Final Alternative Corridor Evaluation (ACE)

Methodology Memorandum (MM)

SR 31 Extension Alternative Corridor Evaluation Feasibility Study
From SR 70 to US 17
FPID: 431298-1-2-01
ETDM#: 14316
DeSoto County, Florida

Date:	April 20, 2018
Prepared By:	Florida Department of Transportation, District One
Subject:	**Draft ACE Methodology Memorandum**
	SR 31 Extension Alternative Corridor Evaluation (ACE) Study, from SR 70 to US 17

The purpose of this Methodology Memorandum (MM) is to document the evaluation methodology to be conducted for the SR 31 Extension ACE Feasibility Study. The memorandum details the goals of the evaluation, the methodology, how coordination with stakeholders will occur, and the basis for decision-making. This MM will be reviewed by the Environmental Technical Advisory Team (ETAT) members during a 30-day minimum comment period. The evaluation of the corridors will be detailed in the Alternative Corridor Evaluation Report (ACER). The results in the ACER will identify the reasonable alternatives for National Environmental Policy Act (NEPA) analysis.

The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, carried out by FDOT pursuant to 23 U.S.C. § 327 and a Memorandum of Understanding dated December 14, 2016, and executed by the Federal Highway Administration (FHWA) and the Florida Department of Transportation (FDOT).

1 Background

1.1 Contact Personnel

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1.2 Project Information

The Florida Department of Transportation (FDOT), District One, initiated this ACE Feasibility Study for the State Road (SR) 31 Extension in DeSoto County, Florida in May, 2017. The purpose of this study is to identify the need for an extension of SR 31 from SR 70 to United States (US) 17, and evaluate the potential effects of a new alignment connecting them. The SR 31 Extension from SR 70 to US 17 is included in the Heartland TPO Cost Feasible System Improvements Plan (2040) with $7.5M allocated for preliminary engineering between 2016 and 2020, $10.11M allocated for right-of-way between 2026 and 2030, an additional $5.62M allocated for right of way between 2031 and 2040, and $74.74M allocated for construction between 2031 and 2040. The PD&E Study and design phases are identified in the Transportation Improvement Plan (TIP) and Statewide Transportation Improvement Plan (STIP). There are no known project issues of concern. This project is ranked as the Number 2 long-term priority project in DeSoto County.

1.3 Project Description

The study area is located in the northeast quadrant of the US 17 intersection with SR 70, just northeast of downtown Arcadia in central DeSoto County. The new corridor would extend a distance of approximately five miles. A project location map is shown in **Figure 1.1**.

FDOT is conducting the SR 31 Extension ACE Feasibility Study to determine the viability of a new alignment extending SR 31 from its current terminus at SR 70 further north to connect to US 17. This study will establish the project's purpose and need, and identify any fatal flaws. If an extension of SR 31 is determined to be viable, a Project Development & Environment (PD&E) Study will be initiated. The alternatives recommended for further evaluation as a result of the ACE Feasibility Study will be evaluated consistent with the NEPA process, and the evaluation results will be documented in the PD&E Study. Consideration will be given to minimizing impacts to the natural, social, cultural and physical environment. The no-build alternative will remain an option throughout any PD&E Study that follows this ACE Feasibility Study.

