts no significant problems in terms of future interchange locations).</li> <li>Tied with other two options in terms of environmental issues with moderate potential impacts to conservation lands and wetlands</li> </ul>

Table 3-10 – Pre-Final Alternative Corridor Summary Results

## 3.3.4 Final Alternative Corridor Evaluation

In order to further test the validity of the results previously obtained in **Table 3-9**, the use of a more detailed evaluation procedure is necessary. The core decision-making tool used for the evaluation was the "Expert Choice" computer software, which utilizes the Analytical Hierarchy Process (AHP) procedure. The AHP method is based on the breakdown of each problem into a system of stratified levels of hierarchies where each level consists of criteria or objectives to be compared. The relative importance or priority for all the criteria in a given level is then established through a sequence of pair-wise comparisons, which will ultimately lead to the derivation of priorities (i.e., weights or importance) for each criterion. Each alternative is then compared in a series of pairwise comparisons in relation to each of the evaluation criteria that leads to the determination of the recommended corridor alternative. A complete description of the project evaluation criteria and AHP methodology, as well as the AHP computer run results, are included in **Appendix C**. The results from the final alternative evaluation confirm that Corridor 20 is the top-ranked alternative but only by a small margin (see **Figure 3-6**). In order to further reduce potential individual bias and investigate any sensitive criterion that could yield a different alternative ranking, a thorough sensitivity analysis of the AHP evaluation results was conducted. This feature investigates the effect on the ranking of the top priority alternative if the criteria take on other possible weight values.

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Figure 3-7 illustrates distinct sensitivity analyses or "cases" which explore potential changes in the engineering deficiencies parameter (case 1), environmental impacts parameter (case 2), and socio-economic impacts parameter (case 3). The solid red vertical line shown for each case indicates the originally assigned weight and the arrow pointing to the dashed line, the necessary increase (arrow pointing to the right) or reduction (arrow pointing to the left) in the originally assigned weight that would be required for another alternative to overtake the superior alternative. In terms of case 1 (engineering deficiencies) the originally assigned weight was 0.430. According to Figure **3-7**, the weight would only need to be slightly decreased to 0.405 for Alternative Corridor 17 to overtake Alternative Corridor 20. As shown on the table at the bottom of the figure, this change would reassign values of 0.271 for the environmental impacts (instead of its original value of 0.260) and 0.324 for socio-economic impacts (instead of 0.310). Under Case 2 (environmental impacts), Corridor 20 maintains its relative superiority regardless of a change in criteria weights since the lines representing the competing alternatives never meet. Lastly, under Case 3 (socio-economic impacts), the originally assigned weight of 0.310 would only have to be increased to 0.338 for Corridor 17 to overtake Corridor 20. This change would also result in relatively minor weight reassignments for the engineering (0.413) and environmental impacts categories (0.250). In summary, the sensitivity analysis confirms that both Corridors 20 and 17 are essentially tied and that the obtained results lack the necessary robustness to affirm that one is superior to the other since a slight shift in criteria weights could alter their final ranking.



## 3.4 TASK 4 – PUBLIC OUTREACH AND AGENCY COORDINATION

Various public outreach and agency coordination activities took place throughout the ACE process to help develop, refine, and evaluate the corridor alternatives. A summary of the outreach efforts and meetings conducted to date are shown in **Table 3-11**. Additional detailed descriptions of specific activities are also provided in this section. A complete summary of the meetings including meeting notifications, presentations and display materials, comments, sign-in sheets, and media coverage is provided in the Comments and Coordination Report available separately.

ITEM	STAKEHOLDER / GOVERNMENT / AGENCY	TOPIC						
04/03/18	CEMEX	Coordination Kick-Off Meeting						
04/20/18	Orange County Transportation Planning Division	Coordination Kick-Off Meeting						
04/27/18	Lake County Department of Public Works	Coordination Kick-Off Meeting						
05/07/18	Water Conserv II	Coordination Kick-Off Meeting						
05/15/18	Orange County Transportation Planning Division	CFX Progress Meeting						
06/12/18	Orange County Transportation Planning Division	CFX Progress Meeting						
06/14/18	Lake County Department of Public Works	Coordination Meeting						
06/20/18	Elected and Appointed Officials Kick-Off Letter emaile	d						
06/20/18	Advance Notification Package distributed							
07/02/18	Orange County Commissioner Betsey VenderLey	Project Overview						
07/10/18	Orange County Transportation Planning Division	CFX Progress Meeting						
07/30/18	Project and Environmental Advisory Group meetings							
08/07/18	Orange County Transportation Planning Division	CFX Progress Meeting						
08/08/18	Lake County MPO Technical Advisory Committee	Project Overview						
08/22/18	Advance Notification comment period ends							
08/22/18	Lake County MPO Board	Project Overview						
08/24/18	FDOT District Five	Project Overview						
08/30/18	First Public Informational Meeting							
09/04/18	Orange County Transportation Planning Division	CFX Progress Meeting						
09/10/18	Greater Orlando Builders Association	Project Overview						
10/02/18	Orange County Transportation Planning Division	CFX Progress Meeting						
10/16/18	Lake County Department of Public Works	Coordination Meeting						
10/30/18	Lake County Department of Public Works	CFX Progress Meeting						

Table 3-11 – Public Outreach and Agency Coordination Summary

## 3.4.1 Advance Notification

An Advance Notification Package was prepared and sent to the Florida State Clearinghouse on June 20, 2018, where it was then distributed to the appropriate state agencies for review. The State Application Identifier (SAI) number assigned to this project by the Florida State Clearinghouse is FL201806228337. The Advance Notification was also distributed to appropriate non-state agencies and tribal nations. A copy of the Advance Notification Package is provided as **Appendix D** and contains a transmittal list of all recipients. **Table 3-12** provides the summary of comments from the reviewing agency along with responses.

AGENCY	COMMENT SUMMARY	RESPONSE
National Forest Service	The National Forests in Florida has no comments. The proposed study does not affect any US Forest Service holdings	Thank you for your review and response.
National Resources Conservation Service	If you need a Farmland Protection Evaluation for this project please send request form and .shp files.	We anticipate the need for a Farmland Protection Evaluation and will coordinate with NRCS once project alternatives and .shp files are available.
Seminole Tribe of Florida	The proposed undertaking does fall within in the STOF [Seminole Tribe of Florida] Area of Interest. We have reviewed the documents provided and would like to provide the following feedback. We would respectfully like to request that once specific alternative corridors are chosen that a Cultural Resources Assessment Survey be conducted and sent to us so that we may complete our review.	A Cultural Resources Assessment Survey is being prepared as part of the Section 106 review process for this project and will be made available for review and comment.
State Historic Preservation Officer	Based on the nature of the project (new roadway) and the environmental conditions in the project area, we request that the project area be subjected to a professional cultural resources assessment survey. The resultant survey report should conform to the provisions of Chapter 1A-46, <i>Florida Administrative Code</i> , and should be forwarded to FHWA and our office upon completion. The report will help us complete the Section 106 review process and provide concurrence on federal findings of effect and recommend any necessary avoidance or mitigation measures.	A Cultural Resources Assessment Survey is being prepared as part of the Section 106 review process for this project.

 Table 3-12 – Advance Notification Comment Summaries and Responses

AGENCY	COMMENT SUMMARY	RESPONSE
Federal Aviation Administration	Please note that federal requirements that pertain to notifying the FAA of proposed construction and alteration on or nearby a public-use airport should be in accordance with FAR Part 77 Regulation. Any tall permanent structure or temporary equipment near an airport must conform to this regulation	All tall, permanent structures or temporary equipment near any airports will conform with appropriate regulations, including FAR Part 77.
U.S. Environmental Protection Agency	The eastern study area of the project lies partially within the Biscayne Aquifer boundaries (NEPAssist https://www.epa.gov/nepa/nepassist). The Biscayne Aquifer is a sole source aquifer and is considered a principal water source for South Florida residents, visitors, and businesses. The aquifer is highly permeable and vulnerable to contamination. The EPA recommends adherence to all federal, state, and local government permits, ordinances, planning designs, construction codes, operation and maintenance requirements, and engineering for avoidance, minimization, and protection of the water source. Additionally, we recommend that avoidance and minimization of any identified jurisdictional waters of the U.S. be avoided during the development of alternatives to the extent practicable. During construction, please consider the vulnerability of the sole source aquifer and protect the drinking water delivered from this source. Also, follow all best management activities for erosion and sedimentation control. The project is a non-federal action. Therefore, concurrence from the EPA is not required according to the Safe Drinking Water Act. Please contact state and county environmental offices to address proper drainage and storm water design. If federal financial assistance does become a source of funding for this project, please contact Region 4, Ground Water and UIC Section, Mr. Khurram Rafi (rafi.khurram@epa.gov) or Larry Cole (cole.larry@epa.gov) for an aquifer impact determination letter.	Impacts to wetlands and jurisdictional waters of the U.S. will be avoided and minimized as much as practicable. Minimization of impacts to the aquifer is also being considered during alternative development. Construction impacts will be minimized by implementing standard Best Management Practices for road construction.

Table 3-12 – Advance	Notification Comment	Summaries	and Responses	(Cont.)
		Cummanes	and hesponses	(00111.)

## 3.4.2 Project and Environmental Advisory Groups

As a special advisory resource to CFX and the consultant team, the Project Advisory Group (PAG) and Environmental Advisory Group (EAG) will provide input regarding local needs, concerns, and potential physical, natural, social and cultural impacts that will be crucial in the evaluation of corridor and alternative alignments. The first PAG and EAG meetings were held on July 30, 2018, at CFX headquarters. Invitation letters to the first PAG meeting were emailed to 61 project stakeholders within the study area. Thirty-six PAG members and ten staff members attended. Invitation letters to the first EAG meeting were emailed to 61 environmental stakeholders within the study area. Ten EAG members and eight staff members attended. The meeting summaries are included in **Appendix D**.

Two additional PAG and EAG meetings will be held during the study to facilitate open communication and provide a forum for issue identification and resolution with the project and environmental stakeholders.

## 3.4.3 Public Informational Meeting

A Public Informational Meeting was held on August 30, 2018, at the Clermont Arts & Recreation Center in Clermont, FL. This meeting provided an opportunity for residents, businesses, stakeholders and other interested parties to view project information, ask questions of the study team and provide comments. Public meeting notices were sent by U.S. mail and published in local newspapers and the Florida Administrative Ad. A total of 126 people signed into the meeting including 104 citizens, four elected officials, and 17 staff members. Nine comments were received during the 10-day comment period:

- Five did not want a limited-access road;
- Three strongly supported the proposed Lake/Orange County Connector; and
- One said it would be helpful to have Lake County staff at the meeting to discuss extensions of Hancock Road and CR 455.

One additional public information meeting and a public hearing will be held during the study to facilitate public participation.

## 3.5 Task 5 – Conclusions and Recommendations

All alternative corridors were developed to meet the project's purpose and need; therefore, no alternative corridor was eliminated based on a failure to meet the purpose and need criteria. All alternative corridors were evaluated to the same desk-top level of detail utilizing the methodological approach previously described. The conclusions obtained show that the resulting scores of Alternative Corridors 12, 17 and 20 (see **Figure 3-8**) are very close which indicate that each could provide a superior solution with an adequate balance between the three decisional components (engineering, environmental and socio-economic). **Table 3-13** provides a summary of findings. Based on the above analysis which produced no appreciable difference between Corridors 12, 17 and 20, and to allow for flexibility in the alternatives phase, the recommended corridor encompasses the area that is bordered by Corridor 20 on the north and Corridor 17 on the south (as shown on **Figure 3-9**).



Methodological Approach | Alternative Corridor Evaluation Report

## Table 3-13 – Summary of Findings

		Key Issues	Effect on Recommended Corridor				
		<u>US 27</u> : Generally, the study area north of Lake Trout is less desirable for a future interchange because of its proximity to the main entrance of Lake Louisa State Park and the presence of the Ridgeview PUD.	The recommended corridor is south of Lake Trout and thus avoids conflicts with Lake Louisa State Park's main entrance and the approved Ridgeview PUD.				
	POTENTIAL INTERCHANGE LOCATION	<u>SR 455 Extension</u> : A future interchange in close proximity to Schofield Road would likely be a collocated design to effectively provide all local and express movements. Such a design involves higher geometric and operational complexity.	The distance between the recommended corridor and Schofield Road facilitates the use of a simple and effective interchange configuration.				
ERING		<u>SR 429</u> : The proposed eastern terminal interchange must be tied to the existing SR 429/Schofield in order to meet interchange spacing standards.	The recommended corridor eliminates the need for a new access point by co-locating the proposed system interchange with the existing service interchange.				
ENGINE	TRAFFIC	Traffic forecasts show no significant difference in 2045 average AADTs between all corridor alternatives. The highest forecasted average AADT is 24,901 while the lowest is 23,144.	The forecasted 2045 average AADTs within the recommended corridor ranged from 24,673 to 23,144.				
	CONNECTIVITY & DIRECTNESS	The goal of the proposed project is to connect US 27 with SR 429. The directness of a corridor alternative is a measure of operational efficiency, driver convenience and resulting road user cost. The more direct a corridor, the more desirable it is.	The recommended corridor connects US 27 with SR 429 and allows for direct, due east, alignments.				
	UTILITY IMPACTS	There are major utilities concentrated along the existing Schofield Road alignment. Therefore, all corridors within the immediate vicinity of Schofield Road will likely have to contend with major utility issues.	The recommended corridor is not in the vicinity of Schofield Road except at the existing Schofield Road/SR 429 interchange. Proposed improvements in this location are likely to be on structures and can be located to avoid major utilities along the existing Schofield Road alignment.				
_	CONSERVATION LANDS	Conservation lands within the study area are few and include Orange County conservation properties and the Schofield Tract.	The recommended corridor has the potential to impact Orange County conservation properties in the vicinity of Lake Needham.				
ONMENTA	WETLANDS	Most of the existing wetlands are located in the southern portion of the study area.	The recommended corridor is located in the southern portion of the study area and thus wetland impacts are unavoidable. Impacts to existing wetlands will be minimized to the greatest extent possible.				
ENVIR	RECREATIONAL RESOURCES	Most of the potential impacts to recreational resources relate to the Lake Louisa State Park (perceived noise and visual impacts and potential access management issues) and Lake County's planned recreational trail in the immediate vicinity of Schofield Road.	The recommended corridor avoids impacts to Lake County's planned recreational trail. Perceived noise and visual impacts may continue due to the presence of park cabins on the west side of US 27, opposite the recommended corridor.				
ECONOMIC	APPROVED DEVELOPMENT IMPACTS	There are several approved developments associated with the WWAP and the HWSPA, with more expected in the future. In addition, the CEMEX Four Corners Sand Mine will operate on approximately 2,000 acres within the study area. Given the size of the future mine, all corridor alternatives have the potential to impact it.	The recommended corridor avoids impacts to currently approved developments. Impacts to the future CEMEX Four Corners Sand Mine are unavoidable and will be minimized to the greatest extent possible. The study team will continue to coordinate with CEMEX.				
SOCIO-	CONTROVERSY POTENTIAL	This issue is generally related to disagreements over perceived environmental or operational impacts by the proposed improvements.	The potential for controversy remains and will be minimized with a robust public involvement program.				



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## 4. RECOMMENDED CORRIDOR AREA

The obtained results indicate that the recommended corridor area as shown on **Figure 4-1** is the best choice to fulfill the project objectives. This area could provide an effective limitedaccess Lake/Orange County Connector facility from US 27 to SR 429, which would greatly enhance the mobility and linkage needs between south Lake County and west Orange County. The next steps involve the development of various alternatives within the recommended corridor which strive to avoid or minimize potential impacts on the physical, natural, social and cultural environment. A more detailed engineering and environmental analysis will be performed on the alternative alignments and documented in the Project Environmental Impact Report (PEIR), PER and accompanying environmental reports. The No-Action or No-Build option remains viable to consider as a basis for comparison, and possibly selection.



## Lake/Orange County Connector Feasibility/PD&E Study

Appendix A: GIS Data Layers

# A. GIS Data Layers

GIS Layer	Source (Year)
SJRWMD - Land Use and Cover	FGDL (2009, 2012 update)
SFWMD – Land Use and Cover	FGDL (2008)
Cemetery Facilities in Florida	FGDL (2015)
Religious Center Facilities in Florida	FGDL (2015)
Fire Department and Rescue Station Facilities in Florida	FGDL (2013)
Law Enforcement Facilities in Florida	FGDL (2012)
Local, State, and Federal Government Buildings in Florida	FGDL (2013)
Health Care Facilities in Florida	FDGL (2014)
Future Land Use	Orange County (2016)
Florida Hydrology and Flowlines	Orange County (2016)
USGS National Hydrography Dataset – Waterbody Features	FGDL (2016)
Parks and Trails	Orange County (2017)
Parks & Trails, FDOT District 5 – Parks	Orange County (2016), FGDL (2007)
FDOT District 5 – Conservation Lands	FGDL (2007)
FDOT District 5 – School Boundaries	FGDL (2007)
Orange County Lands of Interest	Orange County (2017)
Green Place Properties	Orange County (2017)
Lake County Conservation Easements	Lake County (2014)
Floridan Aquifer Recharge	Lake County (2012)
Florida Public Lands	FNAI (2011)
Florida Managed Areas	FGDL (2016)
Parks and Recreational Facilities in Florida	FGDL (2016)
National Wildlife Refuge Boundaries in Florida	FGDL (2013)
Wildlife Occurrence System Database 1988-2014	FGDL (2014)
Orange County Wildlife Occurrence Database	FNAI (2012)
FFWCC Wildlife Management Areas	FGDL (2016)
Cultural Center and Library Facilities in Florida	FGDL (2015)
SHPO Resource Groups in Florida	FGDL (2016)
SHPO Historical Structure Locations in Florida	FGDL (2016)
SFWMD Conservation Easements	FGDL (2012)
SHPO Historic Bridges in Florida	FGDL (2016)
NWI Wetlands in Florida	FGDL (2016)
Outstanding Florida Waters	FGDL (2015)
Aquatic Preserve Boundaries in Florida	FGDL (2011)
Conservation	Orange County (2016)
Regulatory Conservation Easements	SJRWMD (2010)
District Conservation Easements	SJRWMD (2016)
FEMA Flood Zones	Orange County (2016), FGDL (2016)
FFWCC Protected Species Consultation Areas(Multiple Layers)	FGDL (2014)
Mitigation Banks	FGDL (2015)
Mitigation Bank Service Area	FGDL (2014)
FFWCC Potential Habitat by Species	FGDL (2009)
FFWCC Habitat Conservation by Species	FGDL (2009)
USFWS Ecological Services Area Federally Listed Species	FGDL (2016)

GIS Layer	Source (Year)
FDEP Waste Cleanup Sites in Florida – Closed	FGDL (2016)
FDEP Waste Cleanup Sites in Florida – Open	FGDL (2016)
FDEP Waste Cleanup Sites in Florida – Inactive	FGDL (2016)
Brownfield Areas	Orange County (2016), FGDL (2015)
FDEP State Funded Cleanup Sites in Florida	FGDL (2014)
Petroleum Contamination Monitoring Discharges in Florida	FGDL (2016)
FDEP Source Water Assessment and Protection Program Areas	FGDL (2008)
US EPA Regulated Superfund Sites in Florida	FGDL (2016)
US EPA Electricity Generating Plants in Florida	FGDL (2015)
FDEP Hazardous Waste Sites in Florida	FGDL (2016)
US EPA RCRA Regulated Facilities in Florida	FGDL (2016)
US EPA TRI Facilities in Florida	FGDL (2014)
FDEP Solid Waste Facilities in Florida	FGDL (2016)
US EPA Regulated Air Emissions Facilities in Florida	FGDL (2016)
FDEP Wastewater Facilities in Florida	FGDL (2016)
FDEP Surface Water Classification Boundaries	FGDL (2016)

