S.R. 60 PASSING LANES

FY 2019 BUILD GRANT APPLICATION

FDOT

JULY 15, 2019

Florida Department of Transportation

RON DESANTIS
GOVERNOR

605 Suwannee Street
Tallahassee, FL 32399-0450

KEVIN J. THIBAULT, P.E.
SECRETARY

July 15, 2019

The Honorable Elaine L. Chao
Secretary
U.S. Department of Transportation
1200 New Jersey Avenue, SE
Washington, DC 20590

Re: FDOT S.R. 60 Passing Lanes 2019 BUILD Grant Application

Dear Secretary Chao,

The Florida Department of Transportation (FDOT) is pleased to submit this application for consideration for 2019 BUILD Grant. The proposed project, State Road (S.R.) 60 Passing Lanes, is part of a larger effort to improve the safety conditions of the entire S.R. 60 corridor which connects Port Tampa Bay activity from the west to the east coast of Florida. The overall goal of this project is to improve safety conditions in the corridor and support economic activities within the vicinity of this major freight corridor.

The project segment is located within rural Osceola County and is heavily used by residents, tourists, and for the movement of freight. The project segment has a history of deadly crashes due to dangerous passing behavior on the existing rural, two-lane road and due to distracted driving. The project will provide motorists safer passing options and also alert them (using audible/vibratory treatments) as they make unsafe maneuvers. The project will also update signing & pavement markings, widen shoulders to accommodate trucks, install lighting at key intersections and improve drainage. An improved facility will further support commerce at the regional and state levels and provide safe access for agricultural businesses, ranches, and ecotourism areas within rural Osceola/Polk/Indian River Counties.

Thank you for your consideration of this important project. Should you or your staff have any questions, or need additional information, please contact me at (850) 414-5205 or Kevin.Thibault@dot.state.fl.us.

Sincerely,

Kevin J. Thibault, P.E.
Secretary

EXECUTIVE SUMMARY

PROJECT DESCRIPTION & PURPOSE

DESCRIPTION: S.R. 60 Passing Lanes

- From Three Lakes WMA Road to 1.1 miles east of Peavine Road in Osceola County (approximately 8 miles west of Yeehaw Junction/Florida's Turnpike)
- Project Length: 8 miles

SAFETY: History of deadly crashes – 10 fatalities over the past 8 years, with even more injuries and property damage

- Many crashes are the result of dangerous passing behavior on the existing rural, two-lane road; leading to head-on collisions
- Distracted driving is also an issue resulting in run-off-the-road accidents
- Requests from several stakeholders and citizens to improve safety conditions

ECONOMY: Provides access to agricultural industries including ranches, farmland and ecotourism locations in rural Osceola County

- S.R. 60 is a SIS facility (40% trucks)
- Provides east/west connection to many freight activity generators and ports, including Port Tampa Bay

RESILIENCY: S.R. 60 is a designated hurricane evacuation route

GRANT REQUEST

Total Cost: $15.51 M **BUILD:** $7.75 M (50%) **Match:** $7.75 M (50%)

PROJECT ELEMENTS

- Pair of Passing Lanes (EB & WB)
- Rumble strips (audible/vibratory treatments) on road edges and at the centerline
- Updated signing & pavement markings
- Wide shoulders to accommodate trucks
- Lighting at key intersections
- Drainage improvements

KEY BENEFITS

SAFETY:

- Proposed safety features will keep drivers alert, and provide safer opportunities for passing
- Improve hurricane evacuation clearance time from four neighboring counties
- Prevent releases of hazardous materials

STATE OF GOOD REPAIR:

- Address existing system vulnerabilities and risks
- Relieve congestion caused by vehicle crashes on the corridor and improve travel time reliability for people and goods

ECONOMIC COMPETITIVENESS:

- An improved facility will further support commerce at the regional and state levels through the connection to several ports and other activity generators
- Provides safe access for agricultural businesses, ranches, and ecotourism areas within rural Osceola/Polk/Indian River Counties