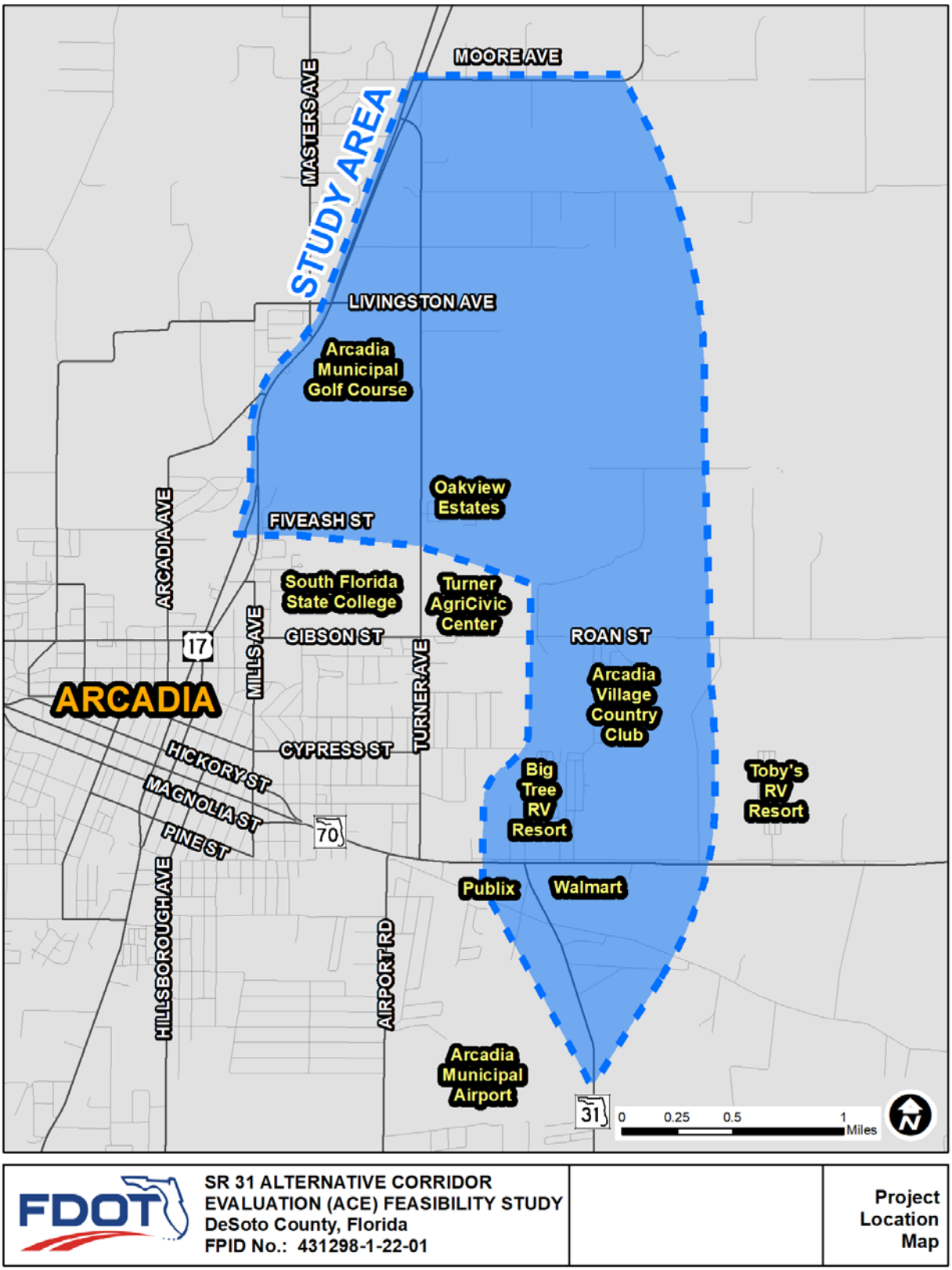
1.4 Purpose and Need

The project was screened in the Planning Screen, and the purpose and need was accepted by the FDOT Office of Environmental Management (OEM) on November 29, 2017. The purpose of the project is to 1) support the economic development goals for northeast Arcadia and 2) improve transportation network connectivity, and is based on the following needs:

- Economic Development: DeSoto County's population is expected to grow by 31% and employment by 20% by 2040. Much of this growth is planned within the project area northeast of Arcadia. Growth and development focused in the project area northeast of Arcadia includes the Mosaic Arena (currently under construction) and new residential development for the local workforce (31% growth by 2040). Local plans include the redevelopment of downtown Arcadia into a more walkable, pedestrian friendly environment with easy access to shops and restaurants. Mosaic Arena is expected to have a regional economic annual impact of more than $9.5M while the Rodeo attracts 16,000 visitors over 3 days with 94% traveling from outside DeSoto County. Currently, this area is served only by 2-lane local roads that are insufficient to handle this level of commercial traffic.
- System Linkage: The proposed facility will improve traffic operations by providing a direct connection for northbound and southbound traffic. This connection would relieve congestion on local roads that are forced to function as downtown bypasses, add capacity to the transportation system, and separate truck and regional through-traffic from local traffic. Large amounts of northbound and southbound US 17 truck through-traffic is coming from or heading to SR 31. This truck traffic currently uses US 17 and SR 70 through downtown Arcadia to complete the north/south link between US 17 and SR 31. As a result the percentage of trucks is very high in the downtown Arcadia area as the intersection of US 17 and SR 70 occur in downtown and no truck bypass is available.

Secondary objectives for the SR 31 Extension are to improve safety conditions and enhance mobility by reducing conflicts between trucks and other vehicular, pedestrian, and bicycle traffic in downtown Arcadia.

Figure 1.1: Project Location Map



2 Goals and Objectives of the Alternative Corridor Evaluation

The ACE process, as defined in the *Project Development and Environment Manual Part 1, Chapter 4* and *Efficient Transportation Decision Making (ETDM) Manual* meets the intent of *23 CFR 450* (Planning regulations) and Title 23 USC 168 (Integration of planning and environmental review). The intent of this study is to link planning decisions so they can be directly incorporated into the NEPA process. The purpose of the ACE is to document and link planning activities for use in the NEPA environmental analysis in accordance with the Planning and Environment Linkages described under Moving Ahead for Progress in the 21st Century (MAP-21). The goal of the ACE is to identify, evaluate, and eliminate alternative corridors that are not feasible or that do not meet the purpose and need of the project.