Appendix B: Evaluation Data

# Lake/Orange County Connector (Corridor Phase) DRAFT 2045 Average

	AA		
	2045	Comparing to	Comparing to
	Average	Alternative	Alternative
Alternative	AADT	A1, A2 and A3	A3
A1	24,661	100%	99%
A2	24,255	100%	97%
A3	24,901	100%	100%
B1	24,207	98%	97%
B2	23,667	98%	95%
B3	24,673	99%	99%
C1	23,419	95%	94%
C2	23,144	95%	93%
C3	24,147	97%	97%

### Assumptions and Notes:

Fiskhind SE data for study area (Wellness Way and Horizon West) \$0.18 per mile toll rate inflated to 2045 conditions

No Schofield Spur

2-Lane Independence Extension

4-Lane Connector Extending all the way to Western Way Extension For use in Corridor Phase Only









#### **Geometric Considerations**

#### Location of Interchanges and their geometric implications

#### 1. US 27 Interchange

**1.1** Within close proximity of Lake Louisa State Park Main Entrance -Fair

1.1.a Potential conflict with future Ridgeview PUD access points - Poor

- 1.2 No potential significant problems -Good
- 1.3 Requires the potential Relocation of S. Bradshaw Rd. on the east side of US-27 -Fair
- 1.4 Same as 1.3 -Fair
- 1.5 And 1.6 No potential significant problems -Good

### 2. Cr 455/Schofield Rd. Interchange

- 2.1 Offers the potential of a combined (in terms of location) interchange serving the local trips to both (Schofield Rd. and Freeway CR 455) -Good
- **2.2** Generally similar but not quite as effective as alternative 2.1 Fair
- 2.3 Similar to alternative 2.2 -Fair
- 2.4 Close proximity to Schofield Rd. would create short weaving distance, which results in operational issues along CR455 -Fair
- **2.5** Provides sufficient distance between potential interchange at CR455 and vehicles destined to Schofield Rd. so as not to create operational issues -Good

### 3. SR429/Schofield Rd. Interchange

- **3.1** Resulting distance to the existing SR429/Schofield Rd. interchange is inadequate (no possible separate interchange at this site). A potential single interchange will likely be more complex and have a higher right-of-way impact on the future Horizon West Town Center. It will likely impact the existing landfill(s) on the east side of the present interchange -Poor
- 3.2 Offers the potential of a combined interchange (in terms of location) serving both the local trips (Schofield Rd) and Freeway trips (SR 429) -Good
- **3.3** Similar to alternative 3.2 -Good
- 3.4 Similar to 3.1 but with slightly less potential right-of-way impact. -Poor

RATING	ING TABLE 3-3																																				
GOOD = +2 POINTS	PRELIMINARY ENGINEERING EVALUATION																																				
FAIR = +1 POINT																																					
POOR = 0 POINTS																																					
EVALUATION COMPONENTS	QUANTITATI	VE W	Alternat 1	tive	Alternativ 2	/e	Alternative 3	•	Alternative 4	Alternative 5	Alter	native 6	Alternative 7		Alternative 8		Alternative 9	Altern	ative 10	Alternative 1	1	Alternative 12	4	Iternative 13	Alternativ	ve 14	Alternative 1	5	Alternative 1	6	Alternative 1	7	Alternative 1	3 4	Alternative 19	Alternat	ive 20
Componen Weight	t MEASURE	SEG	(1-1)+(2-1)+	-(3-1)	(1-1)+(2-1)+(3	3-2)	(1-1)+(2-2)+(3-3	3) (1-	2)+(2-1)+(3-1)	(1-2)+(2-1)+(3-2)	(1-2)+(2-	2)+(3-3)	(1-3)+(2-1)+(3-1	)	(1-3)+(2-1)+(3-2)	(*	1-3)+(2-2)+(3-3)	(1-4)+(2	3)+(3-1)	(1-4)+(2-3)+(3-2	) (	(1-4)+(2-4)+(3-3)	(1	5)+(2-3)+(3-1)	(1-5)+(2-3)+	(3-2)	(1-5)+(2-4)+(3-3	3)	(1-6)+(2-5)+(3-4)	)	(1-6)+(2-6)+(3-3	\$)	(1-7)+(2-3)+(3-1)	(1	1-7)+(2-3)+(3-2)	(1-7)+(2-4	)+(3-3)
		1	0   18 PP, 2 WPS, LS	& 1 0	0   18 PP, 2 WPS, & LS	1 0 0	18 PP, 2 WPS, & 1 LS	0 0 14	PP, 1 WPS, & 1 0 LS	0 14 PP, 1 WPS, & 1 LS	0 0 14 PP, 1 W LS	PS, & 1 0	0 14 PP, 1 WPS, & 1 LS	0 0	14 PP, 1 WPS, & 1 LS	0 0 14	4 PP, 1 WPS, & 1 0 LS	2 4 F	P 0.14	2 4 PP	0.14 2	4 PP	0.14 2	4 PP 0.1	4 2 4 PP	0.14	2 4 PP	0.14 2	4 PP	0.14 2	4 PP	0.14 2	4 PP	0.14 2	4 PP 0.	.14 2 4 PP	0.14
Major Utility Conflicts	No. of potential in	npacts 2	2 1 WPS	0.14	2 1 WPS	0.14 2	1 WPS	0.14 2	1 WPS 0.14	2 1 WPS 0.	14 2 1 WF	S 0.14	2 1 WPS	0.14 2	1 WPS	0.14 2	1 WPS 0.14	4 2 4 P	P 0.14	2 4 PP	0.14 2	4 PP	0.14 2	4 PP 0.1	4 2 4 PP	0.14	2 4 PP	0.14 2	4 PP	0.14 2	4 PP	0.14 2	4 PP	0.14 2	4 PP 0.	.14 2 4 PP	0.14
7%		3	1 11 PP	0.07	0 26 PP, 1 WPS	0 1	8 PP	0.07 1	11 PP 0.0	26 PP, 1 WPS	) 1 8 PI	0.07	1 11 PP	0.07 0	26 PP, 1 WPS	0 1	8 PP 0.07	)7 <mark>1 11 F</mark>	P 0.07	0 26 PP, 1 WPS	0 1 8 F	PP	0.07 1	11 PP 0.0	7 0 26 PP, 1 WP	S 0	1 8 PP	0.07 1	8 PP	0.07 1 8	8 PP	0.07 1	11 PP	0.07 0	26 PP, 1 WPS	0 1 8 PP	0.07
	Interchange Loca	tion & 1	0	0	0	0 0		0 2	0.2	2 2 0.	22 2	0.22	1	0.11 1		0.11 1	0.11	1 1	0.11	1	0.11 1		0.11 1	0.1	1 1	0.11	1	0.11 1		0.11 1		0.11 2		0.22 2	0.	.22 2	0.22
Geometric Considerations	Potential Effe	$\frac{2}{3}$	0	0.22	2	0.22 1		0.11 2 0.22 0	0.2	2 2 0.	22 1 22 2	0.11	0	0.22 2		0.22 1	0.12	1 2 22 0	0.22	2 2	0.22 2 0.22 2		0.22 2 0	0.2	2	0.22	2	0.22 2		0.22 2		0.22 2 0		0.22 2	0.	.22 2	0.22
	A	1	2 9.91	0.14	2 9.91	0.14 2	9.91	0.14 1	15.58 0.0	1         15.58         0.	07 2 15.5	0.14	1 32.90	0.07 1	32.90	0.07 1	32.90 0.07	07 1 35.0	6 0.07	1 35.06	0.07 1	35.06	0.07 1	41.22 0.0	7 1 41.22	0.07	1 41.22	0.07 1	37.52	0.07 1	37.52	0.07 1	44.17	0.07 1	<b>44.17</b> 0.	.07 1 44.17	0.07
FloodPlain Encroachment 7%	Acres	2 3	1         43.53           2         1.87	0.07	1         43.53           2         3.20	0.07 2	18.24 46.30	0.14 1 0.07 2	43.53         0.0           1.87         0.14	1         43.53         0.           4         2         3.20         0.	D7         2         18.2           14         1         46.3	0.14	1         43.53           2         1.87	0.07 1 0.14 2	43.53 3.20	0.07 2 0.14 1	18.24         0.14           46.30         0.07	4 <mark>1 41.</mark> 07 2 1.8	8 0.07 7 0.14	1         41.78           2         3.20	0.07 1 0.14 1	20.62 46.30	0.07 1 0.07 2	41.78         0.0           1.87         0.1	1         41.78           4         2         3.20	0.07	1         20.62           1         46.30	0.07 1	51.78 47.05	0.07 1 0.07 1	45.64 46.30	0.07 1 0.07 2	41.78 1.87	0.07 1 0.14 2	41.78     0.       3.20     0.	.07         1         20.62           .14         1         46.30	0.07
Traffic Considerations	Traffic Volum	es 2	2 2	0.24 0.24	2 2	0.24 2 0.24 2		0.24 2 0.24 2	0.2	4 <mark>1</mark> 0. 4 <b>1</b> 0.	12 1 12 1	0.12	2 2	0.24 1 0.24 1		0.12 1 0.12 1	0.12	2 2 2 2	0.24	1 1	0.12 1 0.12 1		0.12 1 0.12 1	0.1	2 1 2 1	0.12	1 1	0.12 2 0.12 2		0.24 1 0.24 1		0.12 2 0.12 2		0.24 1	0.	.12 1 .12 1	0.12
Total Engineering Weight 27%		3	2	0.24	2	0.24 2		0.24 2	0.24	H 1 0.	12 1	0.12	2	0.24 1		0.12 1	0.12	2 2	0.24	1	0.12 1		0.12 1	0.1	2 1	0.12	1	0.12 2		0.24 1		0.12 2		0.24 1	0.	.12 1	0.12
		1	0.38		0.38		0.38		0.53	0.41	0	18	0.42		0.30		0.30		56	0.44		0.44		0.44	0.44		0.44		0.56		0.44		0.67		0.55	0.5	
Summary of Results	S	2	0.50		0.50		0.50		0.55	0.41	0	51	0.42		0.50		0.50		67	0.55		0.55		0.44	0.44		0.44		0.50		0.44		0.07		0.55	0.5	 
(sum of corridor scores for each eva	luation category)	2	0.07		0.07		0.00		0.07	0.35	0	48	0.07		0.35		0.31		45	0.33		0.48		0.33	0.33		0.00		0.38		0.33		0.07		0.35	0.0	 18
							0.00								0.10					0.10					0.10						0.10		0.10		0.10		
Total Engineering Score for each (higher score = higher performing	a Alternative Corridor g alternative corridor)		1.50		1.65		1.61		1.65	1.44	1.	47	1.54		1.33		1.29	1	68	1.47		1.47		1.32	1.47		1.47		1.61		1.47		1.79		1.58	1.5	8
REMARKS			Highest scorin     Lowest scorin	ng Alternative g Alternative	es 18 and 10 are es 9 and 13 had	e generally hig generally the	ghest in all crite lowest scores o	ria with the exc due to potential	eption of the inte utility conflict iss	change location consider ues and somewhat lower	ations within seg raffic attractions	ment 3.																									
Sample Calcuation for Alternative 1	(Segment 2) under Majo	r Utility Conflicts																		Legend																	
Relative Segmental Score = Segmental 2 (Points Rating	x Major Utility Cor Component We	flicts 7% ght	= 0.14															WF LS PI	S	Water Pump Station Lift Station Power Poles	n																

PREL	IMIN/	ARY	ENG

	Legend
WPS	Water Pump Station
LS	Lift Station
PP	Power Poles

RATING																			TABI	LE 3-4																						
GOOD = +2 POINTS	PDELIMINARY ENVIRONMENTAL EVALUATION																																									
FAIR = +1 POINT																																										
<b>POOR</b> = 0 POINTS																																										
EVALUATION COMPONEN	ITS		BMENT	Alternative 1	e	Alternativ 2	e	Alternative 3	e	Alternative 4	Altern 5	native 5	Alternativ 6	/e	Alternativ 7	e	Alternativ 8	ve	Alternative 9		Alternative 10	0	Alternative 11		Alternative 12		Alternative 1	3	Alternative 14		Alternative 15	5	Alternative	16	Alternative <sup>•</sup>	17	Alternative	18	Alternative	19	Alternative 2	20
	Component Weight		SEC	(1-1)+(2-1)+(3-	-1)	(1-1)+(2-1)+(3-	-2)	(1-1)+(2-2)+(3-	-3) (	1-2)+(2-1)+(3-1)	(1-2)+(2-1	1)+(3-2)	(1-2)+(2-2)+(3	-3)	(1-3)+(2-1)+(3	-1)	(1-3)+(2-1)+(3	3-2)	(1-3)+(2-2)+(3-3)	(	1-4)+(2-3)+(3-1)		(1-4)+(2-3)+(3-2)	(	1-4)+(2-4)+(3-3)		(1-5)+(2-3)+(3-1	)	(1-5)+(2-3)+(3-2)	(	(1-5)+(2-4)+(3-3)		(1-6)+(2-5)+(3-	-4)	(1-6)+(2-6)+(3-3	3)	(1-7)+(2-3)+(3	·1)	(1-7)+(2-3)+(3	2) (	(1-7)+(2-4)+(3-3	3)
			1 1	7.94	0.07 1	7.94	0.07 1	7.94	0.07 1	10.89 0.07	<sup>7</sup> 1 10.89	9 0.07	1 10.89	0.07 0	23.34	0.00 0	23.34	0.00 (	0 23.34	0.00 0	25.74	0.00 0	25.74	0.00 0	25.74	0.00 0	32.29	0.00 0	32.29	0.00 0	32.29	0.00 0	29.92	0.00 0	29.92	0.00 0	20.59	0.00 0	20.59	0.00 0	20.59	0.00
Wetlands (using Land Use Data)		Acres	2 1	14.36	0.07 1	14.36	0.07 2	1.52	0.14 1	<b>14.36</b> 0.07	1 14.36	6 0.07	2 1.52	0.14 <u>1</u>	14.36	0.07 1	14.36	0.07	2 1.52	0.14 1	15.45	0.07 <u>1</u>	15.45	0.07 2	3.39	0.14 <b>1</b>	15.45	0.07 1	15.45	0.07 2	3.39	0.14 1	10.51	0.07 1	10.52	0.07 1	15.45	0.07 1	15.45	0.07 2	3.39	0.14
7%	7%		3 2	0.77	0.14 2	0.8	0.14 1	11.88	0.07 2	0.77	2 0.8	0.14	1 11.88	0.07 2	0.77	0.14 2	0.8	0.14	1 11.88	0.07 2	0.77	0.14 2	0.8	0.14 1	11.88	0.07 2	0.77	0.14 2	0.8	0.14 1	11.88	0.07 1	3.53	0.07 1	11.88	0.07 2	0.77	0.14 2	0.80	<sup>0.14</sup> 1	11.88	0.07
		Average Wildlife Index		2.18	0.10 2	2.18	0.10 2	2.18	0.10 2	2.48 0.10	2 2.48	0.10	2 2.48	0.10 2	2.57	0.10 2	2.57	0.10	2 2.57	0.10 2	2.54	0.10 2	2.54	0.10 2	2.54	0.10 2	2.89	0.10 2	2.89	0.10 2	2.89	0.10 2	2.92	0.10 2	2.92	0.10 2	2.59	0.10 2	2.59	0.10 2	2.59	0.10
Wildlife and Habitat	Ra	anking; Ranked 1-10, 10	0 2 2	2.33	0.10 2	2.28	0.10 2	2.00	0.10 2	2.33 0.10	$\frac{1.91}{2}$	0.10	2 2.00	0.10 2	2.33	0.10 2	2.28	0.10	2 2.00	0.10 2	2.33	0.10 2	2.28	0.10 2	2.00	0.10 2	2.33	0.10 2	2.28	0.10 2	2.00	0.10 2	1.91	0.10 2	2 13	0.10 2	2.33	0.10 2	2.28	0.10 2	2.00	0.10
	5%	is the most important	3 2	0	0.16 2	0	0.16 2	0	0.16 2	0 0.16	$\begin{array}{c c} 2 \\ \hline 2 \\ \hline 2 \\ \hline \end{array} \\ \hline \end{array} \\ \hline \end{array} \\ 0$	0.16	2 0	0.16 2	0	0.16 2	0	0.16	2 0	0.16 2	0	0.16 2	0	0.16 2	0	0.16 2	0	0.16 2	0	0.16 2	0	0.16 2	0	0.16 2	0	0.16 2	0	0.16 2	0	0.16 2	0	0.16
Conservation Lands/Mitigation Banks	80/	Acres	2 2	0	0.16 2	0	0.16 2	0	0.16 2	0 0.16	2 0	0.16	2 0	0.16 2	0	0.16 2	0	0.16	2 0	0.16 2	0	0.16 2	0	0.16 2	0	0.16 2	0	0.16 2	0	0.16 2	0	0.16 2	0	0.16 2	0	0.16 2	0	0.16 2	0	0.16 2	0	0.16
Earmlands (NIRCS Data Prime	0 /0		<u> </u>	170.7	0.16 2	170.7	0.16 1	<u>3.72</u> 170.7	0.08 2	0 0.16 151.24 0.02	2 0 2 <mark>1 151.2</mark>	0.16 4 0.02	1 <u>3.72</u> 1 151.24	0.08 2	0 153.26	0.16 2	0 153.26	0.16	1 3.72 1 153.26	0.08 2	0 119.56	0.16 2	0 119.56	0.16 1	3.72 119.56	0.08 2	0 139.27	0.16 2	0 139.27	0.16 1	3.72 139.27	0.08 0	8.46 126.73	0.00 1	<u>3.72</u> 126.73	0.08 2	0 129.75	0.16 2	0 129.75	0.16 1	3.72 129.75	0.08
Farmland)	2%	Acres	2 1	134.87	0.02 1	134.87 81.77	0.02 1	134.87 47.35	0.02 1	<b>154.56</b> 0.02	2 1 134.8	<b>7</b> 0.02	1 <u>154.56</u> 2 <u>47.35</u>	0.02 1	134.87	0.02 1	134.87 81.77	0.02	1 154.56 2 47.35	0.02 1	144.72	0.02 1	144.72 81.77	0.02 1	149.63	0.02 1	144.72	0.02 1	144.72 81.77	0.02 1	149.63	0.02 1	118.57 51.38	0.02 1	126.53 47.35	0.02 1	144.72	0.02 1	144.72 81.77	0.02 1	<u>149.63</u>	0.02
	270		1 2	0	0.06 2	0	0.06 2	0	0.06 2	0 0.06	2 0	0.04	2 0	0.04 2	0	0.02 2	0	0.04	2 0	0.06 1	100.02	0.02 2	1	0.03 1	1 1	0.03 1	1	0.02 2	1 1	0.03 1	47.55 1	0.03 2	0	0.06 2	0	0.04 1	1	0.03 1	1	0.03 1	1	0.04
Contamination	3%	No. of Sites	2 1	1 0	0.03 1	1 0	0.03 1	<mark>1</mark> 0	0.03 1	1 0.03 0 0.06	3 <mark>1 1</mark> 5 2 0	0.03	1 1 2 0	0.03 1	1 1 0	0.03 1	<u>1</u>	0.03	<mark>1 1</mark> 2 0	0.03 0	2	0.00 0	2	0.00 0	2	0.00 0	2	0.00 0	2	0.00 0	2	0.00 1	<u>1</u> 1	0.03 1	<mark>1</mark> 0	0.03 0	2	0.00 0	2	0.00 0	2	0.00
Total Environmental Weight	25%		Ŭ,								2																															
			1	0.39		0.39		0.39		0.41	0.4	41	0.41		0.34		0.34		0.34		0.31		0.31		0.31		0.31		0.31		0.31		0.34		0.34		0.31		0.31		0.31	
			2	0.38		0.38		0.45		0.38	0.3	38	0.45		0.38		0.38		0.45		0.35		0.35		0.42		0.35		0.35		0.42		0.38		0.38		0.35		0.35		0.42	
			3	0.48		0.50		0.35		0.48	0.8	50	0.35		0.48		0.50		0.35		0.48		0.50		0.35		0.48		0.50		0.35		0.24		0.35		0.48		0.50		0.35	
Total Environmental Sc (higher score = higher	core for each Alter r performing alterr	rnative Corridor native corridor)		1.25		1.27		1.19		1.27	1.2	29	1.21		1.20		1.22		1.14		1.14		1.16		1.08		1.14		1.16		1.08		0.96		1.07		1.14		1.16		1.08	
R	REMARKS		• , • ( •	Alternative 5 ger On the other har nitial wetland im	nerally score nd Alternativ npacts are b	ed the highest in ve 16 was the le ased on Land l	n all criteria, o east desirable Use Data and	closely followe e with significat d/or NWI and n	d by Alternativ nt wetland imp nay change as	es 2 and 4. acts within segmer wetlands are surve	nt 1 and conserveyed and asses	/ation lands/n sed.	nitigation banks in	npacts withi	n Segment 3																											
																																										_