ENVIRONMENTAL SUSTAINABILITY:

- Proactive planning, design, and construction efforts will minimize the impact of the project on the nearby Wildlife Management Areas and the Kissimmee River
- Drainage improvements will enhance water flow in the surrounding wetlands and floodplains

QUALITY OF LIFE:

- Reduce fatalities and driving stress associated with unsafe roadway conditions

PARTNERSHIP:

- Support from local governments, MPOs, and Regional Planning Councils
- Work with the area communities and businesses, including Yeehaw Junction

BENEFIT-COST ANALYSIS

- The project is forecasted to yield a Benefit-Cost Ratio of 1.72, indicating that the investment is a good use of public funds. The results are based on a real discount rate of 7%.
- The project's Net Present Value is estimated at $9.2 M.

PROJECT READINESS

TECHNICAL FEASIBILITY: The project is consistent with several state, regional, and local planning studies. The project will be implemented with minimal right-of-way acquisition to construct the safety improvements on this corridor while enhancing water flow and stormwater treatment.

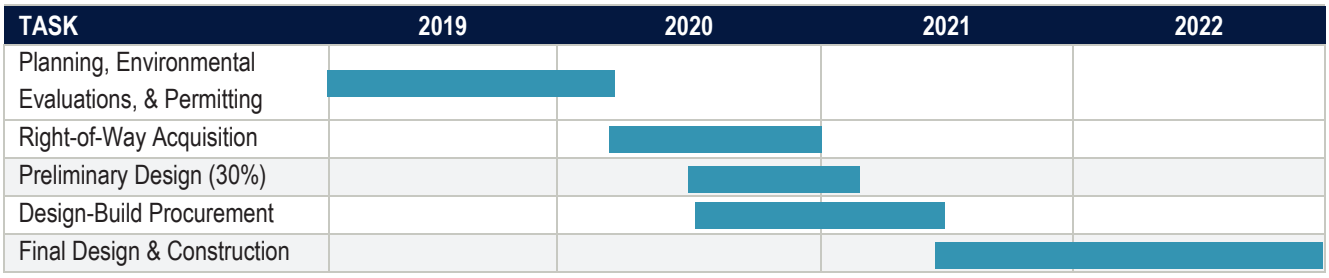
REQUIRED APPROVALS

- NEPA: Type II Categorical Exclusion
- Permitting: South Florida Water Management District, Army Corps of Engineers, Florida Department of Environmental Protection (National Pollution Discharge Elimination System), and additional environmental permits as needed

INNOVATION

- Audible/vibratory treatments
- Innovative speed management strategy using low-cost passing lanes
- Design-build delivery
- Enhancing the environment as opposed to mitigating impacts

PROJECT SCHEDULE



- Project will be obligated before the stipulated September 30, 2021 deadline

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1.0 PROJECT DESCRIPTION

The Florida Department of Transportation (FDOT) has developed the State Road (S.R.) 60 Passing Lanes project to address critical safety needs arising along a major trucking corridor connecting activity generators from the Gulf of Mexico to the Atlantic Ocean through Central Florida. FDOT anticipates the project investment to amount to $15.51 million, and is seeking 50% BUILD Grant funding to deliver safety improvements addressing dangerous driver behavior including:

- Passing lanes installation;
- Signing and pavement marking improvements along S.R. 60 and at associated intersections;
- Audible and vibratory roadway treatment including ground-in rumble strips or profiled thermoplastic along the centerline and edge lines; and
- Installation of roadway lighting at the Peavine Road intersection.

These improvements are anticipated to address distracted driver and dangerous passing behaviors from roadway users which have resulted in collisions, fatalities, injuries, and property damage over recent years.