2.1 Status in Project Delivery

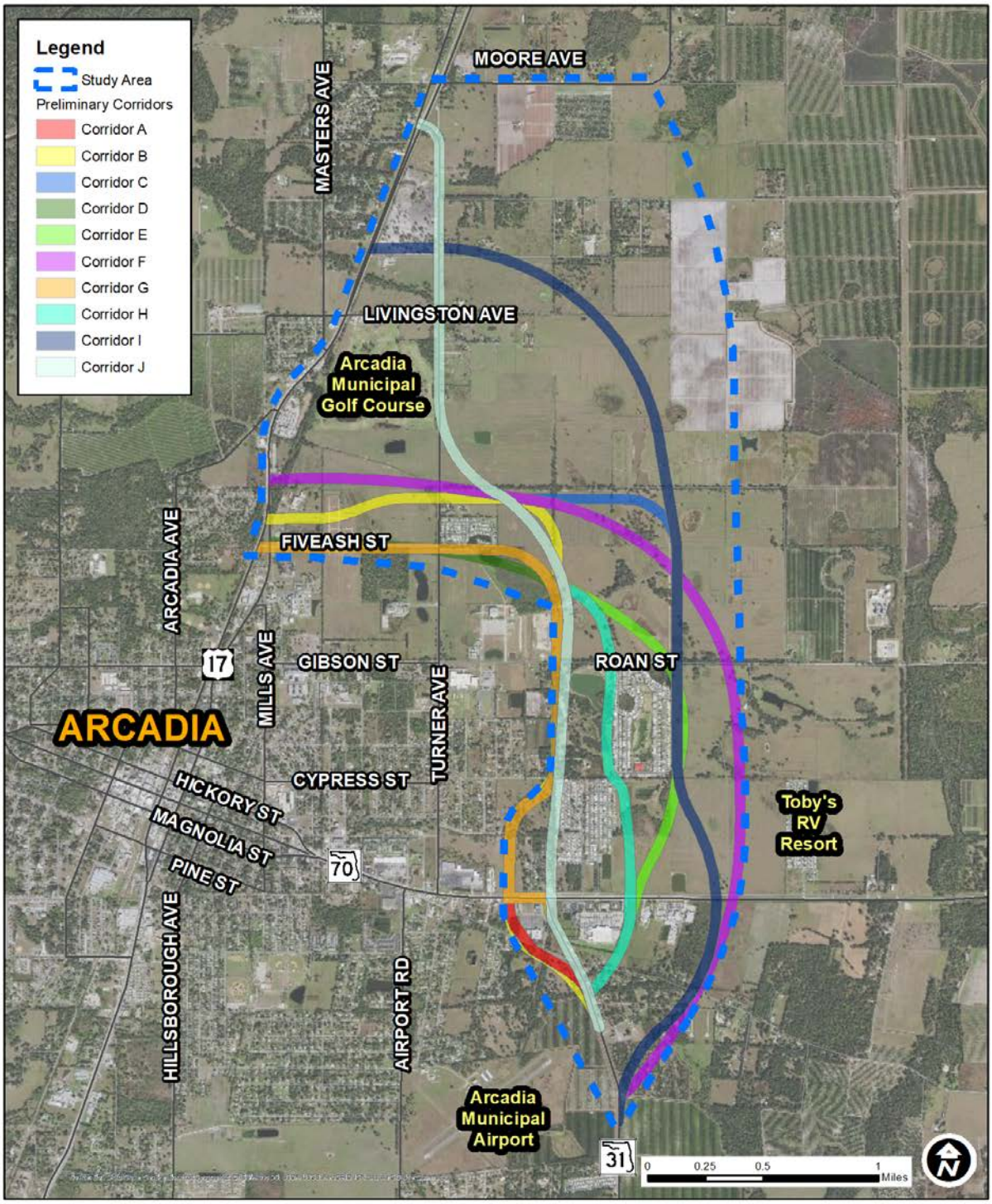
The purpose and need of the project was accepted by OEM for the ETDM Planning Screen on November 29, 2017. The ETDM Planning Screen was initiated on December 5, 2017 (ETDM#14316 – SR 31 Extension, https://etdmpub.fla-etat.org). As shown on **Figure 2.1**, ten (10) initial corridors were developed for the purpose of the ETDM Planning Screen. The ETDM Planning Screen review period was scheduled to end on January 19, 2018, but the review of the initial corridors was completed on February 6, 2018 after a 15 day review period extension was requested.

The ten (10) initial corridors entered in the ETDM Planning Screen were developed using Land Suitability Mapping (LSM). Using the Geographic Information Systems (GIS)-based Environmental Screening Tool (EST), the corridors were developed at a width of 250 feet, and the impacts were analyzed in the EST at a minimum of 1,250 feet (250-foot wide corridors with a 500-foot buffer distance on each side of the corridor).