Sample Calcuation for Alternative 1 (Segment 2) under Wetlands

 Relative Segmental Score = Segmental
 1 (Point)
 x Wetlands Component
 7%
 = 0.07

 Rating
 Weight

RATING																TABLE	3-5															
GOOD = +2 POINTS	= +2 POINTS																															
FAIR = +1 POINT																		VALUA														
<b>POOR</b> = 0 POINTS																																
	ENTS	QUANTITATIVE MEASURE	GMENT	Alternative 1	Alterr	ative	Alternative 3	Alterna 4	itive	Alternative 5	Alternati 6	ve	Alternative 7	Alternative 8		Alternative 9	Alternative	10	Alternative 11	Alternativ	/e 12	Alternative 13	Alternati	/e 14	Alternative 15	Alterr	native 16	Alternative 17	Alternative 18	Alternative 19	Alternative	20
	Component Weight		SE	(1-1)+(2-1)+(3-1)	(1-1)+(2-	) <b>+(3-2)</b>	(1-1)+(2-2)+(3-3)	(1-2)+(2-1)-	+(3-1)	(1-2)+(2-1)+(3-2)	(1-2)+(2-2)+(	3-3) (	(1-3)+(2-1)+(3-1)	(1-3)+(2-1)+(3-2)	(1-	-3)+(2-2)+(3-3)	(1-4)+(2-3)+(3-	1)	(1-4)+(2-3)+(3-2)	(1-4)+(2-4)+	(3-3)	(1-5)+(2-3)+(3-1)	(1-5)+(2-3)	·(3-2)	(1-5)+(2-4)+(3-3)	(1-6)+(2	2-5)+(3-4)	(1-6)+(2-6)+(3-3)	(1-7)+(2-3)+(3-1)	(1-7)+(2-3)+(3-2)	(1-7)+(2-4)+(3-3	· <b>3)</b>
			1 0	<b>109.95</b>	0 109.9	5 0.00	0 109.95	0.00 1 43.27	0.15	1 43.27 <sup>0</sup>	. <sup>15</sup> 1 43.27 .15	0.15 1	<b>24.35</b>	<sup>15</sup> 1 24.35	0.15	24.35	2 3.68	0.00 2	<b>3.68</b>	2 3.68	0.00	2 1.09 0.0	<sup>0</sup> 2 1.09	0.00 2	1.09	2 0.0	0.00	2 0.00 0.30	2 3.68 0.00 0.00	2 3.68 0.30	2 3.68	0.00
Approved Developments/Future Land Us	Se	Acres	2 1	69.83 0. <sup>1</sup>	1 69.8 <sup>15</sup> 1 16.2	0.15	0 70.72	1         69.83           0.30         0         36.83*	0.00	1 69.83	0 76.17	0.30	69.83	<sup>00</sup> 1 16.26	0	70.72       0.30	0 75.28	0.00	75.28	0 72.64	0.30	0 75.28	0 75.28	0.15	72.64	0 72	63 0.15	0 72.4 0.30	0 75.28 0.00	0 75.28 0.1f	0 72.64	0.30
	15%			0.1	14	0.14		0.14	0.14	0	.14	0.14	0.	14	0.14	0.14	0 30.62	0.14	0.	14	0.14	0.0	7	0.07	0	0.07	0.07	0.07	0 36.82 0.14	0.14	2 0	0.14
			1 2	No previously recorded cultural resources intersecting 0.0	2     No previous recorded of resource intersection       07     0	ultural es ing 0.07	2No previously recorded cultural resources intersecting11archaeological site	2     No previous recorded cult resources intersection       0.07     6	isly tural s ng 0.07	2 No previously recorded cultural resources intersecting 0	.07 1 medium archaeological s	2 r	No previously recorded cultural resources intersecting 0.1	2No previously recorded cultural resources intersecting07	0.07 0.07 or other	to previously corded cultural resources intersecting 1 medium naeological site	2 No previously recorded cultural resources intersecting	0.07	No previously recorded cultural resources intersecting 0.	2 No previousl recorded cultur resources intersecting	ly Iral 1 0.07	1 small archaeological site intersecting (not eligible) 0.0	11small archaeologica intersectin (not eligible)7	site ) ) 0.07	1 small archaeological site intersecting (not eligible)	0.07	nall ogical site ecting igible) 0.07	1 small archaeological site intersecting (not eligible)0.07	2     No previously recorded cultural resources intersecting       0.07	2     No previously recorded cultural resources intersecting       0.07	2 No previously recorded cultural resources intersecting	0.07
Historical/Archaeological		Number of Sites	2 1	1 historic structure within 100m/330ft (not eligible)         0.1	1       historic st within 100r (not eligi)         07       1	oucture n/330ft ble) 0.07	1       intersecting (not eligible)         1       historic structure within 100m/330ft (not eligible)	1 historic structure         1 historic structure	icture 330ft le) 0.07	1 historic structure within 100m/330ft (not eligible)         1	.07	0.14 1 0.14	historic structure within 100m/330ft (not eligible)	1       historic structure within 100m/330ft (not eligible)         07       1	0.07	intersecting (not eligible) istoric structure hin 100m/330ft (not eligible) 0.14	1 medium archaeological site intersecting (not eligible)	• 0.07	1 medium archaeological site intersecting (not eligible) 0.	1       historic struct         1       within 100m/33         (not eligible)         07	ture 30ft ) 0.14	1 medium archaeological site intersecting (not eligible) 0.0	7 1 medium 1 archaeologica intersectin (not eligibl	site ) ) 0.07	1 historic structure within 100m/330ft (not eligible)	0.14	dium gical sites ecting igible) 0.14	1 2 medium archaeological sites intersecting (not eligible) 0.14	1     medium archaeological site intersecting (not eligible)       0.07	1 medium archaeological site intersecting (not eligible) 0.0 <sup>°</sup>	1       historic structure         1       within 100m/330ft         (not eligible)       (not eligible)	0.14
	7%		3 1	archaeological site intersecting (not eligible)	1 sma archaeologi intersec (not eligi	ing ble)	2 recorded cultural resources intersecting	1 archaeologica intersectin (not eligible	al site ng le)	1 archaeological site intersecting (not eligible)	2 recorded cultur resources intersecting		rchaeological site intersecting (not eligible)	1 smail archaeological site intersecting (not eligible)	2 rec.	corded cultural resources intersecting	archaeological site intersecting (not eligible)	• 1 <sup>4</sup>	archaeological site intersecting (not eligible)	2 recorded cultures intersecting		archaeological site intersecting (not eligible)	1 archaeologica intersectin (not eligible	site	recorded cultural resources intersecting	2 recorded inters	I cultural Irces ecting	2 recorded cultural resources intersecting	1 archaeological site intersecting (not eligible)	1 archaeological site intersecting (not eligible)	2 recorded cultural resources intersecting	0.14
Parks/Recreational Facilities	In Re	iteraction with Planned creational Trail or State	1 0 2 0	YES 0.4	0 YES	0.00	0 YES 0 YES	0.00 0 YES 0.00 0 YES	0.00	0 YES	0 YES	0.00 0	YES 0.1	0 YES	0.00 0	YES 0.00 YES	2 NO 0 YES	0.00 0	NO 0. YES	2 NO 2 NO	0.14 2 0.14 C	2 NO 0.	2 NO 0 9 YES	0.14 2	NO	2 N 0.14 2 N	0.14 0.14	2 NO 0.14 2 NO 0.14	2 NO 0.14	2 NO 0.14	2 NO 2 NO	0.14
	70/	Park	3																													
Right-of-way Impacts	9%	cres per land use type; hydric (wetlands and waterbodies )	1       1         2       1         3       1	AGRICULTURE 86.64       0.1         AGRICULTURE 86.64       0.1         NATURAL 3.77 HYDRIC 4.15 TOTAL 94.56       0.1         AGRICULTURE 85.87       0.1         AGRICULTURE 85.87       0.1         AGRICULTURE 85.87       0.1         AGRICULTURE 51.95       0.1 </th <th>09       AGRICUL 86.64         1       AGRICUL 86.64         1       NATURAL HYDRIC TOTAL \$         09       AGRICUL 85.81         09       AGRICUL 85.81         09       AGRICUL 85.81         09       AGRICUL 85.81         09       AGRICUL 85.81         09       AGRICUL 46.42         09       AGRICUL 46.42         09       AGRICUL 46.42</th> <th>0.09         TURE         3.77         4.15         4.56         0.09         TURE         1.92         21.75         9.54         0.18         TURE         0.18         TURE         17.49         0.8         44.65</th> <th>AGRICULTURE 86.64AMATURAL 3.77 HYDRIC 4.15 TOTAL 94.56AGRICULTURE 105.02 HYDRIC 4.91 TOTAL 109.93AGRICULTURE 47.25AGRICULTURE 47.25AGRICULTURE 47.25AGRICULTURE 47.25AGRICULTURE 47.25AGRICULTURE 47.25AGRICULTURE 47.25</th> <th>0.09AGRICULTU 86.951AGRICULTU 86.951NATURAL 4 HYDRIC 8 TOTAL 1440.09AGRICULTU 85.870.09AGRICULTU 85.870.09AGRICULTU 85.870.09AGRICULTU 51.951AGRICULTU 51.951AGRICULTU 51.951AGRICULTU 707AL 10</th> <th>URE 4.53 0.09 1.62 4.53 0.09 URE 1.92 1.75 9.54 0.09 URE 1.92 1.75 9.54 0.09 2 0.09 2 1.92 1.75 9.54 0.09 2 1.92 1.92 1.92 1.92 1.92 1.92 1.92 1.92 1.95 9.54 0.09 1.92 1.92 1.95 9.54 0.09 1.92 1.92 1.95 1</br></br></br></br></br></br></br></br></br></br></br></br></br></br></br></br></br></br></br></br></br></br></br></br></br></br></br></br></th> <th>AGRICULTURE 86.950NATURAL 48.96 HYDRIC 8.62 TOTAL 144.530AGRICULTURE 85.87 NATURAL 1.92 HYDRIC 21.75 TOTAL 109.540AGRICULTURE 85.87 NATURAL 1.92 HYDRIC 21.75 TOTAL 109.540AGRICULTURE 46.450AGRICULTURE 46.45 NATURAL 17.49 HYDRIC 0.8 TOTAL 64.650</th> <th>.09AGRICULTUF 86.951AGRICULTUF 86.951NATURAL 48. HYDRIC 8.61 TOTAL 144.51.09AGRICULTUF 105.02 HYDRIC 4.91 TOTAL 109.51.18AGRICULTUF 47.25 NATURAL 26. HYDRIC 12.4 TOTAL 86.21</th> <th><math display="block">\begin{array}{c}     0.09 \\     96 \\     2 \\     33 \\     0.09 \\     1 \\     33 \\     0.09 \\     1 \\     1 \\     33 \\     1 \\   </math></th> <th>AGRICULTURE       93.63         IATURAL 49.34       HYDRIC 26.10         TOTAL 172.07       0.1         AGRICULTURE       85.87         NATURAL 1.92       1.1         HYDRIC 21.75       0.1         AGRICULTURE       85.87         NATURAL 1.92       0.1         HYDRIC 21.75       0.1         AGRICULTURE       51.95         IATURAL 18.37       HYDRIC 0.77         TOTAL 71.09       0.1</th> <th>00AGRICULTURE 93.63 NATURAL 49.34 HYDRIC 26.10 TOTAL 172.0709AGRICULTURE 85.87 NATURAL 1.92 HYDRIC 21.75 TOTAL 109.5409AGRICULTURE 85.87 NATURAL 1.92 HYDRIC 21.75 TOTAL 109.5409AGRICULTURE 46.45 NATURAL 17.49 HYDRIC 0.8 TOTAL 64.65</th> <th>0.00       AG         0.01       AG         0.02       AG         0.03       AG         0.09       AG         0.09       AG         1       AG         0.03       AG         0.04       AG         0.05       AG         1       AG         0.18       AG         1       AG      <t< th=""><th>Image: Second second</th><th>AGRICULTURE 95.620AGRICULTURE 95.621AGRICULTURE 84.211AGRICULTURE 84.211AGRICULTURE 84.211AGRICULTURE 1000000000000000000000000000000000000</th><th></th><th>AGRICULTURE 95.62 NATURAL 49.37 HYDRIC 32.81 TOTAL 177.80 0. AGRICULTURE 84.21 NATURAL 1.92 HYDRIC 21.78 TOTAL 107.91 0. AGRICULTURE 46.45 NATURAL 17.49 HYDRIC 0.8 TOTAL 64.65</th><th>00       AGRICULTU         95.62       NATURAL 49         HYDRIC 32.       TOTAL 177.         09       AGRICULTU         11       AGRICULTU         96.86       HYDRIC 5.9         TOTAL 102.       TOTAL 102.         18       AGRICULTU         1       AGRICULTU         53.28       NATURAL 26         WETLAND       12.48         TOTAL 92.2</th><th><math display="block"> \begin{array}{c}     0.00 \\     RE \\     0.37 \\     81 \\     80 \\     0.09 \\     RE \\     0.09 \\     RE \\     0.09 \\     RE \\     0.09 \\     RE \\     1 \\     21 \\     </math></th><th>AGRICULTURE 98.62 NATURAL 42.29 HYDRIC 37.18 TOTAL 178.09       0.0         AGRICULTURE 84.21 NATURAL 1.92 HYDRIC 21.78 TOTAL 107.91       0.0         AGRICULTURE 51.95 NATURAL 18.37 HYDRIC 0.77 TOTAL 71.09       0.0</th><th>0       AGRICULTI         0       AGRICULTI         9       0         1       AGRICULTI         9       1         1       AGRICULTI         84.21       AGRICULTI         84.21       AGRICULTI         84.21       AGRICULTI         9       AGRICULTI         2       AGRICULTI         46.45       NATURAL 1         HYDRIC 0       TOTAL 64</th><th>0.00       0.00         IRE       0.00         2.29       0         .18       0.09         JRE       1         .92       0.18         JRE       0.18         JRE       1         .8       1</th><th>AGRICULTURE 98.62NATURAL 42.29HYDRIC 37.18TOTAL 178.09AGRICULTURE 96.86HYDRIC 5.92TOTAL 102.78AGRICULTURE 47.25AAGRICULTURE 47.25NATURAL 26.46HYDRIC 12.49TOTAL 86.2</th><th>0.00 0.00 0.09 0.09 0.09 0.09 1 1 1 1 1 1 1 1 1 1 1 1 1</th><th>0.00         JLTURE         25         AL 42.12         234.62         158.99         0.09         JLTURE         36         22.16         104.52         0.18         JLTURE         62         AL 0.08         C 5.72         46.42</th><th>0       AGRICULTURE 82.25 NATURAL 42.12 HYDRIC 34.62 TOTAL 158.99       0.00         1       AGRICULTURE 91.12 HYDRIC 17.04 TOTAL 108.16       0.09         1       AGRICULTURE 91.12 HYDRIC 17.04 TOTAL 108.16       0.09         0       0.09       0.09</th><th>Image: Normal and the second second</th><th>0       AGRICULTURE 79.34       0.00         0       AGRICULTURE 79.34       0.00         0       NATURAL 56.34 HYDRIC 40.5 TOTAL 176.18       0.09         1       AGRICULTURE 84.21 NATURAL 1.92 HYDRIC 21.78 TOTAL 107.91       0.09         2       AGRICULTURE 46.45 NATURAL 17.49 HYDRIC 0.8 TOTAL 64.65       0.118</th><th>AGRICULTURE 79.34 0 AGRICULTURE 79.34 0 NATURAL 56.34 HYDRIC 40.5 TOTAL 176.18 1 AGRICULTURE 96.86 HYDRIC 5.92 TOTAL 102.78 3 AGRICULTURE 47.25 1 AGRICULTURE 47.25 1 NATURAL 26.46 HYDRIC 12.49 TOTAL 86.2</th><th>0.00 1 0.09 1 0.09 1 0.09 1 0.09 1 0.09 1 0.09 1 0.09 1 0.09</th></t<></th>	09       AGRICUL 86.64         1       AGRICUL 86.64         1       NATURAL HYDRIC TOTAL \$         09       AGRICUL 85.81         09       AGRICUL 85.81         09       AGRICUL 85.81         09       AGRICUL 85.81         09       AGRICUL 85.81         09       AGRICUL 46.42         09       AGRICUL 46.42         09       AGRICUL 46.42	0.09         TURE         3.77         4.15         4.56         0.09         TURE         1.92         21.75         9.54         0.18         TURE         0.18         TURE         17.49         0.8         44.65	AGRICULTURE 86.64AMATURAL 3.77 HYDRIC 4.15 TOTAL 94.56AGRICULTURE 105.02 HYDRIC 4.91 TOTAL 109.93AGRICULTURE 47.25AGRICULTURE 47.25AGRICULTURE 47.25AGRICULTURE 47.25AGRICULTURE 47.25AGRICULTURE 47.25AGRICULTURE 47.25	0.09AGRICULTU 86.951AGRICULTU 86.951NATURAL 4 HYDRIC 8 TOTAL 1440.09AGRICULTU 85.870.09AGRICULTU 85.870.09AGRICULTU 85.870.09AGRICULTU 51.951AGRICULTU 51.951AGRICULTU 51.951AGRICULTU 707AL 10	URE 4.53 0.09 1.62 4.53 0.09 URE 1.92 1.75 9.54 0.09 URE 1.92 1.75 9.54 0.09 2 0.09 2 1.92 1.75 9.54 0.09 2 1.92 1.92 1.92 1.92 1.92 1.92 1.92 1.92 1.95 9.54 0.09 1.92 1.92 1.95 9.54 0.09 1.92 1.92 1.95 1.95 1.95 1.95 1.95 1.95 1.95 1.95 1.95 1.95 1.95 1.95 1.95 1.95 1.95 	AGRICULTURE 86.950NATURAL 48.96 HYDRIC 8.62 TOTAL 144.530AGRICULTURE 85.87 NATURAL 1.92 HYDRIC 21.75 TOTAL 109.540AGRICULTURE 85.87 NATURAL 1.92 HYDRIC 21.75 TOTAL 109.540AGRICULTURE 46.450AGRICULTURE 46.45 NATURAL 17.49 HYDRIC 0.8 TOTAL 64.650	.09AGRICULTUF 86.951AGRICULTUF 86.951NATURAL 48. HYDRIC 8.61 TOTAL 144.51.09AGRICULTUF 105.02 HYDRIC 4.91 TOTAL 109.51.18AGRICULTUF 47.25 NATURAL 26. HYDRIC 12.4 TOTAL 86.21	$\begin{array}{c}     0.09 \\     96 \\     2 \\     33 \\     0.09 \\     1 \\     33 \\     0.09 \\     1 \\     1 \\     33 \\     1 \\   $	AGRICULTURE       93.63         IATURAL 49.34       HYDRIC 26.10         TOTAL 172.07       0.1         AGRICULTURE       85.87         NATURAL 1.92       1.1         HYDRIC 21.75       0.1         AGRICULTURE       85.87         NATURAL 1.92       0.1         HYDRIC 21.75       0.1         AGRICULTURE       51.95         IATURAL 18.37       HYDRIC 0.77         TOTAL 71.09       0.1	00AGRICULTURE 93.63 NATURAL 49.34 HYDRIC 26.10 TOTAL 172.0709AGRICULTURE 85.87 NATURAL 1.92 HYDRIC 21.75 TOTAL 109.5409AGRICULTURE 85.87 NATURAL 1.92 HYDRIC 21.75 TOTAL 109.5409AGRICULTURE 46.45 NATURAL 17.49 HYDRIC 0.8 TOTAL 64.65	0.00       AG         0.01       AG         0.02       AG         0.03       AG         0.09       AG         0.09       AG         1       AG         0.03       AG         0.04       AG         0.05       AG         1       AG         0.18       AG         1       AG <t< th=""><th>Image: Second second</th><th>AGRICULTURE 95.620AGRICULTURE 95.621AGRICULTURE 84.211AGRICULTURE 84.211AGRICULTURE 84.211AGRICULTURE 1000000000000000000000000000000000000</th><th></th><th>AGRICULTURE 95.62 NATURAL 49.37 HYDRIC 32.81 TOTAL 177.80 0. AGRICULTURE 84.21 NATURAL 1.92 HYDRIC 21.78 TOTAL 107.91 0. AGRICULTURE 46.45 NATURAL 17.49 HYDRIC 0.8 TOTAL 64.65</th><th>00       AGRICULTU         95.62       NATURAL 49         HYDRIC 32.       TOTAL 177.         09       AGRICULTU         11       AGRICULTU         96.86       HYDRIC 5.9         TOTAL 102.       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Total Socio-Economic Weight	38%		1	0.23	0.1	23	0.23	0.38	3	0.38	0.38		0.29	0.29		0.29	0.58		0.58	0.58		0.51	0.51		0.51		0.51	0.51	0.58	0.58	0.58	
Summa (sum of corridor scores	ary of Results for each evaluation cat	tegory)	2 3	0.31	0.	31 10	0.16	0.31	)	0.31	0.16		0.31	0.31		0.16	0.16		0.16	0.16		0.16	0.16		0.16		D.16 D.47	0.16	0.16	0.16	0.16	
Total Socio-Economic (higher score = high	c Score for each Alternat	tive Corridor e corridor)		0.85	0.9	94	0.92	0.85	5	1.09	1.07	- http:///	0.76	1.00	1141	0.98	0.90		1.14	1.41		0.83	1.07		1.34		1.28	1.34	0.90	1.14	1.41	
Sample Calcuation for Alternativ	REMARKS	pproved Developments/Fu	• / • / Iture Land Us	Alternative 12 had the o	e nighest total sco other hand ranked	ore generally the lowest w	due to its avoidance o rith potential significan * Maj	of significant impacts at land use impacts w or impacts to to the	in two of the f vithin segment	three segments to ap t 1 and potential impa cia College West Ca	proved development acts to parks and recr mpus and Horizon W	s, historical/arch eational facilities /est Town Cente	naeological, and p s within the first tw er	bark and recreational fac vo segments.	allities.																	