Figure 1: *S.R. 60 Study Segment*

Safety improvements along the S.R. 60 corridor have long been a priority for Central Florida communities as evidenced in the FDOT S.R. 60 Corridor Study (2016), which was supported by four FDOT Districts, four Metropolitan Planning Organizations, and four Regional Planning Councils. The 8.2-mile segment in Osceola County between the Polk County Line and Yeehaw Junction (a major trucking stop along Florida's Turnpike) is the focus of this project, and has also been the focus of three safety studies including the FDOT Corridor Safety Study (2019), FDOT S.R. 60 Study (2018), and the FDOT S.R. 60 at US 441 Safety Study (2017).

This segment is a priority for the State of Florida, regional agencies, and local governments, with associated improvements included in the area's Long Range Transportation Plan (LRTP), Freight Mobility Plan, FDOT's 5-Year Work Program, and the Strategic Intermodal System (SIS) 2029-2045 Cost Feasible Plan. FDOT is also leveraging state funding sources from the Strategic Intermodal System (SIS) program to ensure sufficient matching dollars. The completion of the S.R. 60 Passing Lanes project will result in a benefit-cost ratio of 1.72, indicating the project's good use of public funds with generation of net societal benefits.

Florida's SIS facilities play critical roles in supporting the local, regional, and national economy. As a major east-west SIS corridor, S.R. 60 spans four FDOT Districts and intersects with five SIS Highway Corridors, one Emerging SIS Highway Corridor, and one SIS Highway Connector. This corridor provides critical east/west connections to several freight activity generators and ports located in Florida, including Port Tampa Bay, which has a $17.2 billion economic impact for the region.[1] Addressing and maintaining safe conditions along this segment of the corridor is important for continuity of commerce between Florida's coasts.

The segment is located in rural Osceola County providing the agricultural industries and the small, "Old Florida" community of Yeehaw Junction access to other areas of the state. The land use where the facility traverses is agricultural including farmland, ranches, natural preserves and includes several ecotourism sites. Osceola County is the leading county in Florida for beef cattle production with 556,438

1 https://frontrunner-bucket.s3.amazonaws.com/19C50237-5056-907D-8D38-E12F5ABBABF5.pdf

out of 580,258 acres of agriculture being devoted to ranching. A safe S.R. 60 supports a local, regional, and national market for the County's agriculture.

Due to Florida's unique coastal geography, the state is vulnerable to several natural hazards, which when combined with the state's population growth, makes safe evacuation paramount. The state plans evacuation routes and shelters for residents and visitors to avoid flooding, winds, tornados and destructive hurricanes. S.R. 60 has been identified as an evacuation route in Florida's Statewide Regional Evacuation Study Program (SRESP) helping people from four counties evacuate including Hillsborough, Polk, Osceola, and Indian River. Once improvements are made, the project segment of S.R. 60 can offer a safe, efficient route for evacuation in the event of a hurricane or other natural disaster.

The S.R. 60 Passing Lanes project is anticipated to be implemented through a design/build contract in order to accelerate delivery, maximize innovation, and assure accountability. FDOT has a history of providing strong fiscal, managerial, and engineering personnel to successfully implement BUILD-funded projects. However, FDOT understands it will be responsible for all cost overruns that may occur. Additionally, FDOT will ensure compliance with state agreements regarding expenditure of state funds, reporting, and audits.

The total cost of the project is $15.51 million, and FDOT is requesting a 50% BUILD grant award. The investment in infrastructure will help support the local and regional Florida economy while also reducing injuries and fatalities and associated property damage. Key project benefits include:

PASSING LANES BENEFITS

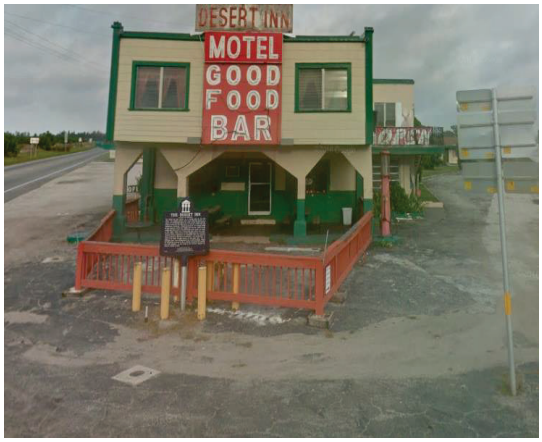
TOTAL PROJECT MONETIZED BENEFITS: $22.7 M