These initial corridors are the starting point for the ACE process. No additional corridors were identified in the ETDM Planning Screen. The naming of each corridor or alternative will remain consistent throughout ACE and be carried through the PD&E phase

The Draft MM will be reviewed by ETAT and any comments provided will be reviewed, considered and incorporated into a revised MM by the study team and into the ACE process. Upcoming opportunities for public input include a public meeting in the fall of 2018.

Figure 2.1 Preliminary Corridors Map



2.2 Intent of Study

2.3 Identify Decision Points/Milestones

Once comments on the Draft MM have been incorporated, the revised MM will be included in the republished Planning Screen Summary Report once it has been reviewed and revised. The revised MM and ACE will be documented in the ACER, which will be referenced in the NEPA document. The results of the ACE will determine which corridors are not feasible or do not meet the purpose and need and should be eliminated from further study. Recommendations made are recorded in the EST and published in the Final Planning Screen Summary Report for use in the NEPA phase. The PD&E study will analyze reasonable alternatives that meet the purpose and need for the project to satisfy federal requirements associated with NEPA.

3 Alternative Corridor Evaluation Methodology

3.1 Data Collection

The data used to further evaluate the project corridor's social, cultural, natural and physical environmental impacts will be derived from (GIS), literature and field reviews where appropriate. Various GIS datasets within the Florida Geographical Data Library (FGDL), the South Florida Water Management District (SFWMD), the Florida Fish and Wildlife Conservation Commission (FFWCC), the Florida Natural Areas Inventory (FNAI), the U.S. Department of Agriculture's (USDA) Natural Resource Conservation Service (NRCS), DeSoto County Property Appraiser (DCPA), and the City of Arcadia's Future Land Use Plan will be used as data sources. In addition, field and literature reviews will be performed to verify key project corridor constraints. A preliminary list of GIS data layers that may be used in the assessment of the project study area is provided in **Table 3.1**.

Table 3.1: Potential GIS Layers

GIS LAYER	SOURCE (YEAR)
Social and Economic Layers	
Airports	DCPA (2017)
Cemeteries	DCPA (2017)
Churches	DCPA (2017)
DRI's	FGDL (2013), City of Arcadia (2017)
Prime Farmland	NRCS (2017)
Planned Unit Developments (PUDs)	FGDL (2009)
Environmental Justice Index	EPA (2017)
Fire Stations	DCPA (2017)
Government Buildings	DCPA (2017)
High Density Residential	DCPA (2017); City of Arcadia (2017)
Hospitals	DCPA (2017)
Law Enforcement	DCPA (2017)
Medium Density Residential	DCPA (2017); City of Arcadia (2017)
Schools	DCPA (2017)
Enterprise Zones	City of Arcadia (2017)
Cultural Layers	
State Parks	FGDL (2015)
FWCC Managed Lands	FGDL (2017)
Greenways	FGDL (2017)
Historical Sites	FGDL (2018)
Indian Parcels	FGDL (2008)
Local Parks	DCPA (2017)
Managed Lands	FNAI (2018)
Military Lands	FGDL (2010)
SHPO Structures	FGDL (2018)
SHPO Bridges	FGDL (2018)
SHPO Cemeteries	FGDL (2018) FGDL (2018)
SFWMD Lands	FGDL (2017)
Wildlife Management Areas	FNAI (2018)
Archaeological or Historic Sites	FGDL (2018)
Resource Groups	FGDL (2018)
National Register of Historic Places	FGDL (2018)
Natural Environment Layers	
Aquatic Preserves	FGDL (2011)
Eagle Nests	FFWCC (2017)
FDEP Mitigation Banks	FGDL (2017)
Floodways	FEMA (2014)
OFW	FGDL (2016)
Protected Species Occurrence Potential (multiple layers)	FFWCC (2017, 2012, 2010, 2003); FNAI (2018)
Water Features	SWFWMD (2008)
Wetlands	SWFWMD (2008)

GIS LAYER	SOURCE (YEAR)
Physical Environment Layers	
Brownfields (EPA/FDEP)	FGDL (2016)
Electrical Power Facilities	DCPA (2017)
EPA Pollutant Sites (air, water, RCRA)	FGDL (2017)
Hazardous Materials Sites	FDEP (2018)
Industrial Sites	DCPA (2017)
Landfills	FDEP (2018)
Nuclear Sites	DCPA (2017)
Oil and Gas Storage	FDEP (2018)
Petroleum Contaminated Sites	FDEP (2018)
Power Plants	DCPA (2017)
Sewer Treatment Plants	DCPA (2017)
Sinkholes	FGDL (2006)
Solid Waste Facilities	FDEP (2018)
Superfund Sites	FDEP (2018)
Water Treatment Plants	DCPA (2017)
Potable Water Sources	FGDL (2012)

3.2 Identify Corridor Constraints

The GIS data will be used to identify those corridors that avoid and minimize impacts to sensitive environmental features to the extent possible. The data sources included in **Table 3.1** will be used to locate social, cultural, natural, and physical constraints within the study area. Based on ETAT commentary, features identified as important considerations include, but are not limited to, potential land use changes from agriculture/prime farm lands to residential, source water, environmental justice, potential historic sites, wetlands, water quality, floodplains, contamination, and wildlife and habitat (including the Eastern indigo snake, Audobon's crested caracara, wood stork, Florida scrub jay, Florida grasshopper sparrow, gopher tortoise , Florida pine snake, Florida burrowing owl, southeastern American kestrel, Florida sandhill crane, little blue heron, tricolored heron, and Sherman's fox squirrel).