 Relative Segmental Score = Segmental Rating
 X Approved
 15%

Appendix C: Analytical Hierarchy Process (AHP) Results

## **Alternatives Evaluation**

The final evaluation of the various corridor alternatives for the proposed Lake/Orange County Connector involved essentially a multi-objective/multi-attribute decision-making process. The establishment of the relative importance of each objective/criteria was critical in order to ultimately choose the most efficient or "best" corridor alternative. This process involved decisions which must make trade-offs between different and often conflicting objectives/criteria. The core decision-making tool utilized during the evaluation was the Analytic Hierarchical Process (AHP). This process was developed by Thomas J. Saaty for decision analysis of complex subjective problems involving a large number of criteria. This appendix documents the application of the AHP computer decision-making software used to determine the recommended corridor alternative for the proposed project. Study participants started by addressing pertinent issues such as setting priorities, subsequently establishing criteria and criteria weights, and finally by evaluating the various alternatives for the proposed project improvements. **Figure C-1** illustrates the methodology utilized in the evaluation of the corridor alternatives for the proposed project.

## **Evaluation Methodology**

The Analytic Hierarchy Process (AHP) method is based on the breakdown of each problem into a system of stratified levels or hierarchies where each level consists of criteria or objectives to be compared. Each of the criteria or objectives in a level is further broken down in subsequent levels into sub-criteria or objectives that are easier to quantify. The relative importance or priority for all the criteria in a given level is then established through a sequence of pair-wise comparisons which will ultimately lead to the derivation of priorities (i.e., weights or importance) for each criterion as well as the determination of the recommended corridor alternative. Pair-wise comparisons have been technically proven to be more reliable in eliciting human judgment than directly assigning weights. Once the hierarchy was established and agreed upon, a questionnaire was developed based on pair-wise comparisons of the established



**Figure C-1** criteria. It should be noted that even though project questionnaires are often utilized by participants to establish the importance, priority or weight of each criterion, in our case the panel participants agreed to adopt the weights previously established during the previous evaluation phase (see values at top of **Table 3-8**). However, a questionnaire was developed to compare each of the corridor alternatives based on each parameter comprising the criteria. After the questionnaires were completed, the data was input into the computer program.

### **Evaluation Results**

The AHP computer application was performed with a group consensus results obtained by aggregating the responses of all participants and applying the group median method. The group median judgments and preferences were then incorporated into the AHP computer program. The AHP computer application results are included at the end of this appendix and Table C-1 provides a brief explanation of the included outputs. A thorough sensitivity analysis of the results was conducted after finding the recommended roadway alternative as selected by the participants of the study through the execution of the program. The analysis included the investigation of sensitive criterion or criteria within the results. The AHP software also includes a sensitivity analysis feature. This feature investigates the effect of the ranking of the recommended roadway alternative if criteria take on other possible values. The sensitivity analysis identifies the relatively sensitive criteria (i.e., those that cannot be changed much without changing the ranking of the top roadway alternative) to try to estimate these more closely, and then to select a solution which remains a good one over the ranges of likely values of the sensitive parameters. Usually, there will be some criteria that can be assigned any reasonable value without affecting the ranking of the recommended alternative. However, there may also be criteria with likely values that would yield a new ranking of the recommended alternative.

	Table C-1
Page No.	Contents
1	Weight assignment for all Primary & Secondary objectives and Final Computed results for both competing alternatives
2	Weight Assignment graph for Primary Objectives
3	Weight Assignment graph for Engineering Impacts
4 to 7	Computed alternative results with respect to secondary objectives of traffic congestion/safety, traffic accommodated, and connectivity
8	Weight Assignment graph for Environmental Impacts
9 to 11	Computed alternative results with respect to secondary objectives of SJRWMD Regulatory Easement impacts, wetland impacts, wildlife and habitat, and outstanding Florida waterway impacts
12	Weight Assignment graph for Socio-Economic Impacts
13 to 14	Computed alternative results with respect to secondary objectives of Community Cohesion and controversy potential
15 to 16	Synthesis of computed alternative results

### Model Name: Lake/Orange County Connector AHP

Treeview

Goal: Pre-Final Alternative Corridor Evaluation Engineering (L: .430) Geometric Considerations (L: .279) Traffic Attractions (L: .279) Connectivity/Directness (L: .186) Utility Impacts (L: .256) Environmental (L: .260) Conservation Lands (L: .385) Wetland Impacts (L: .308) Recreational Resources (L: .308) Socio-Economic (L: .310) Approved Development Impacts (L: .387) Controversy Potential (L: .290) Right-of-way Impacts (L: .323)

Alternatives

Alternative 12	.333
Alternative 17	.333
Alternative 20	.333
## Priority Graphs

Priorities with respect to:

Goal: Pre-Final Alternative Corrid...

Engineering Environmental Socio-Economic .430 .260 .310

Inconsistency = 0.00 with 0 missing judgments. Priorities with respect to: Goal: Pre-Final Alternative Corridor E >Engineering

Geometric Considerations Traffic Attractions Connectivity/Directness Utility Impacts Inconsistency = 0.00



Priorities with respect to: Goal: Pre-Final Alternative Corridor >Engineering >Geometric Considerations

Alternative 12 Alternative 17 Alternative 20 Inconsistency = 0.00



Priorities with respect to: Goal: Pre-Final Alternative Corridor >Engineering >Traffic Attractions

Alternative 12 Alternative 17 Alternative 20 Inconsistency = 0.00 .333 .333 .333

Priorities with respect to: Goal: Pre-Final Alternative Corridor >Engineering >Connectivity/Directness

Alternative 12 Alternative 17 Alternative 20 Inconsistency = 0.00



Priorities with respect to: Goal: Pre-Final Alternative Corridor >Engineering >Utility Impacts

Alternative 12 Alternative 17 Alternative 20

Inconsistency = 0.00 with 0 missing judgments.



Priorities with respect to: Goal: Pre-Final Alternative Corridor >Environmental

Conservation Lands Wetland Impacts Recreational Resources Inconsistency = 0.00



Priorities with respect to: Goal: Pre-Final Alternative Corridor >Environmental >Conservation Lands

Alternative 12 Alternative 17 Alternative 20 Inconsistency = 0.00



#### Priorities with respect to: Goal: Pre-Final Alternative Corridor >Environmental >Wetland Impacts

Alternative 12 Alternative 17 Alternative 20 Inconsistency = 0.00



Priorities with respect to: Goal: Pre-Final Alternative Corridor >Environmental >Recreational Resources

Alternative 12 Alternative 17 Alternative 20 Inconsistency = 0.00



#### Priorities with respect to:

Goal: Pre-Final Alternative Corridor Evaluatio > Socio-Economic

Approved Development Impacts Controversy Potential Right-of-way Impacts Inconsistency = 0.00 with 0 missing judgments.



#### Priorities with respect to: Goal: Pre-Final Alternative Corridor >Socio-Economic >Approved Development Im...

Alternative 12 Alternative 17 Alternative 20

Inconsistency = 0.00 with 0 missing judgments.



#### Priorities with respect to: Goal: Pre-Final Alternative Corridor >Socio-Economic >Controversy Potential

Alternative 12 Alternative 17 Alternative 20 .235 .529 .235

Inconsistency = 0.00 with 0 missing judgments.

#### Priorities with respect to: Goal: Pre-Final Alternative Corridor >Socio-Economic >Right-of-way Impacts

Alternative 12	
Alternative 17	
Alternative 20	
Inconsistency = 0.00	



with 0 missing judgments.

Synthesis: Details

Alts	Level 1	Level 2	Prty
Total A			0.309
	Total Engineering (L: .430)		0.139
	Engineering (L: .430)	Geometric	.01063
		Traffic Att	.04975
		Connectiv	.03316
		Utility Imp	.04560
	Total Environmental (L: 260)		0.089
Alternat		Conservat	.04146
	Environmental (L: .260)	Wetland I	.03316
		Recreatio	.01474
	Total Socio-Economic (L: .310)		0.080
	Socio-Economic (L: .310)	Approved	.02211
		Controver	.01658
		Right-of-w	.04146
Total A			0.344
	Total Engineering (L: .430)		0.126
		Geometric	.02299
	Enginæring (L: .430)	Traffic Att	.04975
		Connectiv	.00737
		Utility Imp	.04560
	Total Environmental (L: 260)		0.089
Alternat		Conservat	.04146
	Environmental (L: .260)	Wetland I	.01474
		Recreatio	.03316
	Total Socio-Economic (L: .310)		0.129
		Approved	.04975
	Socio-Economic (L: .310)	Controver	.03731
		Right-of-w	.04146
Total A			0.348
	Total Engineering (L: .430)		0.178
Alternat	Enginæring (L: .430)	Geometric	.04975
		Traffic Att	.04975
		Connectiv	.03316

#### 10/31/2018 3:47:20 PM

Alts	Level 1	Level 2	Prty
Alternat	Enginæring (L: .430)	Utility Imp	.04560
	Total Environmental (L: 260)		0.089
	Environmental (L: .260) nat Total Socio-Economic (L: .310)	Conservat	.04146
		Wetland I	.03316
		Recreatio	.01474
			0.080
	Socio-Economic (L: .310)	Approved	.02211
		Controver	.01658
		Right-of-w	.04146

Appendix D: Coordination Information

## **ADVANCED NOTIFICATION**

# ADVANCE NOTIFICATION SUMMARY REPORT

Lake / Orange County Connector (US 27 to SR 429) Feasibility / Project Development and Environment Study Lake and Orange Counties, Florida

CFX Project Number: 599-225

SEPTEMBER 2018



An Advance Notification Package was prepared by the Central Florida Expressway Authority (CFX) as part of the Lake /Orange County Connector Feasibility / Project Development and Environment (PD&E) study. The Florida State Clearinghouse received the Advance Notification on June 20, 2018 and distributed it to the appropriate state agencies for review. The State Application Identifier (SAI) number assigned to this project by the Florida State Clearinghouse is FL201806228337. The Advance Notification was also distributed to appropriate non-state agencies and tribal nations. A copy of the Advance Notification Package is provided as **Appendix A** and contains a transmittal list of all recipients.

Comments to the Advance Notification were received from the National Forest Service, National Resources Conservation Service, Seminole Tribe of Florida, State Historic Preservation Officer, Federal Aviation Administration, and the U.S. Environmental Protection Agency. The complete comments to the Advance Notification are provided in **Appendix B**. Below is a summary of comments along with responses and contact information for the reviewing agency.

#### **Commenting Agency: National Forest Service**

John McKechnie Forest Engineer Forest Service National Forests in Florida 325 John Knox Rd Tallahassee, FL 32303 Office: 850-523-8522 Mobile: 850-274-0470 Fax: 850-523-8505 Email: jmckechnie@fs.fed.us

#### **Comment Summary:**

The National Forests in Florida has no comments. The proposed study does not affect any US Forest Service holdings.

#### Response:

Thank you for your review and response.

#### Commenting Agency: National Resources Conservation Service

LeRoy Crockett Resource Soil Scientist Perry Paige Bldg. Suite 305N 1740 S MLK Blvd Tallahassee, FL 32307 Office: 850-412-7809 Mobile: 352-262-0192

#### **Comment Summary:**

If you need a Farmland Protection Evaluation for this project please send request form and .shp files.

#### **Response:**

We anticipate the need for a Farmland Protection Evaluation and will coordinate with NRCS once project alternatives and .shp files are available.

#### **Commenting Agency: Seminole Tribe of Florida**

Victoria L. Menchaca, MA, Compliance Review Specialist STOF-THPO, Compliance Review Section 30290 Josie Billie Hwy, PMB 1004 Clewiston, FL 33440 Office: 863-983-6549 ext. 12216 Email: victoriamenchaca@semtribe.com

#### **Comment Summary:**

The proposed undertaking does fall within in the STOF [Seminole Tribe of Florida] Area of Interest. We have reviewed the documents provided and would like to provide the following feedback. We would respectfully like to request that once specific alternative corridors are chosen that a Cultural Resources Assessment Survey be conducted and sent to us so that we may complete our review.

#### **Response:**

A Cultural Resources Assessment Survey is being prepared as part of the Section 106 review process for this project and will be made available to the public for review and comment.

#### **Commenting Agency: State Historic Preservation Officer**

Timothy A. Parsons, Ph.D. Director, Division of Historical Resources and State Historic Preservation Officer and Ginny Jones Transportation Compliance & Review Architectural Historian 500 South Bronough Street Tallahassee, FL 32399 Office: 800-847-7278 (Main) Office: 850-245-6333 (Direct) Email: ginny.jones@dos.myflorida.com

#### **Comment Summary:**

Based on the nature of the project (new roadway) and the environmental conditions in the project area, we request that the project area be subjected to a professional cultural resources assessment survey. The resultant survey report should conform to the provisions of Chapter 1A-46, *Florida Administrative Code*,

and should be forwarded to FHWA and our office upon completion. The report will help us complete the Section 106 review process and provide concurrence on federal findings of effect, and recommend any necessary avoidance or mitigation measures.

#### **Response:**

A Cultural Resources Assessment Survey is being prepared as part of the Section 106 review process for this project.

#### **Commenting Agency: Federal Aviation Administration**

Bart Vernace, P.E. Manager FAA/Orlando Airports District Office 8427 SouthPark Circle, Suite 524 Orlando, FL 32819 Office: 407-487-7220 (Main) Office:407-487-7223 (Direct) Fax: (407) 487-7135 Email: Bart.vernace@faa.gov

#### **Comment Summary:**

Please note that federal requirements that pertain to notifying the FAA of proposed construction and alteration on or nearby a public-use airport should be in accordance with FAR Part 77 Regulation. Any tall permanent structure or temporary equipment near an airport must conform to this regulation.

#### **Response:**

All tall, permanent structures or temporary equipment near any airports will conform with appropriate regulations, including FAR Part 77.

#### Commenting Agency: U.S. Environmental Protection Agency

Roshanna White Life Scientist, NEPA Program Office U.S. Environmental Protection Agency, Region IV 61 Forsyth Street SW Atlanta, GA 30303 Office: 404-562-9035 Email: white.roshanna@epa.gov

#### **Comment Summary:**

The eastern study area of the project lies partially within the Biscayne Aquifer boundaries (NEPAssist https://www.epa.gov/nepa/nepassist). The Biscayne Aquifer is a sole source aquifer and is considered a principal water source for South Florida residents, visitors, and businesses. The aquifer is highly permeable and vulnerable to contamination. The EPA recommends adherence to all federal, state, and local

government permits, ordinances, planning designs, construction codes, operation and maintenance requirements, and engineering for avoidance, minimization, and protection of the water source. Additionally, we recommend that avoidance and minimization of any identified jurisdictional waters of the U.S. be avoided during the development of alternatives to the extent practicable. During construction, please consider the vulnerability of the sole source aquifer and protect the drinking water delivered from this source. Also, follow all best management activities for erosion and sedimentation control. The project is a non-federal action. Therefore, concurrence from the EPA is not required according to the Safe Drinking Water Act. Please contact state and county environmental offices to address proper drainage and storm water design. If federal financial assistance does become a source of funding for this project, please contact Region 4, Ground Water and UIC Section, Mr. Khurram Rafi (rafi.khurram@epa.gov) or Larry Cole (cole.larry@epa.gov) for an aquifer impact determination letter.

#### **Response:**

Impacts to wetlands and jurisdictional waters of the US will be avoided and minimized as much as practicable. Minimization of impacts to the aquifer is also being considered during alternative development. Construction impacts will be minimized by implementing standard Best Management Practices for road construction.

Appendix A: Advance Notification

# ADVANCE NOTIFICATION PACKAGE

Lake / Orange County Connector (US 27 to SR 429) Feasibility / Project Development and Environment Study Lake and Orange Counties, Florida

CFX Project Number: 599-225

June 2018



# **Table of Contents**

LOCATION MAPS	1
FACT SHEET	3
PROJECT PURPOSE AND NEED	1
PURPOSE	1
NEED	1
PROJECT DESCRIPTION	3
PRELIMINARY ENVIRONMENTAL DISCUSSION	3
SOCIAL AND ECONOMIC	3
CULTURAL	)
NATURAL	)
PHYSICAL	2
ANTICIPATED PERMITS	3
ANTICIPATED TECHNICAL STUDIES	3
TRANSMITTAL LIST	1

# Figures

Figure 1: Regional Map	. 1
Figure 2: Study Area Map	. 2

## Table

Table 1: Local Planning Consistency .	
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# **LOCATION MAPS**



See Figures 1 and 2 for maps of the region and study area.

Figure 1: Regional Map



Figure 2: Study Area Map

# FACT SHEET

Project Name:	Lake / Orange County Connector	
Project Limits:	The study area limits are generally described as: Porter Road on the north; SR 429 on the east; Old YMCA Road on the south; and US 27 on the west.	
Counties:	Lake and Orange	
Proposed Activity:	Assess the feasibility and viability of a Lake / Orange County connection as a toll road under the CFX Master Plan policy for new projects as a system expansion.	
Responsible Agency:	Central Florida Expressway Authority (CFX)	
Planning Organization:	CFX	
Phase:	Programming Screen	
Plan ID:	Not Available	
Federal Involvement:	Applicable Federal Permits	
Project Contact Information:		
Chief of Infrastructure	Consultant Project Manager	

Joseph A. Berenis, P.E. Central Florida Expressway Authority 4974 ORL Tower Road Orlando, FL 32807 Office: 407-690-5000 E-mail: Joseph.Berenis@CFXway.com

## William Sloup, P.E. Metric Engineering 615 Crescent Executive Court, Suite 524 Lake Mary, FL 32746 Office: 407-644-1898 ext. 1114 E-mail: William.Sloup@metriceng.com

## **PROJECT PURPOSE AND NEED**

The purpose and need for a project provides the basis for developing, considering, evaluating, and eliminating alternatives while also shaping the alternatives and assisting with the identification of reasonable and feasible alternatives. The need aspect lays the foundation and basis of a proposed project while the purpose presents proposed solutions to the stated need.

## **PURPOSE**

The primary objectives of this transportation improvement project are to expand regional system linkage and connectivity in Lake and Orange Counties; enhance mobility between SR 429 and US 27; and accommodate the expected increase in traffic due to population and employment growth within the study area, while being consistent with accepted local and regional plans. As such, the proposed improvements include the construction of a limited-access facility that provides a new east-west connection from SR 429 in west Orange County to US 27 in south Lake County.

## NEED

There are six (6) project needs that serve as justification for the proposed improvements. These needs are: 1) Provide improved system connectivity / linkage; 2) Accommodate anticipated transportation demand; 3) Provide consistency with Local and Regional Plans; 4) Support economic viability and job creation; 5) Support intermodal opportunities; and 6) Enhance evacuation and emergency service. The following sections describe the needs in more detail.

## System Connectivity / Linkage

System linkage is defined as linking two or more existing transportation facilities or types of modal facilities between geographic areas or regional traffic generators.

Figure 1 illustrates the existing roadway network within the vicinity of the proposed project. There are two major north-south facilities serving the project area, SR 429, a four-lane limited access rural toll road at the eastern project terminus and US 27, a four-lane divided rural arterial at the western project terminus. In the east-west direction, SR 50, a six-lane urban arterial facility located approximately 7 miles to the north, and US 192, a six-lane urban divided arterial located approximately 7 miles south, connect Lake County to the Orlando urban core. These existing eastwest facilities not only serve through traffic but also provide significant local access thus limiting their ability to provide effective overall mobility.

At the present time, the east-west connectivity within the study area is deficient with Schofield Road, an unpaved 20-foot wide rural facility, providing the only connection between US 27 on the west and SR 429 on the east. A new limited-access, direct connection expressway facility would not only provide the much-needed connectivity in the area but would also significantly improve regional mobility and travel time.

A Preliminary Engineering Report (PER) was completed in 2016 for Wellness Way, a new fourlane divided arterial extending from US 27 and connecting to New Independence Parkway in the vicinity of SR 429. It should be noted that the 2007 SR 429 to US 27 Connector Concept Development and Evaluation Study prepared by the Central Florida Expressway Authority (CFX) (former Orlando-Orange County Expressway Authority (OOCEA)) stated that a network of eastwest six-lane roadway arterials could also meet the capacity need of the study area. Wellness Way alone will not be sufficient to provide the necessary east-west linkage to meet the anticipated growth of the area as would a new limited-access, direct connection expressway facility.

Interchanges are proposed at US 27 in Lake County, SR 429 in Orange County, and the future extension of CR 455 in Lake County. Lake County's Visionary Map shows a southerly extension of CR 455 from its current terminus to the future extension of Sawgrass Bay Blvd.

## Anticipated Transportation Demand

According to the Central Florida Expressway Authority's 2040 Master Plan, Lake County's population is projected to increase by 56% (to 493,000 residents) and employment is projected to increase by 60% (to 212,700) by 2040. During the same time period, the population and employment growth within Orange County are expected to each increase by more than 50%. Two of the main areas of development generating additional population are the Wellness Way Area Plan (WWAP) in south Lake County and the Horizon West Special Planning Area (HWSPA) in southwestern Orange County. The WWAP includes more than 16,000 acres. Horizon West is a growing community of several villages occupying more than 20,000 acres and projected to house over 60,000 residents when completed. Horizon West also features the future site of a Valencia College satellite campus.

The January 2018 Bureau of Economic and Business Research (BEBR) population projections show from 2017 to 2045 a 54% growth in population is anticipated for both Lake and Orange counties.

The study area traverses all five of the WWAP Future Land Use Categories (FLUC); Town Center and Wellness Way 1, 2, 3 and 4. The planning horizon for the WWAP is projected to be 2040 with a build-out of 16,500 dwelling units and a projected employment of 36,000. CEMEX submitted an updated permit for the proposed Four Corners Sand Mine in August 2017. They propose to operate on 1,200 acres within the WWAP, on property divided by Schofield Road. The permit allows mining approximately 525 acres over a 22-year period.

The study area also falls within the Town Center and Village H (Hickory Nut) of Horizon West. The Town Center will be a regional employment center with a projected employment force of over 27,000 and home to a host of new developments including a satellite campus of Valencia College and Orlando Health Hospital. Overall, Horizon West has an anticipated build-out of 40,000 dwelling units and a projected commercial area of 9.5 million square feet.

An origin and destination (OD) study conducted by CDM Smith in 2017 for CFX revealed that much of the potential traffic for a new toll road would come from planned developments. Without a new facility in the year 2045, there is a potential for 34,000 daily trips traveling between US 27 and SR 429 in the vicinity of Schofield Road. With the proposed project as a tolled expressway, approximately 19,000 daily trips would be diverted from local roadways.

The proposed connector is anticipated to help accommodate the expected increase in traffic due to population and employment growth within the study area by expanding the limited access expressway system.

## Consistency with Local and Regional Plans

Planning consistency of the proposed project is documented in various local comprehensive plans (see Table 1). A brief explanation of each follows.

CFX 2040 Master Plan and Five-Year Work Plan: The subject project is a major component of the Authority's plan to provide additional capacity to address the area's increasing projected population and employment growth. The Lake-Orange Connector would support the economic vitality of the WWAP and the HWSPA developments and is widely supported among local landowners and community leaders. The project is listed in the five-year work plan and funded for years 18/19 and 19/20 for Concept, Feasibility and Mobility Study. In 2007 OOCEA completed the SR 429 to US 27 Connector Concept Development and Evaluation Study which evaluated corridors for a new east-west limited access expressway in an area extending from SR 50 to the north to US 192 to the south. The study concluded that "if properties within and adjacent to the study area are developed in a manner consistent with the currently adopted comprehensive regional land use plans, there is a need for an additional east-west transportation facility in the study area."

Lake-Sumter MPO – 2040 LRTP: The Lake-Sumter MPO provides a forum for cooperative decision making concerning transportation issues throughout the urbanized area of Lake and Sumter Counties. The latest draft list of priority projects (April 2018) shows that a new "east-west connection between US 27 in Lake County and SR 429 in Orange County" is listed as priority #20 under the Preliminary Engineering projects. In addition, the portion of the Lake/Orange Parkway project extending from US 27 to the Lake/Orange County line is included in the Lake-Sumter 2040 LRTP as a cost feasible element and as an Emerging Regional Significant Corridor.

West Orange South Lake Transportation and Economic Development Task Force (WOSLTED): This task force was initiated in 2000 with the goal of promoting transportation in the West Orange/South Lake (WOSL) region. In 2008, the task force started a planning process to ensure coordinated transportation and housing development which eventually resulted in a proposed system of new roadways and roadway improvements which included the provision of a proposed east-west connector from US 27 to SR 429. This connector has always been a main focus of this organization.

<u>MetroPlan Orlando</u>: MetroPlan Orlando is the metropolitan planning organization for the greater Orlando area. It coordinates and leads transportation planning efforts in Orange, Osceola, and Seminole counties. The subject project is listed on the 2040 LRTP Plan Development Cost Feasible projects (updated June 2017) as a fully funded project (including PD&E, Design, Right-of-Way and Construction by 2040).

Agency	Remarks
Central Florida Expressway Authority (CFX)	Included in the 2040 Master Plan and the Five- Year Work Plan
Lake-Sumter MPO	Identified the proposed project in the 2040 LRTP Needs Plan
West Orange/South Lake Transportation and Economic Development Task Force	Identified a connection between US 27 to Orange County in its Transportation Plan
MetroPlan Orlando	Identified in its Technical Report 3: "Plan Development and Cost Feasible Projects"

## Table 1: Local Planning Consistency

## Economic Viability and Job Creation

The proposed facility is needed to further support the economic viability of the WWAP. This 16,000-acre service area has been recognized for many years as having significant potential for economic development in southeast Lake County. It is projected to be an economic engine for job creation in the region and is envisioned to strengthen its connectivity with other regional economic hubs. With an anticipated buildout of over 16,000 residential units, this important planned development is expected to generate over 26,800 jobs in the future.

The proposed connector will also directly benefit the economy and job creation potential of the Horizon West development by expediting the efficient delivery of goods and services in this developing area of West Orange County.

## Support Intermodal Opportunities

The Horizon West Town Center is an intermodal and freight staging facility potentially providing access to trucks, rails, airports and/or ports. Its presence enhances the integration and connectivity of the multimodal transportation system. The proposed connector would link this freight staging facility with two major Strategic Intermodal System (SIS) highways (US 27 and SR 429) and thus connect Lake County via a network of limited-access facilities to the Orlando International Airport and Port Canaveral. In addition, the MetroPlan Orlando's "Regional Freight and Goods Movement Facilities Profile" noted that there is "limited existing east-west highway

and rail connectivity within the region - which provides logistical challenges for some shippers". The proposed project will add a valuable east-west mobility link to the area's transportation network.

## **Evacuation and Emergency Services**

The East Central Florida Region has been identified by the National Oceanic and Atmospheric Administration (NOAA) as a high hurricane-vulnerable area within the United States and thus requires sufficient and efficient evacuation routes. There are no existing designated east-west evacuation routes within the immediate project area. Only SR 50, approximately 7 miles to the north, and US 192 (SR 530), approximately 7 miles to the south, provide effective east-west evacuation connection to important north-south SIS routes in the area (US 27 and SR 429). The provision of an additional high-speed, limited-access east-west facility will afford desirable redundancy of the highway network to accommodate diverted local and regional traffic during times of natural or man-made emergencies.

Another critical issue deals with potential delays of fire and emergency services. There are two fire stations just north and south of the study area along US 27 but their linkage to the east is ineffective due to the lack of a paved or limited-access facility connecting to SR 429, potentially resulting in additional delays. The proposed connector would facilitate prompt fire and emergency response.

## **PROJECT DESCRIPTION**

This PD&E study will consider a new tolled connection between US 27 and SR 429 in the study area shown on Figure 1. The type, design, and location of any potential improvements will be developed and evaluated during the course of the PD&E study and are not known at this time. It is anticipated that a limited access east-west roadway with two lanes in each direction will be a considered build alternative. A no-build alternative will also be considered.

## PRELIMINARY ENVIRONMENTAL DISCUSSION

A project study area (study area) for this Advance Notification was established and is shown on Figures 1 and 2. The study area limits are generally described as Porter Road on the north, SR 429 on the east, Old YMCA Road on the south, and US 27 on the west. The environment in the study area was analyzed using existing databases and GIS files as well as by using information provided by previous concept development and feasibility study reports.

## SOCIAL AND ECONOMIC

## Land Use Changes

Much of the study area is undeveloped or agricultural with scattered water bodies and wetlands and some limited residential areas. Existing development is predominantly along US 27 and SR 429. There are residential areas immediately south of the study area, near US 27 and SR 429, as well as to the east of SR 429, around Orange County National Golf Center and Lodge. Lake Louisa State Park is located west of US 27 and provides recreational opportunities to the public. The Four Corners Sand Mine is a mining operation proposed within the study area. Multiple major residential developments are also planned within the study area and the surrounding region. A conservation parcel known as the Schofield Tract is located immediately north of Schofield Road, two miles west of SR 429, and was purchased using Florida Forever Funds. Lake Louisa State Park, west of SR 27, was also purchased using Florida Forever Funds.

## Social

The 2010 Demographic Profile Data from the US Census Bureau shows the majority of the populations in Orange County (63.6 percent) and Lake County (82 percent) are identified as white. Major minority populations include African Americans, Asians, or "Multiple" and "Other" races. Demographics are similar in the study area, though the study area appears to contain proportionately fewer populations identified as "non-white" than does Orange County. There is limited potential for environmental justice concerns or impacts to underserved populations, community cohesion, or safety/emergency response due to the proposed project.

Community facilities and services in or adjacent to the study area include the Orange County National Golf Center and Lodge and Lake Louisa State Park. Lake Louisa is a navigable water body open to the public for recreational activity.

## **Relocation Potential**

The proposed project would involve a new roadway corridor and, therefore, additional right-ofway will be required. Currently, the amount and location of required right-of-way is undetermined. The project study area has minimal residential land uses, accounting for less than 5 percent of the total study area.

## Farmlands

Most of the study area contains soils classified as Farmlands of Unique Importance. Prime farmlands in the study area with associated St. Johns River Water Management District (SJRWMD) land use descriptions include improved and unimproved pastures, woodland pastures, field crops, tree crops, citrus groves, tree nurseries, and pine plantations. Due to the extent of agricultural lands in the study area, the potential exists for moderate impacts to Farmland Soils of Unique Importance.

## Aesthetic Effects

Aesthetic impacts in and around developed portions of the study area, including Schofield Road, Five Mile Road, US 27, and SR 429, are anticipated to be minimal because roadways are already present. Other portions of the study area are predominantly in a natural or agricultural setting and may contain woodlands, pastures, crop fields, or wetlands. Greater potential exists for aesthetic impacts to occur in these undeveloped areas; however, those impacts are anticipated to be minimal as well. Future planned development, including the Four Corners Sand Mine, residential developments, and utility infrastructure, are anticipated to further impact the undeveloped portions of the study area, so no significant aesthetic impacts are anticipated because of the proposed project.

## Economic

Agricultural nurseries, a golf course, planned residential developments, Lake Louisa State Park, and other businesses are located within or adjacent to the study area. The Four Corners Sand Mine and additional residential developments are approved or planned within the study area. The proposed project is anticipated to provide economic enhancements by creating additional transportation infrastructure that links employment and residential areas.

## Mobility

The project is anticipated to enhance regional mobility by providing an expressway option in the east-west direction linking US 27 and SR 429. This would accommodate additional anticipated development under the Wellness Way Area Plan in southern Lake County and the Horizon West Special Planning Area (including a future state college) in southwest Orange County.

## CULTURAL

## Historic and Archaeological Sites

A review of the Florida Master Site File and the corresponding GIS layers were used to determine the presence of any potentially significant historical or archeological resources in the region around the project. There are 20 previously recorded archaeological sites, and 16 previously recorded historic structures. Thirteen of these historic structures were no longer existing by 1945. Twenty of the remaining resources were found to be ineligible for listing in the National Register of Historic Places (NRHP).

#### **Recreation Areas**

Recreation areas within or adjacent to the project area include the Orange County National Golf Center and Lodge, the National Training Center, and the 4,500-acre Lake Louisa State Park. The Orange County National Golf Center and Lodge is a large golf facility, consisting of three separate golf courses and several smaller buildings for private events and instructional programs. The golf center is located along the eastern edge of the study area, east of SR 429. The National Training Center is a 300-acre sports, health, fitness, and education campus. It features a fitness center and aquatic center, track and field complex, cross-country course, multi-purpose athletic fields, and softball/baseball facility. The National Training Center is located approximately 7 miles north of the study area on SR 50.

#### NATURAL

## Wetlands

Wetlands occur throughout the study area and include mixed wetland hardwoods, cypress, hydric pine flatwoods, freshwater marshes, wet prairies, emergent aquatic vegetation, and mixed scrub-shrub wetlands. The study area, particularly south and west of Schofield Road, contains many lakes and ponds that have freshwater marsh, emergent aquatic vegetation, or other wetlands along their margins. Wetlands also occur in association with Lake Louisa, west of US 27.

## Water Quality and Quantity

The project occurs within the jurisdictions of both the South Florida Water Management District (SFWMD) and the SJRWMD. The study area overlies the Floridan Aquifer and contains multiple surface water bodies and lakes such as Trout Lake, Pike Lake, Adain Lake, Island Lake, and Lake Needham. According to the Florida Lake Watch Program, water quality status in Lake Louisa in the Ocklawaha River Watershed was 'good' as of July 2017. Previous impairments that resulted in failed water quality standards included dissolved oxygen. The project is in an aquifer recharge area and may contain sinkholes or recharge features.

## Floodplains

Information regarding the location of floodplains was obtained using the Federal Emergency Management Agency's Flood Insurance Rate Maps. Most of the study area is located within Floodzone X, which is outside the floodplain and considered moderate to low risk. Scattered regions designated as Floodzones A and AE are found throughout the project area are centered on wetlands or lakes. These floodzones are located within the 100-year floodplain and are considered high risk.

## Wildlife and Habitat

Federally listed species with potential to occur in the study area include Audubon's crested caracara (*Polyborus plancus audubonii*), Florida scrub-jay (*Aphelocoma coerulescens*), wood stork (*Mycteria americana*), red-cockaded woodpecker (*Picoides borealis*), sand skink (*Neoseps reynoldsi*), bluetail mole skink (*Eumeces egregius lividus*), eastern indigo snake (*Drymarchon corais couperi*), striped newt (*Notophthalmus perstriatus*, candidate for listing), Britton's beargrass (*Nolina brittoniana*), Florida bonamia (*Bonamia grandiflora*), Florida blazing star (*Liatris ohlingerae*), scrub lupine (*Lupinus aridorum*), papery whitlow-wort (*Paronychia chartacea spp. chartacea*), pygmy fringe tree (*Chionanthus pygmaeus*), Lewton's polygala (*Polygala lewtonii*), scrub pigeon-wing (*Clitoria fragrans*), scrub plum (*Prunus geniculate*), short-leaved rosemary (*Conradina brevifolia*), Everglade snail kite (*Rostrhamus sociabilis plumbeus*), Clasping warea (*Warea amplexifolia*), Carter's warea (*Warea carteri*), and scrub wild buckwheat (*Eriogonum longifolium* var. gnalphalifolium). The project occurs on the northern limits of the US Fish and Wildlife Service consultation area for Audubon's crested caracara. Carter's warea is known to occur on the Schofield Tract, which was purchased using Florida Forever Funds and is intended to protect rare habitats.

State listed species that may occur in the study area include Florida burrowing owl (*Athene cunicularia floridanal*), Florida pine snake (*Pituophis melanoleucus mugitus*), Florida mouse (*Podomys floridanus*), Florida sandhill crane (*Grus Canadensis pratensis*), gopher tortoise (*Gopherus Polyphemus*, candidate for Federal listing), gopher frog (*Lithobates capito*), little blue heron (*Egretta caerulea*) short-tailed snake (*Lampropeltis extenuata*), Sherman's fox squirrel (*Sciurus niger shermani*), southeastern American kestrel (*Falco sparverius paulus*), and tricolored heron (*Egretta tricolor*). Bald eagles (*Haliaeetus luecocephalus*) are protected by the Bald and Golden Eagle Protection Act and may also occur in the study area. During a 2007 conceptual
study, over 2,000 gopher tortoise burrows were identified within a portion of study area. There is high potential for gopher tortoise (and associated species which utilize burrows) to be located within the project impact area. A thorough survey will be required to identify burrows, develop a relocation plan, and obtain necessary relocation permits.

The highest quality wildlife habitat in the study area is associated with undeveloped areas, wetlands, and protected lands like the Schofield Tract. Smaller patches of wildlife habitat occur throughout the study area but are generally fragmented and surrounded by agricultural uses. Lake Louisa State Park contains high-quality wildlife habitat and is linked to other habitats to the southwest. The area southwest of Lake Louisa is known collectively as the Green Swamp and is important for wildlife and water quality.

#### Coastal and Marine

No coastal or marine resources occur within the study area and the project is not subject to Coastal Zone Consistency Review.

#### PHYSICAL

#### Noise

Residential and recreational areas within the study area are potentially sensitive to noise impacts and include lands mapped as Residential Low Density (FLUCCS 1100), Golf Courses (FLUCCS 1820), and Community Recreational Facilities/Parks (FLUCCS 1850). Most of these facilities are located near US 27 or SR 429 and likely experience existing roadway noise.