3.3 Identify Potential Corridors

Potential corridors were developed that provide for a 250-foot width because it includes sufficient space to accommodate a range of potential typical sections. Potential typical sections could include a low speed urban typical section requiring 104 feet of right of way, a high speed urban typical section requiring 148 feet of right of way, or a rural typical section requiring 192 feet of right of way. In each case, the right of way required for each typical section is less than the 250 foot corridor width to allow for flexibility in developing proposed alignments that avoid potential constraints. Typical sections and detailed alignments would be analyzed during PD&E Study phase.

3.4 Corridor Analysis and Evaluation Criteria

Corridors will be assessed using project specific criteria developed as a result of ETAT comments and public input received during ETDM Screening and the initial scoping activities. The evaluation criteria allows for the comparative assessment of the corridor alternatives. The corridors will be evaluated based on consideration of meeting the project purpose and need, avoidance and minimization of potential impacts to environmental resources, engineering feasibility, a narrative assessment of the corridors, and agency/public input. The analysis and assessment for each of these factors are described below.

3.4.1 Purpose and Need Evaluation

The purpose and need evaluation assesses how well each corridor satisfies the project purpose and need. In addition, each corridor will be evaluated for regional connectivity, emergency evacuation, and support of economic development. **Table 3.2** below provides the primary and secondary screening criteria related to purpose and need. Primary criteria include supporting economic development and improving network connectivity, and secondary criteria include improving safety and enhancing mobility.

Table 3.2: Purpose and Need Screening Criteria

Corridor	Primary		Secondary	
	Supports economic Development[1]	Improves network connectivity[2]	Improves safety[3]	Enhances mobility[4]
A				
B				
C				
D				
E				
F				
G				
H				
I				
J				

Notes: Yes = Highest Benefit, Moderate = Neutral Benefit, No = Unsatisfactory

1.
2.
3.
4.

3.4.2 Environmental Evaluation

The potential direct, indirect, and cumulative effects on the environment will be considered for each corridor. **Table 3.3** provides a matrix evaluation table that will be populated with data using the GIS layers identified in **Table 3.1** and the corridor shapes for the corridors shown in **Figure 2.1**. Quantifiable values for social, cultural natural, and physical environment will be shown in the matrix evaluation table. Non-quantifiable factors will be given a likelihood of impact rating. For listed species occurrence potential, an assessment of likelihood of impact will be made by a qualified biologist through the review of species occurrence databases from the sources identified in **Table 3.1**, as well as limited pedestrian wildlife surveys within the study area shown in **Figure 1.1**.

Table 3.3: Environmental Evaluation Criteria

Category	Evaluation Criteria	Unit of Measure	Potential Corridors									
			A	B	C	D	E	F	G	H	I	J
Social	Potential Residential Displacements	Number										
	Potential Non-residential Displacements	Number										
	Community Facilities	Number										
	Neighborhoods	Number										
	Community Cohesion	Effects to residential connectivity and social interaction										
	Socioeconomic Impact to Special Populations	Potential for disproportionate impacts										
Cultural	Potential Section 106 Resources	No. of affected historic and archeological resources										
	Potential Section 4(f) Resources	Acres										
Natural	Listed Species Occurrence Potential	Degree										
	Non-forested Wetlands	Acres										
	Forested Wetlands	Acres										
	Approved Mitigation Banks/Conservation Lands	Acres										
	Water Features	Acres										
Physical	Potential Contamination Sites	Number										
	Floodplain Impacts	Acres										
	Floodway Impacts	Acres										
	Noise	Receptors										

3.4.3 Engineering Considerations

The engineering considerations used to screen corridors are listed in **Table 3.4**. Engineering factors such as utility conflicts, right-of-way, and access management spacing on US 17. Drainage issues may not be able to be measured; for instance, a corridor may either be located in an area with flooding issues or it may not. Those corridors with technical feasibility concerns are likely to have high construction costs.

Table 3.4: Engineering Screening Criteria

Corridor	Major Utility Conflicts	Right-of-way Needs	Drainage Issues
A			
B			
C			
D			
E			
F			
G			
H			
I			
J			

The estimated construction, wetland mitigation, and right-of-way costs will be listed in **Table 3.5** below. Construction costs will be based on general FDOT long range estimates for roadway and structures using the length of the project and the two or four lane rural, low speed urban, or high speed urban typical section. Right-of-way costs will be estimated based on general costs of land and buildings in the study area by land use type and unit right-of-way costs obtained from FDOT District 1. Wetland mitigation costs will be based on in-basin mitigation bank credit costs.