#### Air Quality

The study area is not located within any US Environmental Protection Agency (USEPA) Air Quality Maintenance Area or Non-Attainment Area. Therefore, the Clean Air Act Conformity requirements do not apply to this project at this time. Temporary impacts to air quality are anticipated during construction as a result of fugitive dust and exhaust emissions, but no permanent impacts to air quality are anticipated.

#### Contamination

Within the study area there are at least 14 storage tank contamination monitoring sites, three petroleum contamination monitoring sites, and three USEPA Resource Conservation and Recovery Act (RCRA) regulated facilities. The Florida Department of Environmental Protection (FDEP) Contamination Locator Map identifies one active petroleum cleanup site within the study area. Due to the presence of these facilities and the potential presence of unknown contamination risks, moderate involvement regarding contamination is anticipated.

#### Infrastructure

The study area contains at least two limited-use drinking water wells, four solid waste facilities, two wastewater facilities, 14 onsite sewage facilities, and 32 USEPA water quality data monitoring stations. The study area includes existing and proposed infrastructure for a City of Orlando-Orange County water conservation program called Water Conserv II.

#### Navigation

Lake Louisa is the only navigable waterway proximate to the study area. The project is not anticipated to directly impact Lake Louisa and no potential impacts to navigation are anticipated as a result of the proposed project.

#### Special Designations

Outstanding Florida Waters—Lake Louisa is the largest of the Clermont chain of lakes and is designated an Outstanding Florida Water (OFW).

Aquatic Preserves—There are no aquatic preserves in or around the study area, so no impacts from the proposed project are anticipated.

Scenic Highways—There are no scenic highways in or around the study area, so no impacts from the proposed project are anticipated.

Wild and Scenic Rivers—There are no Wild and Scenic Rivers in the study area, so no impacts from the proposed project are anticipated.

#### **ANTICIPATED PERMITS**

The proposed project has the potential to impact wetlands, which would necessitate a SJRWMD and SFWMD or FDEP Environmental Resource Permit as well as a Section 404 permit from the US Army Corps of Engineers. Coordination with FDEP for permitting jurisdiction may be necessary. A dewatering permit from the SJRWMD and SFWMD may also be necessary and a National Pollutant Discharge Elimination System (NPDES) permit from FDEP is anticipated. Federal Consistency Reviews will be conducted during the permit phase, as applicable. Mitigation is anticipated for unavoidable impacts to wetlands and wood stork suitable foraging habitat. Permitting for impacts to gopher tortoise through the Florida Fish and Wildlife Conservation Commission (FWC) is also anticipated.

#### **ANTICIPATED TECHNICAL STUDIES**

A Natural Resources Evaluation Report, a Cultural Resource Assessment Survey, a Noise Study Report, and a Contamination Screening Evaluation Report are anticipated and will be summarized in a Project Environmental Impact Report.

### **TRANSMITTAL LIST**

The AN will be distributed throughout the State of Florida system by the Florida State Clearinghouse, an office within the Florida Department of Environmental Protection that acts as the state's single point of contact for review of transportation projects. Accordingly, the transmittal list below includes the Florida State Clearinghouse as the only state entity to receive this AN.

Name	Agency
Chris Stahl, Florida State Clearinghouse	Florida Department of Environmental Protection
Bart Vernace	Federal Aviation Administration
Richelle Gosman	Federal Transit Administration
Stan Mitchell	Federal Transit Administration
Andrew Kizlauskas	US Army Corps of Engineers
Lisa Lovvorn	US Army Corps of Engineers
Randy Turner	US Army Corps of Engineers
Randall Overton	US Coast Guard
Kim Gates	US Environmental Protection Agency
Ntale Kajumba	US Environmental Protection Agency
Alya Singh-White	US Environmental Protection Agency
Amanetta Somerville	US Environmental Protection Agency
Roshanna White	US Environmental Protection Agency
Zakia Williams	US Fish and Wildlife Service
John Mckenchnie	US Forest Service
Steven Schnetzler	US Forest Service
Jennifer Schull	National Marine Fisheries Service
Leroy Crockett	National Resources Conservation Service
Gary Huttmann	MetroPlan Orlando
Keith Caskey	MetroPlan Orlando
Nick Lepp	MetroPlan Orlando
Mike Woods	Lake Sumter MPO
George Gadiel	Lake County
Seth Lynch	Lake County
Maria Cahill	Orange County
Renzo Nastasi	Orange County
Alberto Vargas	Orange County
Annette Burkett	SFWMD
Mindy Parrott	SFWMD
Ken Lewis	SJRWMD
Lee Kissick	SJRWMD
Mark von Canal	SJRWMD

#### Name

Barbara Hatchitt
Mr. Billie Cyprus
Mr. Fred Dayhoff
Mr. James Floyd
Historic and Cultural Preservation Department
Stephanie A. Bryan
Carolyn White
Victoria Menchaca
Paul N. Backhouse, Ph.D.
Alison Swing
Marcellus Osceola
Mr. Leonard M. Harjo
Jason Watts

#### Agency

SJRWMD Miccosukee Tribe of Indians of Florida Miccosukee Tribe of Indians of Florida Muscogee (Creek) Nation Muscogee (Creek) Nation Poarch Band of Creek Indians Poarch Band of Creek Indians Seminole Tribe of Florida Seminole Nation of Oklahoma FDOT Native American Coordinator Appendix B: Agency Comments to Advance Notification

### U.S. Environmental Protection Agency Region IV

From: White, Roshanna <<u>White.Roshanna@epa.gov</u>>
Sent: Wednesday, August 1, 2018 10:44 AM
To: William Sloup <<u>william.sloup@metriceng.com</u>>
Cc: Militscher, Chris <<u>Militscher.Chris@epa.gov</u>>; Buskey, Traci P. <<u>Buskey.Traci@epa.gov</u>>;
Kajumba, Ntale <<u>Kajumba.Ntale@epa.gov</u>>
Subject: RE: EPA Comments for AN Package - Feasibility/Project Development &
Environment Study for the Lake/Orange County Connector (US 27 to SR 429)

Dear Mr. Sloup:

The eastern study area of the project lies partially within the Biscayne Aquifer boundaries (NEPAssist <u>https://www.epa.gov/nepa/nepassist</u>). The Biscayne Aquifer is a sole source aquifer and is considered a principal water source for South Florida residents, visitors, and businesses. The aquifer is highly permeable and vulnerable to contamination. The EPA recommends adherence to all federal, state, and local government permits, ordinances, planning designs, construction codes, operation and maintenance requirements, and engineering for avoidance, minimization, and protection of the water source. Additionally, we recommend that avoidance and minimization of any identified jurisdictional waters of the U.S. be avoided during the development of alternatives to the extent practicable. During construction, please consider the vulnerability of the sole source aquifer and protect the drinking water delivered from this source. Also, follow all best management activities for erosion and sedimentation control.

The project is a non-federal action. Therefore, concurrence from the EPA is not required according to the Safe Drinking Water Act. Please contact state and county environmental offices to address proper drainage and storm water design. If federal financial assistance does become a source of funding for this project, please contact Region 4, Ground Water and UIC Section, Mr. Khurram Rafi (<u>rafi.khurram@epa.gov</u>) or Larry Cole (<u>cole.larry@epa.gov</u>) for an aquifer impact determination letter.

Sincerely,

Roshanna White | Life Scientist | NEPA Program Office U.S. Environmental Protection Agency | Region IV 61 Forsyth Street SW | Atlanta, GA 30303 Voice: 404-562-9035 | Email: white.roshanna@epa.gov



### Seminole Tribe of Florida

From: Victoria Menchaca <<u>VictoriaMenchaca@semtribe.com</u>>
Sent: Friday, July 20, 2018 3:08 PM
To: William Sloup <<u>william.sloup@metriceng.com</u>>
Subject: Central FL Expressway Authority Advance Notification Lake/Orange County Connector US27SR429

#### SEMINOLE TRIBE OF FLORIDA TRIBAL HISTORIC PRESERVATION OFFICE AH-TAH-THI-KI MUSEUM



July 20, 2018

William Sloup, P.E. Metric Engineering 615 Crescent Executive Court, Ste 524 Lake Mary, FL 32746 Phone: 407-644-1898 x1114 Email: William.Sloup@metriceng.com

Subject: Central FL Expressway Authority Advance Notification Lake/Orange County Connector US27- SR429 THPO #: 0031014

Dear Mr. Sloup,

Thank you for contacting the Seminole Tribe of Florida – Tribal Historic Preservation Office (STOF-THPO) regarding the Central FL Expressway Authority Advance Notification Lake/Orange County Connector US27- SR429. The proposed undertaking does fall within in the STOF Area of Interest. We have reviewed the documents provided and would like to provide the following feedback. We would respectfully like to request that once specific alternative corridors are chosen that a Cultural Resources Assessment Survey be conducted and sent to us so that we may complete our review.

Thank you and feel free to contact us with any further questions.

Respectfully,

Estorio Mendaria

Victoria L. Menchaca, MA, Compliance Review Specialist STOF-THPO, Compliance Review Section 30290 Josie Billie Hwy, PMB 1004 Clewiston, FL 33440 Office: 863-983-6549 ext 12216 Email: <u>victoriamenchaca@semtribe.com</u> Web: <u>www.stofthpo.com</u>

### **Natural Resources Conservation Service**

From: Crockett, Leroy - NRCS, Quincy, FL <Leroy.Crockett@fl.usda.gov>
Sent: Thursday, July 19, 2018 12:55 PM
To: William Sloup <<u>william.sloup@metriceng.com</u>>
Subject: RE: AN Package - Feasibility/Project Development & Environment Study for the Lake/Orange
County Connector (US 27 to SR 429)

Just going through emails and following up. If you need a Farmland Protection Evaluation for this project please send request form and shp files.

Sincerely

#### *LeRoy Crockett* Resource Soil Scientist

Perry Paige Bld suite 305N 1740 S MLK Blvd Tallahassee, FL 32307 Of: (850) 412-7809 Mb: (352) 262-0192



Watch the "Mighty Mini Microbe" trailer.

#### **US Forest Service**

From: Mckechnie, John - FS <<u>imckechnie@fs.fed.us</u>>
Sent: Tuesday, June 26, 2018 7:37 AM
To: William Sloup <<u>william.sloup@metriceng.com</u>>
Subject: RE: AN Package - Feasibility/Project Development & Environment Study for the Lake/Orange
County Connector (US 27 to SR 429)

Mr. Sloup,

The National Forests in Florida has no comments. The proposed study does not affect any US Forest Service holdings.

Thank you



John McKechnie Forest Engineer Forest Service National Forests In Florida

p: 850-523-8522 c: 850-274-0470 f: 850-523-8505 jmckechnie@fs.fed.us

325 John Knox Rd Tallahassee, FL 32303 www.fs.fed.us

Caring for the land and serving people

#### **Federal Aviation Administration**

From: <u>Bart.Vernace@FAA.GOV</u> Date: 8/2/18 3:51 PM (GMT-05:00) To: William Sloup <<u>william.sloup@metriceng.com</u>> Subject: RE: AN Package - Feasibility/Project Development & Environment Study for the Lake/Orange County Connector (US 27 to SR 429)

Mr. Sloup:

Please note that federal requirements that pertain to notifying the FAA of proposed construction and alteration on or nearby a public-use airport should be in accordance with <u>FAR Part 77 Regulation</u>. Any tall permanent structure or temporary equipment near an airport must conform to this regulation.

## Here are the instructions for submitting a FAA 7460-1 form, Notice of Proposed Construction or Alteration (Off-Airport) via OE/AAA:

A 7460-1, Notice of Proposed Construction or Alteration can be submitted to FAA by utilizing the link below to access our Obstruction Evaluation Airport Airspace Analysis (OE/AAA) program. <u>https://oeaaa.faa.gov/oeaaa/external/portal.jsp</u>

You may use the "Notice Criteria Tool" to see if you are required to submit a 7460-1, Notice of Proposed Construction or Alteration to FAA. The "Notice Criteria Tool" is located on the left hand side of our main web page, but is also accessible by clicking the following link: https://oeaaa.faa.gov/oeaaa/external/gisTools/gisAction.jsp?action=showNoNoticeRequiredToolForm

If you need to submit a 7460, you will have to register online and log in to the web based tool. Once on the main portal page, enter your contact information and then select "off airport proposal" option. Fill in the blanks and submit to FAA for review and approval.

Here is the "New User Registration" link:

https://oeaaa.faa.gov/oeaaa/external/userMgmt/permissionAction.jsp?action=showRegistrationForm

For any other information pertaining to off-airport airspace evaluations, please contact Mike Blaich, FAA Southern Region Off-Airport Airspace Specialist at 404-305-7081.

Bart Vernace, P.E. Manager FAA/Orlando Airports District Office 8427 SouthPark Circle, Suite 524 Orlando, FL 32819 (407) 487-7220 (Main), (407) 487-7223 (Direct) (407) 487-7135 (FAX) <u>Bart.vernace@faa.gov</u>



FLORIDA DEPARTMENT Of STATE

RICK SCOTT Governor KEN DETZNER Secretary of State

Mr. Chris Stahl Florida Department of Environmental Protection Florida State Clearinghouse 2600 Blair Stone Road, MS 47 Tallahassee, FL 32399-2400 July 10, 2018

RE: DHR Project File No.: 2018-3297/Received by DHR: June 22, 2018 Project: *FHWA grant: Lake/Orange County Connector Study (US 27 to SR 429) Feasibility Study* SAI#: FL201806228337 Counties: Orange, Lake

Dear Mr. Stahl:

Our office reviewed the referenced project in accordance with Chapters 267.061 and 373.414, *Florida Statutes*, and implementing state regulations, for possible effects on historic properties listed, or eligible for listing, in the *National Register of Historic Places (NRHP)*, or otherwise of historical, architectural or archaeological value. This letter does not constitute a review under Section 106 of the *National Historic Preservation Act*.

The Central Florida Expressway Authority has been granted funds from the Federal Highway Administration (FHWA) to study a new Lake/Orange County Connector. Based on the nature of the project (new roadway) and the environmental conditions in the project area, we request that the project area be subjected to a professional cultural resources assessment survey. The resultant survey report should conform to the provisions of Chapter 1A-46, *Florida Administrative Code*, and should be forwarded to FHWA and our office upon completion. The report will help us complete the Section 106 review process and provide concurrence on federal findings of effect, and recommend any necessary avoidance or mitigation measures.

The Division of Historical Resources cannot endorse specific archaeological or historic preservation consultants. However, the American Cultural Resources Association maintains a listing of professional consultants at <u>www.acra-crm.org</u>, and the Register of Professional Archaeologists maintains a membership directory at <u>www.rpanet.org</u>. The Division encourages checking references and recent work history.



Mr. Chris Stahl DHR Project No. 2018-3297 July 10, 2018 Page 2

If you have any questions, please contact Ginny Jones, Transportation Compliance & Review Architectural Historian, by email *ginny.jones@dos.myflorida.com*, or by telephone at 850.245.6333 or 800.847.7278.

Sincerely,

Jasu For

Timothy A. Parsons, Ph.D. Director, Division of Historical Resources and State Historic Preservation Officer

### **ENVIRONMENTAL ADVISORY GROUP MEETING #1**



#### LAKE / ORANGE COUNTY CONNECTOR (US 27 TO SR 429) ENVIRONMENTAL ADVISORY GROUP (EAG) MEETING #1 SUMMARY

**Date/Time:** Monday, July 30, 2018; 1:30 p.m. – 3:00 p.m.

Location: Central Florida Expressway Authority (CFX), 4974 ORL Tower Road, Orlando, FL 32807, Board Room

Attendees:Ten EAG members and eight staff members attended. Six EAG members participated via<br/>GoToMeeting. See sign-in sheets attached.



#### I. Notifications

Invitation letters were emailed to 61 members of the EAG on July 9, 2018.

#### II. Welcome

Nicole Gough of Dewberry, CFX's General Engineering Consultant (GEC), called the meeting to order at 1:34 p.m. and welcomed everyone. She gave a brief introduction about the meeting and provided safety, housekeeping and Title VI information. She also mentioned that the meeting was being recorded and there were members participating via GoToMeeting. Attendees introduced themselves and the organizations they represented.

#### **III. Presentation**

Will Sloup, Consultant Project Manager with Metric Engineering, presented the following information:

#### • Study Objective

The Lake/Orange County Connector PD&E study will determine if a limited access facility between US 27 in south Lake County and SR 429 in west Orange County is viable and fundable in accordance with CFX policies and procedures. New interchanges are proposed at US 27 and the future extension of CR 455 in Lake County. The existing Schofield Road interchange with SR 429 in Orange County will remain but be modified to accommodate free-flow traffic movements between SR 429 and the proposed Lake/Orange County Connector.



#### • Study Area

At the present time, the study area is generally undeveloped. The study area lies within Lake County and Orange County and the limits are generally described as: Porter Road on the north; SR 429 on the east; Old YMCA Road on the south; and US 27 on the west. (Presented on the slide was a map of the study area which was also available in the room as a 40" x 64" display board.)

#### • Future Land Use

The study area falls within the Wellness Way Area Plan and the Horizon West Special Planning Area.

The Wellness Way Area Plan has been recognized for many years as an area that has significant potential for economic development in southeast Lake County. It's comprised of approximately 15,471 acres in southeast Lake County. The anticipated build out of 16,531 units will generate over 26,839 jobs.

Horizon West is a fast-growing, master-planned community in southwest Orange County. This is highlighted by the fact that Horizon West's share of all approved single-family building permits within Orange County has steadily increased since 2002 and comprised more than 50% of issued permits in 2015. The study area falls within the Town Center and Village H (Hickory Nut) of Horizon West. The Town Center will be a regional employment center with a projected employment force of over 27,000.

#### • Project Needs

The need for a transportation project arises from deficiencies, issues or concerns that currently exist or are expected to occur within the study area. In short, the need establishes the rationale for pursuing a project. There are six project needs that serve as justification for the proposed Lake / Orange County Connector:

- 1. Improve connections between area roads.
- 2. Accommodate future transportation demand.
- 3. Provide consistency with local and regional plans.
- 4. Support economic viability and job creation.
- 5. Support intermodal opportunities.
- 6. Enhance evacuation and emergency services.

#### • CFX Project Development Process

CFX follows a project development and environment, or PD&E, process for new alignment expansion projects. At the conclusion of the PD&E study one of two things can occur - the proposed project can either move forward into the final design phase or be placed on hold to be revisited in the future.

#### • Current Phase – PD&E Study

Simply stated, the PD&E Study will determine if there is an engineering and environmentally feasible alternative to meet the project needs. Using the results of previous studies as a foundation, a feasible corridor for the proposed toll road will be identified. Several alignments within the corridor will then be developed and evaluated to identify a preferred alternative. The PD&E study and Final Design phases are funded in CFX's Five-Year Work Plan. Design funds are indicated as placeholder in fiscal years 2021/22 and 2022/23 until the CFX Governing Board approves the results of this PD&E Study.

#### • Project History – Identify Project

The Lake / Orange County Connector is identified in the 2040 Master Plan and was also identified in previous Master Plans (2025, 2030 and 2035) as the "Wellness Way Corridor". It is also identified in Lake County and Orange County Long Range Transportation Plans.

#### • Project History – Feasibility Study

In 2002, CFX studied the feasibility of a limited access toll road to connect US 27 on the west with Florida's Turnpike and the then newly constructed SR 429. Based on the concepts that

were developed, the study concluded that only the Southern Corridor offered any long-term opportunity for CFX participation. The Southern Corridor was in the general area of Schofield Road.

Again in 2007, CFX studied the feasibility and viability of a potential US 27 to SR 429 expressway connection within an area south of Hartwood Marsh Road and north of US 192. The study identified Corridors A, C and D as the three overall viable corridors. In the end Corridor C, which paralleled Schofield Road, was not recommended due to potential impacts to the planned Horizon West Town Center at the eastern terminus.

In 2017, CFX completed a preliminary traffic and revenue analysis of three alignments. The "Southern Alignment", located in the general area of Schofield Road, was found to provide the greatest potential for revenue generation and a recommendation was made to move forward with a Feasibility/PD&E Study.

#### • Schedule

The study began in May 2018 with a 15-month schedule. In August we will be finalizing corridor analysis, the analysis that will help identify the most feasible corridors. We will then proceed to alternatives analysis which will help identify a preferred alternative. Three PAG/EAG meetings will be held throughout the course of the study. Today we are discussing corridors, the next time we meet will discuss several alternative alignments, and the final time we meet we will focus on the preferred alternative.

#### • Corridor Analysis – Social Constraints Map

We have separated the study area into three segments and have developed several 800' wide corridors. This resulted in a total of 16 corridor segments that we are able to evaluate in different combinations to create a direct link between US 27 and SR 429. These corridors were then mapped against known constraints. (Presented on the slide was the Social Constraints Map which was also available in the room as a 40" x 64" display board.)

#### Corridor Analysis – Environmental Constraints Map

(Presented on the slide was the Environmental Constraints Map which was also available in the room as a  $40^{\circ} \times 64^{\circ}$  display board.)



#### • Corridor Analysis - Evaluation Criteria

The corridors will be evaluated to determine how well the six project needs are satisfied. The corridors will also be evaluated based on engineering, environmental and socio-economic criteria that were tailored to fit the characteristics of the study area. Evaluation matrices will be developed, based on these criteria, to facilitate the comparison of corridors.

#### IV. Presentation, continued

To conclude the presentation Kathy Putnam, CFX's Public Involvement Coordinator, presented the following information:

#### • Corridor Analysis - Public Involvement

Public involvement is critical throughout the study process. Multiple opportunities to provide input are being provided. Comments received during corridor analysis will be used to refine the project needs, corridor constraints and evaluation criteria. The results of the corridor analysis will be summarized in an Alternatives Corridor Evaluation Report which will be made available for public review.

Environmental Advisory Group Meeting #1 July 30, 2018



#### • Next Steps

We will continue to solicit public input on the corridor alternatives with a Public Informational Meeting scheduled to occur on August 30<sup>th</sup> from 5:30 pm to 7:30 pm at the Clermont Arts & Recreation Center in Clermont. The meeting will be held in an open house format. After this meeting the corridor analysis will be finalized and the study team will begin alternatives analysis. Following today's meeting the PowerPoint presentation, meeting summary and meeting materials will be posted to the study website and Facebook page. The presentation will also be emailed to the PAG & EAG members.

#### V. Questions & Discussion

Nicole Gough invited questions and discussion on the presentation and/or project study.

- Lex Veech, property owner: Asked for clarification on the 2007 study...was corridor C removed from consideration? It was out and now it's back in? Jazlyn Heywood with Metric Engineering responded that the study identified three viable corridors, A, C and D. In the end the report did not recommend corridor C due to potential impacts to the planned Horizon West Town Center at the eastern terminus. Yes, this study is once again considering Corridor C. The study team is coordinating with Orange County staff, property owners and developers to minimize and/or avoid impacts to the planned Horizon West Town Center.
- Beth Jackson, Orange County Environmental Protection Division: There are significant environmental constraints, particularly around Schofield: Gopher tortoise, sand skink, several threatened and endangered plant species are present. "Site 6" is utilized for gopher tortoise relocation (for Water Conserv II) – quasi-regulated area mostly to the north. There was a brief discussion regarding utilities and the need to coordinate with Woodward & Curran.

• Aldin Mathews, Lake Louisa State Park: What do the colors (for each corridor) represent? Any specific hierarchy? Will Sloup with Metric Engineering replied that they are just colors to distinguish different segments and corridors. Aldin Mathews continued that there should be some consideration to the entrance at the state park (intersection) with many visitors and a number of R/Vs navigating the area, etc.



- William "Bill" Graf, South Florida Water Management District (SFWMD): If you meet water management districts rules, you can get a permit. You appear to be within Water Conserv II area. There may be an opportunity for a Water Conserv II partnership. The project will obviously create more impervious area. A partnership could reduce pondage.
- James Hollingshead, St. Johns River Water Management District (SJRWMD): I would also ask that you explore other opportunities for stormwater RSD (Regional Sewer District). Any irrigation should be reclaimed or stormwater.
- Chris Matson, Florida Department of Environmental Protection District 3: We have done some review of various interchange potentials for section 1 on the map. From an environmental point of view i.e. noise, light: segments 1-5, 1-6 are preferred.
- **Casey Lyons, Florida Department of Transportation District Five (GoToMeeting):** By tying into US 27, traffic could be relocated onto our facility...how much traffic going into our road? I would suggest coordination with FDOT to augment our capacity on US 27. **Will Sloup** added that traffic forecasting is going on now and as soon as it becomes available they will coordinate with FDOT.
- **Cammie Dewey, SJRWMD (GoToMeeting):** These alignments cross over both water management districts. Orange County is SFWMD, Lake County is SJRWMD.

There were no more comments, so Nicole Gough thanked everyone for attending and providing input. The meeting concluded at 2:00 p.m.

#### END OF SUMMARY

This meeting summary was prepared by Kelly Hiden, Public Involvement Coordinator with The Valerin Group, Inc. It is not verbatim, but is a summary of the meeting activities and overall discussion. If you feel something should be added or revised, please contact Kelly Hiden by email at kelly@valerin-group.com or by telephone 407-508-0839 within five days of receipt of this summary.

8 | Page

EAG members present: John Classe – Reedy Creek Improvement District William Graf – South Florida Water Management District (SFWMD) Mark Griffin – City of Clermont Ron Hart – Lake County Water Authority James Hollingshead – St. Johns River Water Management District (SJRWMD) Beth Jackson – Orange County, Environmental Protection Division Aldin Mathews – Florida Park Service, Lake Louisa State Park Chris Matson – Florida Department of Environmental Protection (FDEP), District 3 Brandon Matulka - Lake County, Agency for Economic Prosperity Lee Pulham – Reedy Creek Improvement District Lex Veech – property owner

#### **GoToMeeting Attendees:**

Casey Lyon – Florida Department of Transportation (FDOT) District Five Ginny Jones – Florida Division of Historic Resources Kathy Pagan – Lake County Richard Mospens – Florida Fish and Wildlife Conservation Commission (FWC) Cammie Dewey - St. Johns River Water Management District (SJRWMD) Zakia Williams - US Fish and Wildlife

<u>Staff</u>

Brian Hutchings – CFX Jonathan Williamson – Dewberry Merissa Evans – Dewberry Nicole Gough - Dewberry Will Sloup – Metric Engineering Jazlyn Heywood – Metric Engineering Kathy Putnam – Quest Corporation of America Kelly Hiden – The Valerin Group

Environmental Advisory Group Meeting #1 July 30, 2018

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Lake / Orange County Connector Feasibility / Project Development & Environment (PD&E) Study ENVIRONMENTAL ADVISORY GROUP - MEETING NO. 1 CFX Project No.: 599-225

CFX Headquarters, 4974 ORL Tower Rd. Orlando, FL 32807

Name	Organization	Address	City/State/Zip	Email Address	In
Bill Adams	St. Johns River Water Management District	601 S. Lake Destiny Road, Suite 200	Maitland, FL 32751	wadams@sjrwmd.com	
Marc Ady	South Florida Water Management District	Orlando Service Center 1707 Orlando Central Pkwy., Suite 200	Orlando, FL 32809	mady@sfwmd.gov	
Janet Akerson	Florida Trail Association	5415 SW 13th Street	Gainesville, FL 32608	janetakerson@floridatrail.org	
Alyssa Alers	St. Johns River Water Management District	601 S. Lake Destiny Road, Suite 200	Maitland, FL 32751	aalers@sjrwmd.com	
Dale Allen	Florida Greenways & Trails Foundation	P. O. Box 4142	Tallahassee, FL 32315	wm.dale.allen@gmail.com	
Rick Baird	Audubon Society – Orange County	1920 North Forest Avenue	Orlando, FL 32803-1537		
Tom Ballesteros	Friends of Lake Louisa State Park	7305 U.S. Hwy. 27	Clermont, FL 34714		
Brian Barnett	Florida Fish and Wildlife Conservation Commission	Farris Bryant Building 620 S. Meridian Street	Tallahassee, FL 32399- 1600	brian.barnett@myfwc.com	
Doug Bryant	Lake County Water Authority	27351 SR 19	Tavares, FL 32778	info@lcwa.org	
John Classe	Reedy Creek Improvement District (RCID)	P. O. Box 10170	Lake Buena Vista, FL 32830	jclasse@rcid.org	
Jeffrey Collins	US Army Corps of Engineers, Jacksonville District	Jacksonville District P. O. Box 4970	Jacksonville, FL 32232- 0019	jeffrey.s.collins@usace.army.mil	
Christy Conk	Friends of Lake Louisa State Park	7305 U.S. Hwy. 27	Clermont, FL 34714		
Katasha Cornwell	FDOT Office of Environmental Management	605 Suwannee Street	Tallahassee, FL 32399	katasha.cornwell@dot.state.fl.us	

# **SIGN IN**





Name	Organization	Address	City/State/Zip	Email Address	In
Roy Cribb	FL Dept of Agriculture - Florida	Leesburg Forestry Station 9610 County Road 44	Leesburg, FL 34788	roy.cribbjr@freshfromflorida.com	
Mike Crikis	Reedy Creek Improvement	P. O. Box 10170	Lake Buena Vista, FL 32830	mcrikis@rcid.org	
Traci Dean	Conservation Trust for Florida	1731 NW 6th Street, Suite D	Gainesville, FL 32609	traci@conserveflorida.org	
Nahir DeTizio	Florida Highway	400 W. Washington Street - Suite 4200	Orlando, FL 32801	nahir.detizio@dot.gov	AH
Cammie Dewey	St. Johns River Water	601 S. Lake Destiny Road, Suite 200	Maitland, FL 32751	cdewey@sjrwmd.com	46
Laura DiGruttolo	Florida Fish and Wildlife	Farris Bryant Building 620 S. Meridian Street	Tallahassee, FL 32399- 1600	laura.digruttolo@myfwc.com	
Pote Dunkleberg	Florida Citizens for Science			petedunkpi@gmail.com	_
Sean Gallagher	FL Dept of Agriculture - Florida	8431 S Orange Blossom Trail	Orlando, FL 32809	sean.gallagher@freshfromflorida.com	
Terry Gilbert	Florida Fish and Wildlife	Farris Bryant Building	Tallahassee, FL 32399- 1600	terry.gilbert@myfwc.com	
Trey Glenn	US Environmental Protection	San Nunn Atlanta Federal Ctr	Atlanta, GA 30303-8960	glenn.trey@epa.gov	
Downse Jennesson William Graf	Agency – Region 4 South Florida Water Management District	Orlando Service Center 1707 Orlando Central Pkwy.,	Orlando, FL 32809	wgraf@sfwmd.gov	6
Deborah Green	Audubon Society – Orange County	1920 North Forest Avenue	Orlando, FL 32803-1537	sabalpress@mac.com; watermediaservices@icloud.com; watermediaservices@mac.com; watermediaservices@me.com	

# **SIGN IN**

Lake / Orange County Connector Feasibility / Project Development & Environment (PD&E) Study ENVIRONMENTAL ADVISORY GROUP - MEETING NO. 1

CFX Project No.: 599-225

CFX Headquarters, 4974 ORL Tower Rd, Orlando, FL 32807



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Name	Organization	Address	City/State/Zip	Email Address	
Mary Hamilton	Lake County	315 W. Main Street, #411	Tavares, FL 32778	mhamilton@lakecountyfl.gov	T
Ron Hart	Lake County Water Auth.	27351 S.R. 19	Tavares, FL 32778	rhart@lcwa.org	-
Thomas Hawkins	1000 Friends of Florida	P. O. Box 5948	Tallahassee, FL 32314- 5984	friends@1000fof.org	
Jason Hight	Florida Fish and Wildlife Conservation Commission	Farris Bryant Building 620 S. Meridian Street	Tallahassee, FL 32399- 1600	jason.hight@myfwc.com	
Jeff Holland	Reedy Creek Improvement District (RCID)	P. O. Box 10170	Lake Buena Vista, FL 32830	jholland@rcid.org	
James Hollingshead	d St. Johns River Water Management District	601 S. Lake Destiny Road Suite 200	Maitland, FL 32751	jhollingshead@sjrwmd.com	
Marjorie Holt	Sierra Club of Florida	Florida Regional Office 1990 Central Avenue	St. Petersburg, FL 33712	marjorieholt@earthlink.net	
Beth Jackson	Orange County - Environmental Protection Division	800 Mercy Drive, Suite 4	Orlando, FL 32808	beth.jackson@ocfl.net	
Kacee Johnson	FL Dept of Environmental Protection	3900 Commonwealth Blvd.	Tallahassee, FL 32399	kacee.l.johnson@dep.state.fl.us	
J Ginny Jones	FL Dept of State - Div of Historical Resources	RA Gray Building 500 S. Bronough Street	Tallahassee, FL 32399- 0250	ginny.jones@dos.myflorida.com	5.4
Wil Kitchings	FL Dept of Agriculture - Florida Forest Service, Orange County	8431 S Orange Blossom Trail	Orlando, FL 32809	wil.kitchings@freshfromflorida.com	
/ Charles Lee	Audubon Society - Central Florida	1101 Audubon Way	Maitland, FL 32751	chlee2@earthlink.net	10H
Casey Lyon	FDOT - District Five	719 S. Woodland Blvd.	DeLand, FL 32720	casey.lyon@dot.state.fl.us	44

# SIGN IN

Lake / Orange County Connector Feasibility / Project Development & Environment (PD&E) Study ENVIRONMENTAL ADVISORY GROUP - MEETING NO. 1

CFX Project No.: 599-225

CFX Headquarters, 4974 ORL Tower Rd, Orlando, FL 32807



Name	Organization	Address	City/State/Zip	Email Address	In
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MacDonald	Water Conserv II	17498 McKinney Road	Winter Garden, FL 34787	dmahnken@esciencesinc.com	
David Mannken	w/E Sciences	Florida Field Office	Maitland, FL 32751	tricia_martin@tnc.org	
Patricia Martin	The Nature Conservancy	2500 Maitland Center Pkwy.		Our fue com	Atte
Richard Mospens	Florida Fish and Wildlife	Farris Bryant Building	Tallahassee, FL 32399- 1600	richard.mospens@mytwc.com	Gé
Keith Mousel	FL Dept of Agriculture - Florida Forest Service, Lake	Withlacoochee Forestry Center	Brooksville, FL 34601	keith.mousel@freshfromflorida.com	
	County Audubon Society – Lake	15019 Broad Street 115 Lameraux Road	Winter Haven, FL 33884	president@lakeregionaudubon.org	
Reinier Munguia	Region	1620 Boyce Banch Avenue	Lake Placid, FL 33852	ridgerangers@myfwc.com	
Bill Parkins	Ridge Rangers	PA Gray Building	Tallahassee, FL 32399-	timothy.parsons@dos.myflorida.com	
Timothy Parsons	FL Dept of State - Div of Historical Resources	500 S. Bronough Street	0250 Jacksonville, FL 32232-	andrew.w.philips@usace.army.mil	
Andrew Philips	US Army Corps of Engineers, Jacksonville District	P. O. Box 4970	0019 St. Petersburg, FL 33712	flsquirrel@aol.com	
John Puhek	Sierra Club of Florida	Florida Regional Office 1990 Central Avenue	Lake Buena Vista, FL	Ipulham@rcid.org	
Lee Pulham	Reedy Creek Improvement District (RCID)	P. O. Box 10170	32830 Tallahassee, FL 32399	linda.reeves@dep.state.fl.us	
Linda Reeves	FL Dept of Environmental Protection	3900 Commonwealth Blvd.	Orlando, FL 32809		
Jennifer Rubiello	Environment Florida	3110 1st Avenue, Ste 2000			

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Lake / Orange County Connector Feasibility / Project Development & Environment (PD&E) Study ENVIRONMENTAL ADVISORY GROUP - MEETING NO. 1

CFX Project No.: 599-225

CFX Headquarters, 4974 ORL Tower Rd, Orlando, FL 32807



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Name	Organization	Address	City/State/Zip	Email Address	IIIItica
				and ars@myfwc.com	
Scott Sanders	Florida Fish and Wildlife Conservation Commission	Farris Bryant Building 620 S. Meridian Street	Tallahassee, FL 32399- 1600 Tallahassee, FL 32399-	tom.shupe@myfwc.com	
Tom Shupe	Florida Fish and Wildlife Conservation Commission	Farris Bryant Building 620 S. Meridian Street	1600 Clermont, FL 34714	scott.spaulding@dep.state.fl.us	
Scott Spaulding	Friends of Lake Louisa State Park	7305 U.S. Hwy. 27	Gainesville, FL 32608	alex@floridatrail.org	
Alex Stigliano	Florida Trail Association	400 W. Washington Street -	Orlando, FL 32801	Joseph.Sullivan@dot.gov	
Joseph Sullivan	Administration (FHWA) - FL	Suite 4200 800 Mercy Drive, Suite 4	Orlando, FL 32808	neal.thomas@ocfl.net	
Neal Thomas	Orange County Environmental Protection	000 111010		t it to an among the com	
Devid Turpor	Division Florida Fish and Wildlife	Farris Bryant Building	Tallahassee, FL 32399- 1600	david.turner@mytwc.com	
David Turner	Conservation Commission US Army Corps of Engineers,	Jacksonville District	Jacksonville, FL 32232- 0019	randy.l.turner@usace.army.mi	
Randy Turner	Jacksonville District	P. O. Box 4970 719 S. Woodland Blvd.	DeLand, FL 32720	william.walsh@dot.state.fl.us	
Bill Walsh	City of Clermont	685 W. Montrose Street	Clermont, FL 34711	zakia williams@fws.gov	Atter
Zakia Williams	US Fish and Wildlife Service (USFWS)	North Florida Ecological Services Field Office 7915 Baymeadows Way, Suite 200	Jacksonville, FL 32230- 7517		Golor

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Lake / Orange County Connector Feasibility / Project Development & Environment (PD&E) Study ENVIRONMENTAL ADVISORY GROUP - MEETING NO. 1 CFX Project No.: 599-225 CFX Headquarters, 4974 ORL Tower Rd, Orlando, FL 32807 July 30, 2018 1:30 p.m. – 3:30 p.m.



Lake / Orange County Connector Feasibility / Project Development & Environment (PD&E) Study ENVIRONMENTAL ADVISORY GROUP - MEETING NO. 1 CFX Project No.: 599-225 CFX Headquarters, 4974 ORL Tower Rd, Orlando, FL 32807 July 30, 2018 1:30 p.m. – 3:30 p.m.

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Name	Organization	Address	City/State/Zip	Email Address	
				Licha wrublik@fws gov	
John Wrublik	US Fish and Wildlife Service (USFWS)	North Florida Ecological Services Field Office 7915 Baymeadows Way, Suite	Jacksonville, FL 32256- 7517	Jonn_wrublik@rws.gov	
11	ICRIC	200 20763 US 27	Grovelan FL	buatulkaplake county fl.go	
BRANDON MATURA	FDEP-District 3 DRP	1500 we kind circle Apopla, FL	Apoplea, FL	ephristopher. matson & dep. statefLD	
AUDINTI MATTERS	FPS-LAKE LOUISA STATE PARK	7305 US 27, COERNONIE	CLERNONT, FL347	4 AWIN-MATHEWS OUR SIAIROT	1
LEX VEECIT	Property Owner	9450 AVELLIND AVEL 800	URSANDO ILSO		Alter \$60To
Kathy Ragen	Lakerword				

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## **STAFF SIGN IN SHEET**

#### CENTRAL FLORIDA EXPRESSWAY AUTHORITY

Lake / Orange County Connector Feasibility / Project Development & Environment (PD&E) Study ENVIRONMENTAL ADVISORY GROUP - MEETING NO. 1 CFX Project No.: 599-225 CFX Headquarters, 4974 ORL Tower Rd, Orlando, FL 32807 July 30, 2018 1:30 p.m. – 3:30 p.m.