Table 3.5: Cost Estimates by Corridor

Corridor	Construction Costs	Wetland Mitigation Costs	Right-of-Way Costs	Total Costs
A				
B				
C				
D				
E				
F				
G				
H				
I				
J				

3.4.4 Narrative of Assessment

Based on the corridor evaluations described above, a narrative discussion and assessment of each of the corridors will be prepared in compliance with elements and issues contained in 23 USC 168(c). This narrative will provide a discussion of the affected environment, advantages and limitations of each corridor and highlight any specific factors that may result in an unreasonable corridor. Public and agency input (consideration of input received from the ETAT, project stakeholders and the general public) will be summarized in the narrative.

3.4.5 Public and Agency Considerations

Public, agency and ETAT members input received during the screening process will be used to refine the purpose and need, corridor constraints and evaluation criteria in order to evaluate the corridors. A complete description of the opportunities for public input into the corridor evaluation process is in Section 4. The results documented in the ACER will be made available to the stakeholders through the EST for a 30 calendar day period. Notification of the public meetings will be distributed to all the individuals on the project mailing list including local officials, agencies including appropriate Native American tribes, stakeholders, special interest groups and property owners within the affected study area. If meetings are needed to explain the results of the ACER, they will be scheduled as necessary.

3.5 Approach to Eliminating Unreasonable Alternatives

Any corridor that does not meet the purpose and need for the project or not considered feasible will be eliminated from further consideration upon OEM approval. The corridors considered reasonable for detailed study as a result of the Purpose and Need Evaluation will be compared using the evaluation criteria described in **Section 3.4**. The corridor evaluation involves both quantitative and qualitative comparisons of the evaluation criteria. The comparative analysis will include rating the following:

- Environmental impacts and construction cost estimates (quantitative)
- Engineering factors (technical feasibility) (qualitative)
- Public support including plan consistency and controversy potential (qualitative)
- Narrative assessment (advantages and limitations) (qualitative)

This rating process is discussed further in **Sections 3.5.1** and **3.5.2.** Upon completion of this assessment and OEM approval, remaining reasonable corridors will be carried forward in the PD&E Study.

The PD&E study project documentation will be prepared in accordance with the PD&E Manual and shall, therefore, be in compliance with all applicable state and federal laws, executive orders, and regulations. In compliance with the ETDM Master Agreement, agency involvement regarding project needs, issues, evaluation criteria, avoidance, minimization, decisions, and preliminary mitigation concepts will be a continuous effort throughout the ETDM and ACE processes. The evaluation criteria and units of measure used to evaluate and compare alternatives will include resources issues that are consistent and acceptable to each respective resource agency. The ACE process ensures that all alternatives are evaluated consistently.

3.5.1 Environmental Impacts and Cost Estimates (Rating of Quantitative Data)

The evaluation process includes the development of an evaluation matrix to facilitate comparison of corridors. The evaluation matrix will identify the buffer width used, quantify potential impacts, and list the source of the data. The potential impacts for each criterion will be provided for the entire corridor and summarized in a matrix similar to **Table 3.6**. For each evaluation criteria, a comparison will be made using a standard deviation method to compare Corridors A through J. Red will be assigned to potential impacts greater than one standard deviation above the mean, yellow will be assigned to evaluation criteria within one standard deviation of the mean, and green will be assigned to evaluation criteria with zero or greater than one standard deviation below the mean. For each of the evaluation criteria, the corridors will be rated based on a score of 1 to 3 where 1 represents the least potential impact (green) and 3 represents the highest potential impact (red). Potential impacts of each corridor will be assigned a color code and number based on the standard deviation for the evaluation criteria results. Red indicates that the potential impacts are substantially higher than average when compared to the other alternatives. Green indicates that the potential impacts are substantially lower than average when compared to the other alternatives.

Table 3.6: Example Summary of Comparative Matrix for Environmental Impacts and Costs

Evaluation Criteria	Measurement within the Screening Buffer	Source	ALTERNATIVES									
			NB	A	B	C	D	E	F	G	H	I	J
Recreation Lands (Parks)	Number of Parks	UF GEOPLAN/ Parcel Derived Parks											

For each evaluation category, the score is based on summing the individual criteria rankings. The total costs for each of the corridor alternatives will be shown in **Table 3.7**.

3.5.2 Summary Corridor Ratings

The evaluation factors shall be summarized in a format similar to **Table 3.7** including the ratings from the environmental impact/cost rating summary (quantitative data) and ratings from the engineering, public and agency input (qualitative data).