Name	Organization	Email Address	Initials
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Will Hawthorne	Central Florida Expressway Authority	William.Hawthorne@CFXWay.com	A
Brian Hutchings	Central Florida Expressway Authority	Brian.Hutchings@CFXWay.com	KAD
Glenn Pressimone	Central Florida Expressway Authority	Glenn.Pressimone@CFXWay.com	
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Jonathan Williamson	Dewberry	JWilliamson@dewberry.com	AW
Merissa Evans	Dewberry	MEvans@dewberry.com	MES
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Rob Myers	Metric Engineering	Rob.Myers@metriceng.com	RM
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Jazlyn Heywood	Metric Engineering	Jazlyn.Heywood@metriceng.com	-H-
Om Prakash Kanike	CDMSmith	kanikeo@cdmsmith.com	
Carleen Flynn	CDMSmith	flynncm@cdmsmith.com	

## **STAFF SIGN IN SHEET**

#### CENTRAL FLORIDA EXPRESSWAY AUTHORITY

Lake / Orange County Connector Feasibility / Project Development & Environment (PD&E) Study

ENVIRONMENTAL ADVISORY GROUP - MEETING NO. 1

CFX Project No.: 599-225

CFX Headquarters, 4974 ORL Tower Rd, Orlando, FL 32807

Name	Organization	Email Address	Initials
Kevin Plenzler	Fishkind & Associates	kevinp@fishkind.com	
Kathy Putnam	Quest Corporation of America	Kathy.Putnam@qcausa.com	KP
Kelly Hiden	The Valerin Group, Inc.	Kelly@valerin-group.com	KAMES

### **PROJECT ADVISORY GROUP MEETING #1**



#### LAKE / ORANGE COUNTY CONNECTOR (US 27 TO SR 429) PROJECT ADVISORY GROUP (PAG) MEETING #1 SUMMARY

Date/Time:Monday, July 30, 2018; 9:30 a.m. – 11:00 a.m.Location:Central Florida Expressway Authority (CFX), 4974 ORL Tower Road, Orlando, FL 32807,

Boardroom

Attendees: Thirty-four PAG members and ten staff members attended. Two PAG members participated via GoToMeeting. See sign-in sheets attached.



#### I. Notifications

Invitation letters were emailed to 61 members of the PAG on July 9, 2018.

#### II. Welcome

Kathy Putnam, CFX's Public Involvement Coordinator, called the meeting to order at 9:34 a.m. and welcomed everyone. She gave a brief introduction about the meeting and provided safety, housekeeping and Title VI information. She also mentioned that the meeting was being recorded and there were members participating via GoToMeeting. Attendees introduced themselves and the organizations they represented.

#### **III.** Presentation

Will Sloup, Consultant Project Manager with Metric Engineering, presented the following information, including:

#### • Study Objective

The Lake / Orange County Connector PD&E study will determine if a limited access facility between US 27 in south Lake County and SR 429 in west Orange County is viable and fundable in accordance with CFX policies and procedures. New interchanges are proposed at US 27 and the future extension of CR 455 in Lake County. The existing Schofield Road interchange with SR 429 in Orange County will remain but be modified to accommodate free-flow traffic movements between SR 429 and the proposed Lake / Orange County Connector.



#### • Study Area

At the present time, the study area is generally undeveloped. The study area lies within Lake County and Orange County and the limits are generally described as: Porter Road on the north; SR 429 on the east; Old YMCA Road on the south; and US 27 on the west. (Presented on the slide was a map of the study area which was also available in the room as a 40" x 64" display board.)

#### • Future Land Use

The study area falls within the Wellness Way Area Plan and the Horizon West Special Planning Area.

The Wellness Way Area Plan has been recognized for many years as an area that has significant potential for economic development in southeast Lake County. It's comprised of approximately 15,471 acres in southeast Lake County. The anticipated build out of 16,531 units will generate over 26,839 jobs.

Horizon West is a fast-growing, master-planned community in southwest Orange County. This is highlighted by the fact that Horizon West's share of all approved single-family building permits within Orange County has steadily increased since 2002 and comprised more than 50% of issued

permits in 2015. The study area falls within the Town Center and Village H (Hickory Nut) of Horizon West. The Town Center will be a regional employment center with a projected employment force of over 27,000.

#### • Project Needs

The need for a transportation project arises from deficiencies, issues or concerns that currently exist or are expected to occur within the study area. In short, the need establishes the rationale for pursuing a project. There are six project needs that serve as justification for the proposed Lake / Orange County Connector:

- 1. Improve connections between area roads.
- 2. Accommodate future transportation demand.
- 3. Provide consistency with local and regional plans.
- 4. Support economic viability and job creation.
- 5. Support intermodal opportunities.
- 6. Enhance evacuation and emergency services.

#### • CFX Project Development Process

CFX follows a project development and environment, or PD&E, process for new alignment expansion projects. At the conclusion of the PD&E study one of two things can occur - the proposed project can either move forward into the final design phase or be placed on hold to be revisited in the future.

#### • Current Phase – PD&E Study

Simply stated, the PD&E Study will determine if there is an engineering and environmentally feasible alternative to meet the project needs. Using the results of previous studies as a foundation, a feasible corridor for the proposed toll road will be identified. Several alignments within the corridor will then be developed and evaluated to identify a preferred alternative. The PD&E study and Final Design phases are funded in CFX's Five-Year Work Plan. Design funds are indicated as placeholder in fiscal years 2021/22 and 2022/23 until the CFX Governing Board approves the results of this PD&E Study.

#### • Project History – Identify Project

The Lake / Orange County Connector is identified in the 2040 Master Plan and was also identified in previous Master Plans (2025, 2030 and 2035) as the "Wellness Way Corridor". It is also identified in Lake County and Orange County Long Range Transportation Plans.

#### • Project History – Feasibility Study

In 2002 CFX studied the feasibility of a limited access toll road to connect US 27 on the west with Florida's Turnpike and the then newly constructed SR 429. Based on the concepts that were developed, the study concluded that only the Southern Corridor offered any long-term opportunity for CFX participation. The Southern Corridor was in the general area of Schofield Road.
Again in 2007, CFX studied the feasibility and viability of a potential US 27 to SR 429 expressway connection within an area south of Hartwood Marsh Road and north of US 192. The study identified Corridors A, C and D as the three overall viable corridors. In the end Corridor C, which paralleled Schofield Road, was not recommended due to potential impacts to the planned Horizon West Town Center at the eastern terminus.

In 2017, CFX completed a preliminary traffic and revenue analysis of three alignments. The "Southern Alignment", located in the general area of Schofield Road, was found to provide the greatest potential for revenue generation and a recommendation was made to move forward with a Feasibility/PD&E Study.

#### • Schedule

The study began in May 2018 with a 15-month schedule. In August we will be finalizing corridor analysis, the analysis that will help identify the most feasible corridors. We will then proceed to alternatives analysis which will help identify a preferred alternative. Three PAG/EAG meetings will be held throughout the course of the study. Today we are discussing corridors, the next time we meet will discuss several alternative alignments, and the final time we meet we will focus on the preferred alternative.

#### • Corridor Analysis – Social Constraints Map

We have separated the study area into three segments and have developed several 800' wide corridors. This resulted in a total of 16 corridor segments that we are able to evaluate in different combinations to create a direct link between US 27 and SR 429. These corridors were then mapped against known constraints. (Presented on the slide was the Social Constraints Map which was also available in the room as a 40" x 64" display board.)

#### Corridor Analysis – Environmental Constraints Map

(Presented on the slide was the Environmental Constraints Map which was also available in the room as a 40" x 64" display board.)



#### • Corridor Analysis - Evaluation Criteria

The corridors will be evaluated to determine how well the six project needs are satisfied. The corridors will also be evaluated based on engineering, environmental and socio-economic criteria that were tailored to fit the characteristics of the study area. Evaluation matrices will be developed, based on these criteria, to facilitate the comparison of corridors.

#### • Corridor Analysis - Public Involvement

Public involvement is critical throughout the study process. Multiple opportunities to provide input are being provided. Comments received during corridor analysis will be used to refine the project needs, corridor constraints and evaluation criteria. The results of the corridor analysis will be summarized in an Alternatives Corridor Evaluation Report which will be made available for public review.

#### • Next Steps

We will continue to solicit public input on the corridor alternatives with a Public Informational Meeting scheduled to occur on August 30<sup>th</sup> from 5:30 pm to 7:30 pm at the Clermont Arts & Recreation Center in Clermont. The meeting will be held in an open house format. After this meeting the corridor analysis will be finalized, and the study team will begin alternatives analysis. Following today's meeting the PowerPoint presentation, meeting summary and meeting materials will be posted to the study website and Facebook page. The presentation will also be emailed to the PAG & EAG members.

#### IV. Questions & Discussion

Kathy Putnam invited questions and discussion on the presentation and/or project study.

- Herb Kahlert, Karl Corporation: We own 800 acres at the east end of the corridor. Any of the alignments will bisect our property and we are concerned with it being limited access. We previously asked for consideration of non-limited access, local road system. We would like to remain closely informed on the progress of the study.
- Jim Karr, South Lake Crossing: We feel that Hancock Road should have access and CR 455. Only one access point is troubling as a land owner. We feel that there should be more access points along the corridor and there are also some environmental concerns. What is left would severely damage our property. Hancock Road should have access, as it is part of the local roadway network.
- Ed Williams, City of Winter Garden: We see a need for everyone that is using SR 535 to SR 429. We like the northern most connection as it will pull more people. Definitely see a need for the road.
- **Renzo Nastasi, Orange County:** Several study corridors go through our Town Center. The potential impacts to property owners currently in various phases of development could be significant. Perhaps there could be a limited access roadway and also a local network.



- Shannon Schmidt, City of Clermont: We do have pending development at the north end. I
  would encourage CFX to coordinate with land owners/developers and am not in favor of a
  limited access corridor.
- **Kathy Putnam** asked if anyone in attendance could speak to plans for Wellness Way, or connections to Horizon West, or any other plans in the works.
- Jim Karr: There is ongoing work on Wellness Way providing access for both Lake and Orange counties. When asked if there was an established time line he replied that they were working on it.

- **Kathy Putnam** then inquired whether anyone from the Chambers of Commerce want to speak to economic viability.
- Jim Karr asked what the study team saw as the purpose of this road. Will Sloup replied that it was defined as a system expansion and that local governments supported this system expansion. Due to activity with local roadways there was a need to create a system within the local network to provide regional benefit.
- **Renzo Nastasi:** Orange county is in support of an east-west connector whether it is this or another one. Mr. Karr is looking at a potential east/west connection near Independence Way. Further South is Western Way, providing another connection. That's three different corridors, all of which may come to fruition. Mr. Nastasi sees the benefits of a limited access facility but realizes impacts to property owners need to be considered. He would also like to see impacts to Town Center minimized.
- Stina D'Uva, West Orange Chamber of Commerce: A toll road was not feasible previously. An organization known as the Southwestern Task Force and the Chamber supported what is now Wellness Way (the most northern corridor) at the time, as traffic relief for SR 50. The Chamber will get together after this meeting to discuss options and what we feel is the best corridor with fewest impacts to the Town Center.
- Herb Kahlert: Many of the property owners in the area have owned their land for more than 20 years and rode out the economic downturn in 2007. Lake County has recently adopted a regional plan that was referenced here, about 15,000 acres, which has been formally adopted. We were in a holding status for many years in terms of additional land uses. As we begin to now plan, development requires 1,000 acres or more. They will spend the next five to 10 years trying to get developments in place. Hopefully Lake County and CFX will realize what impacts will mean to those large tracts: bisecting them so that they would no longer meet the 1,000-acre requirement. Will Sloup added that the study is six months from being able to narrow down the location and width of the corridor. Mr. Kahlert expressed concern over government controlling the development planning.
- Mike Litvany, Hickory Grove LLC: Is the idea of a limited access roadway carved in stone? Will Sloup responded that the study is described as a (limited access) system expansion, but that the ultimate recommendation will be made at the conclusion of the study. Litvany added that there are other ways to fund roadways. You would bisect our properties leaving the balance of the property virtually unusable.
- **David Hill, Southern Hill Farms:** We have a 120-acre farm (the Southern boundary is Schofield Road). We are developing agritourism right where the northern corridor is. We are currently the only viable business in the area, and this roadway will be devastating to us. We vehemently oppose the northern corridors.
- Shannon Schmidt, City of Clermont: The northern alignment will be disruptive to development currently in the works.

There were no more comments, so Kathy Putnam thanked everyone for attending and providing input. She mentioned that the next PAG will be in early 2019 and reiterated all methods available for providing comments and questions. The meeting concluded at 10:17 a.m.

#### END OF SUMMARY

This meeting summary was prepared by Kelly Hiden, Public Involvement Coordinator with The Valerin Group, Inc. It is not verbatim but is a summary of the meeting activities and overall discussion. If you feel something should be added or revised, please contact Kelly Hiden by email at kelly@valerin-group.com or by telephone 407-508-0839 within five days of receipt of this summary.

PAG attendees:

Loren Bender – Valencia College

Julie Bendure – Floribra-Bradshaw

Chris Carmody – Apartment Association of Greater Orlando

Roger Chapin – Mears Transportation

Rex Clonts – Clonts Groves, Inc.

Diane Dethlefs – Orange County (Commissioner's aide – District 1)

Chris Dougherty – S&ME (Consultant)

Jonathan Droor – Lennar Land Development

Stina D'Uva – West Orange Chamber of Commerce

Mark Griffith – Cra-Mar Groves

Hugh Harling – East Central Florida Regional Planning Council

Jose Hernandez – Orange County Utilities

Lisa Hill – Southern Hill Farms

David Hill – Southern Hill Farm

Rafael Jimenez – CEMEX

Herb Kahlert – Karl Corp.

Jim Karr – South Lake Crossing

Nick Lepp – MetroPlan Orlando

Mike Litvany – Hickory Grove LLC

Richard Levey – Levey Consulting

Mark Massaro – Orange County Public Works

Brandon Matulka - Lake County (Agency for Economic Prosperity)

Tim McClendon – Lake County Planning & Zoning

Renzo Nastasi - Orange County (Community, Environmental and Development Services)

Jimmy Roper – Land owner

Scott Ruland – Water Conserv II

Jenelle Schmidli – Greater Orlando Builders Association

Shannon Schmidt – City of Clermont

Lee Steinhauer – Greater Orlando Builders Association

Marcie Tinsley – Karl Corp.

Keith Trace – Mattamy Homes

Thomas Werner – City of Clermont

Ed Williams – City of Winter Garden

Cuqui Whitehead - City of Clermont

GoToMeeting Attendees:

Kevin Plenzler – CDMSmith

Doug Byrd – Wantman Group

<u>Staff</u>

Joseph Berenis – CFX Brian Hutchings – CFX Jonathan Williamson – Dewberry Merissa Evans – Dewberry Will Sloup – Metric Engineering Jazlyn Heywood – Metric Engineering Carleen Flynn – CDMSmith Kathy Putnam – Quest Corporation of America Sheri Croteau – Quest Corporation of America Kelly Hiden – The Valerin Group

## CENTRAL FLORIDA EXPRESSWAY AUTHORITY

Lake / Orange County Connector Feasibility / Project Development & Environment (PD&E) Study PROJECT ADVISORY GROUP - MEETING NO. 1 CFX Project No.: 599-225 CFX Headquarters, 4974 ORL Tower Rd, Orlando, FL 32807 July 30, 2018 9:30 a.m. - 11:30 a.m.

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Harry Fix	Lake				





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July 30, 2018 9:30 a.m. - 11:30 a.m.

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hito	Lake County Engineering				
William Willie					





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#### PUBLIC INFORMATIONAL MEETING

#### CENTRAL FLORIDA EXPRESSWAY AUTHORITY

## Feasibility/Project Development & Environment Study

#### LAKE/ORANGE COUNTY CONNECTOR

Summer 2018

## A NEW STUDY IS UNDERWAY

The Central Florida Expressway Authority (CFX) is conducting a Feasibility/Project Development and Environment (PD&E) Study of the Lake/Orange County Connector. Below are details about the study and resources to keep you informed of the project's progress. The study is scheduled to be completed by August 2019.



## **PROJECT DESCRIPTION**

The proposed Lake/Orange County Connector extends from US 27 in south Lake County to State Road (SR) 429 in west Orange County, a distance of approximately five (5) miles. The study area is generally bordered by Porter Road on the north and Old YMCA Road on the south. A proposed interchange with the future extension of County Road 455 in Lake County is included in the study evaluation. The Lake/Orange County Connector is identified in the CFX 2040 Master Plan, the MetroPlan Orlando 2040 Long Range Transportation Plan and the Lake-Sumter MPO's 2040 Long Range Transportation Plan.



## STUDY OBJECTIVE

The objective of the Feasibility/PD&E Study is to determine if a limited access facility between US 27 in south Lake County and SR 429 in west Orange County is viable and fundable in accordance with CFX policies and procedures. Using the results of previous studies as a foundation, a feasible corridor for the proposed toll road will first be identified. Several alignments within the corridor will then be developed and evaluated to identify a preferred alternative. All factors related to the design and location of the facility will be considered, including; transportation needs, financial feasibility, social impacts, economic factors, environmental impacts, engineering analysis, and right-of-way requirements.

### **GOALS OF THE PROJECT**

The goals of the project are to improve connections between area roadways, accommodate anticipated transportation demand, provide consistency with local and regional plans, support economic viability and job creation, support intermodal opportunities, and enhance evacuation and emergency services.



#### Visit the study webpage at:

https://www.cfxway.com/agencyinformation/plans-studies/ project-studies/lake-orange-coconnector-pde/

### **PARTICIPATING IN THE STUDY**

Public involvement and community engagement will be a crucial component of this study. We value your input. CFX will provide multiple opportunities for participation, including presentations to elected officials' boards, public information meetings and a public hearing. Community groups can request a presentation via the www.CFXWay.com website or by emailing Public Involvement Coordinator Kathy Putnam at LakeOrangeStudy@CFXway.com. You're also welcome to submit your comments at any time during the study via the website or project email address as noted. And be sure to follow the study on Facebook (@LakeOrangeConnector) for updates.

# TO FIND OUT MORE Kathy Putnam

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Public participation is solicited without regard to race, color, national origin, age, sex, religion, disability or family status. Para más información en español acerca del proyecto, por afavor comuníquese con Alicia Arroyo al 407-509-0231 o por correo electrónico Alicia. Arroyo@QCAusa.com.

From:	Kathy Putnam		
To:	Michelle Maikisch; Glenn Pressimone; Joseph.Berenis@CFXWay.com		
Cc:	"Angela Melton"; Brian Hutchings; Williamson, Jonathan; Evans, Merissa; William Sloup; Jazlyn Heywood; Kelly Hiden; Mary Brooks; Shari Croteau		
Subject:	Lake-Orange County Connector Public Meeting Summary		
Date:	Friday, August 31, 2018 9:35:49 AM		
Attachments:	image001.png		

Good morning:

Last night was the first public meeting for the Lake/Orange County Connector Feasibility/PD&E Study. Below is a summary. Please let me know if you have any questions.

#### <u>Attendance</u>

A total of 126 people

- 109 citizens
- 17 staffers
- Most people said they found out about the meeting from media reports.

#### Elected Officials Attending

- Lake County Commissioner/CFX Board member Sean Parks
- State Rep. Bobby Olszewski
- Clermont City Council Member Tim Bates
- Clermont City Council Member Ray Goodgame
- Sara Ard, aide to Rep. Jennifer Sullivan
- Armando Harwood, attending on behalf of Orange County Sheriff and County Mayor Elect Jerry Demings

#### <u>Media</u>

Gabby Baquero with the West Orange Times/Windermere Observer was there. I talked with her and Will Sloup walked her through the study. Brian Hutchings also spoke with her about future stories regarding work planned for SR 429. Gabby indicated her story on the Lake/Orange County Connector will run in the West Orange Times and Windermere Observer next week.

-

#### <u>Comments</u>

We received nine comments.

- Five of them did not want a limited access road (four of these were from large property owners)
- Three strongly supported this connector
- One said it would have been helpful to have Lake County at the meeting to discuss extensions of Hancock Road and CR 455.

I'll follow up with a few attendees who requested pdf's of the display boards as well as previous studies connected with this study area.

Thanks,



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