Table 3.7: Corridor Evaluation Summary

Corridor	Construction Costs	Purpose & Need Satisfaction	Evaluation Criteria			Recommended for Further Consideration
			Environmental Impacts	Engineering Factors	Public Support	
A						
B						
C						
D						
E						
F						
G						
H						
I						
J						

3.6 Alternative Corridor Evaluation Report

The results of the analysis described above will be summarized in a Final ACER. This report will be submitted to the ETAT and interested stakeholders through the EST for a 30 calendar day period. Once comments are addressed, a corridor public workshop will be held to allow the public to provide input. The appropriate decision making matrices (i.e., the evaluation matrices similar to **Table 3.2**, **Table 3.3**, and **Table 3.4**, and a corridor evaluation summary similar to **Table 3.7**) will be included in the ACER to substantiate findings and the reasons for eliminating corridors and identifying corridors that will be carried forward into the PD&E phase. The ACER will be included in the republished Preliminary Programming Screen Report. The NEPA class of action determination (i.e. Environmental Assessment or Environmental Impact Statement), degree of effect, summary of public comments, and dispute resolution issues will be addressed in the Preliminary Programming Screen Report.

4 Opportunity for Agency/Public Input

Public outreach during the initial stages of the project's development has and will continue to be used to engage stakeholders to identify community values and concerns that may affect the development and evaluation of corridors. **Table 4.1** lists the public and agency events that have been conducted to date. **Table 4.2** summarizes ETAT comments, and **Table 4.3** summarizes nearterm outreach that will occur through the ETAT reviews of the MM and ACER.

Table 4.1: Public/Agency Coordination Conducted to Date

Item	Description	Date
Stakeholder Meetings	Stakeholder meetings were held to introduce the project and provide an opportunity for input into the project's purpose and need and on the initial corridors. Meetings included representatives from the Arcadia Rodeo Organization, Walmart, Publix, Arcadia Crossing, Arcadia Village, Big Tree RV Resort, the City of Arcadia, DeSoto County, the Heartland TPO, and major landowners (including the Turner Family and the Stevenson Family)	8/18/17 8/23/17 8/25/17 1/12/18
Public Event Booth	Project information was presented at a booth at the annual All Florida Championship Rodeo Event. This event was held at the new Mosaic Arena located adjacent to the project study area. Members of the public attending the event had the opportunity to ask questions and provide project comments.	3/10/18
Project Website	The website includes meeting information, report summaries which will be available for viewing and downloading, and provide opportunity for public comment. The website is being updated monthly and on an as need basis.	8/29/17
ETDM Comments	ETAT review team comments received regarding the anticipated degree of effect for the preliminary corridors on each ETDM issue.	2/6/18

Table 4.2: Summary of ETAT Comments

Issue	Degree of Effect	Organization	FDOT Responses to ETAT Comments
Land Use Changes	None	Florida Department of Economic Opportunity (FDEO)	During the PD&E phase, FDOT District One will coordinate with the City and the County to ensure that the project is consistent with their comprehensive plans. FDOT District One will also engage the public to solicit input on project effects and identify solutions. In addition, a Sociocultural Effects Evaluation conducted in accordance with the FDOT PD&E Manual, Part 2, Chapter 4 will also be included in the scoping recommendations for this project.
Social	Moderate	U.S. Environmental Protection Agency (USEPA)	During the PD&E phase, FDOT District One will engage the community to solicit input on potential project impacts, including vulnerable populations and concerns that are specific to the project area. A Public Involvement Plan, consistent with the FDOT PD&E Manual, Part 1, Chapter 11, will be included in the scoping recommendations for this project. A Sociocultural Effects Evaluation conducted in accordance with the FDOT PD&E Manual, Part 2, Chapter 4 will also be included in the scoping recommendations for this project.
Relocation Potential	None	None submitted	The project area primarily consists of agricultural land uses; however, residential, public/semi-public, and commercial land uses also exist adjacent to this proposed corridor. During the PD&E phase, potential right-of-way impacts that could lead to relocations will be evaluated. The community will be engaged to provide input in order to minimize any potential impacts. Relocation potential will be further assessed as project information becomes available. A Sociocultural Effects Evaluation in accordance with Part 2, Chapter 4 of the FDOT PD&E Manual will be included in the scoping recommendations for this project.
Farmlands	Moderate	NRCS	FDOT District One will coordinate with NRCS to determine if a FPPA form (AD-1006) will be required. The PD&E Study scoping recommendations for this project will reflect the results of this coordination.
Aesthetic Effects	None	None submitted	During the PD&E phase, FDOT District One will engage the public and local agencies to solicit input on design concepts and project effects to determine aesthetic details that the community desires and finds important. A Sociocultural Effects Evaluation in accordance with Part 2, Chapter 4 of the FDOT PD&E Manual will be included in the scoping recommendations for this project.

Issue	Degree of Effect	Organization	FDOT Responses to ETAT Comments
Economic	Enhanced	FDEO	FDOT District One will organize and facilitate public outreach activities to engage the community and solicit input on potential economic enhancements/impacts from the project in order to derive potential solutions. A Sociocultural Effects Evaluation in accordance with Part 2, Chapter 4 of the FDOT PD&E Manual will be included in the scoping recommendations for this project.
Mobility	None	None submitted	The proposed improvements involve separating automobile and truck through traffic from downtown Arcadia, which is anticipated to enhance mobility for vehicular, bicycle, and pedestrian modes. Freight mobility would be enhanced as the project would be designed to accommodate truck traffic outside of the downtown area. Additionally, the project may provide access to planned and future development within the project vicinity.
Section 4(f) Potential	None	SWFWMD; National Park Service	Concurrent with the FDOT Project Development and Environment (PD&E) Manual, Part 2, Chapter 7, a Section 4(f) Determination of Applicability Form will be included in the scoping recommendations for this project.
Historic and Archaeological Sites	None to Moderate	FDOS; SWFWMD	A Cultural Resource Assessment Survey prepared in accordance with Part 2, Chapter 8 of the FDOT PD&E Manual will be included in the scoping recommendations for this project. Communications will continue with the Department of State, Division of Historical Resources (DHR) pursuant Subsection 10.2.3.6 of the Environmental Resource Permit Applicant's Handbook Volume I.
Recreation Areas	None	SWFWMD; National Park Service, and FDEP	Specific impacts to recreation areas will be evaluated during the PD&E Study phase.
Wetlands and Surface Waters	Moderate to Substantial	U.S. Army Corps of Engineers (USACE); SWFWMD; USFWS; USEPA, FDEP, and NMFS	A Natural Resource Evaluation prepared in accordance with Part 2, Chapter 9 of the FDOT PD&E Manual will be included in the scoping recommendations for this project.
Water Quality and Quantity	Moderate to Substantial	SWFWMD; USEPA	A Water Quality Impact Evaluation and Pond Siting Report, conducted in accordance with Part 2, Chapter 11 of the FDOT PD&E Manual, will be included in the scoping recommendations for this project.
Floodplains	Moderate	SWFWMD	A Location Hydraulic Report conducted in accordance with Part 2, Chapter 13 of the FDOT PD&E Manual will be included in the scoping recommendations for this project.

Issue	Degree of Effect	Organization	FDOT Responses to ETAT Comments
Wildlife and Habitat	Minimal to Potential Dispute	FFWCC; USFWS; SWFWMD; Florida Department of Agriculture and Consumer Services	A Natural Resources Evaluation conducted in accordance with Part 2, Chapter 16 of the FDOT PD&E Manual will be included in the scoping recommendations for this project. Surveys for the species recommended will also be included in the scoping recommendations for this project.
Coastal and Marine	None	National Marine Fisheries Service	N/A
Noise	None	None submitted	Due to the presence of residential and social land uses within the project area, traffic noise impacts will be considered during the PD&E Study. A Noise Study Report conducted in accordance with Part 2, Chapter 18 of the FDOT PD&E Manual will be included in the scoping recommendations for this project.
Air Quality	Minimal	USEPA	An Air Quality Technical Memorandum conducted in accordance with Part 2, Chapter 19 of the FDOT PD&E Manual will be included in the scoping recommendations for this project. Additionally, scoping recommendations will include following the guidelines for the Florida State Implementation Plan as requested by USEPA and FDEP.
Contamination	Minimal to Moderate	SWFWMD; US EPA	A Contamination Screening Evaluation Report conducted in accordance with Part 2, Chapter 20 of the FDOT PD&E Manual will be included in the scoping recommendations for this project.
Infrastructure	None	None submitted	A utilities evaluation will be conducted during the PD&E Study phase.
Navigation	No Involvement	USACE	N/A
Special Designations	No Involvement	USEPA, SWFWMD	N/A

Table 4.3: Future Public/Agency Coordination

Item	Description	Date
MM Review Process	The MM will be used as a tool during the ETDM process to provide an opportunity for the ETAT to review and comment on the methodology used to develop and evaluate potential corridors. Additional meetings may be held as part of the Dispute Resolution process if any disputes are identified.	4/25/18 through 5/22/18
ACER Review Process	The Draft ACER will be used as a tool during the ETDM process to provide an opportunity for the ETAT to review and comment on the evaluation of the alternatives before the ACER is finalized. Additional meetings may be held with agencies to discuss the results of the evaluation as necessary.	9/19/18 through 10/16/18
Public Information Meeting	This meeting will be held to discuss the results of the ACER and recommendations for eliminating unreasonable alternatives.	11/1/18

5 Conclusion

In conclusion, the purpose of this MM is to document the ACE methodology to be conducted for the SR 31 Extension Feasibility Study. The memorandum details the goals of the evaluation, the methodology, how coordination with stakeholders will occur, and the basis for decision-making. The evaluation of the corridors will be detailed in the Alternative Corridor Evaluation Report. The results will identify the reasonable alternatives for NEPA analysis.