(2017$ in Present Value Terms)

2.0 PROJECT LOCATION

Osceola County is one of the fastest growing counties in Central Florida and was considered the 7th fastest growing county in the United States from 2017-2018. The County has experienced a 31% increase in population since the year 2000, and its population is expected to double over the next 20 years to over 450,000 residents.[2] The project is focused in southern Osceola County, closest to the rural community of Yeehaw Junction. According to the 2018 US Census, Census Tract 0438.00 shows this area has a population of 6,951 with 21% of this population identifying as minority.[3] Yeehaw Junction is considered an "Old Florida" jewel, established in the 1880's to accommodate area workers transporting timber via rail. As a testament to that time, the Desert Inn, see **Figure 2**, in Yeehaw Junction was registered on the National Register of Historical Places. The Pilot Travel Center at Yeehaw Junction has now become a major truck stop along S.R. 60, US 441, and Florida's Turnpike routes.

Figure 2: Historical Desert Inn



S.R. 60 is designated as a SIS Highway Corridor, part of the high priority network of transportation facilities within Florida. S.R. 60 traverses east-west across Florida between the Gulf of Mexico and the Atlantic Ocean. The study corridor is located 7 miles west of Yeehaw Junction in Osceola County. S.R. 60 intersects with both US 441 and Florida's Turnpike at Yeehaw Junction which provides motorists access to points north and south. US 441 is a major roadway running from Miami, Florida to Rocky Top, Tennessee and acts as a connector between several urban and rural areas. Florida's Turnpike is a limited access highway connecting nearly 500 miles through Florida. A study location map is included as **Figure 3**.

S.R. 60 is a two-lane undivided roadway and has a rural typical section. Two 12-foot wide travel lanes are provided, one eastbound and one westbound. Four-foot wide paved shoulders exist along the north and south sides of the roadway. Lighting is not present along the corridor and there are no pedestrian or designated bicycle facilities. Passing lanes along S.R. 60 are present to the east and west outside of the study corridor. The posted speed limit along the corridor is 60 MPH. The approximate right-of-way width is 50 feet from the centerline of S.R. 60 (100 feet total).

Local land use throughout the corridor is agricultural, with farmland existing on the north and south sides of S.R. 60. Driveways provide access to the farmland and are gated. There are no residential or commercial areas present along the subject corridor. The intersections at Three Lakes WMA Road, Access Road, and Peavine Road are low-volume, stop-controlled side streets.

2 FDOT Central Office, S.R. 60 Corridor Study. (2016) Pg 4-120
3 https://geomap.ffiec.gov/FFIECGeocMap/GeocodeMap1.aspx

FDOT

Study Corridor

0 0.5 1 1.5
Miles

SR 60 Study
Corridor Overview
Figure 3

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FDOT District Five

3.0 GRANT FUNDS, SOURCES AND USES OF PROJECT FUNDS

FDOT is seeking a BUILD grant so the construction of the S.R. 60 Passing Lanes can be accomplished on an expedited schedule as a design/build project. FDOT is currently involved in discussions for finalizing this approach, but recognizes that a design/build delivery method will accelerate project implementation and maximize innovation, increasing cost efficiency of the dollars used.

Project Costs

The total capital costs are estimated at $15.51 in 2018 dollars (or $15.17 million in 2017 dollars). These costs include construction, Right-of-Way (ROW), Planning/Permitting/Environmental, and design. The construction amounts include costs associated with maintenance of traffic (MOT), mobilization, and appropriate contingencies. A breakdown of the estimate can be found online in **Appendix E**. **Table 1** details the cost of the project by phase (also refer to SF 424C in **Appendix A**).

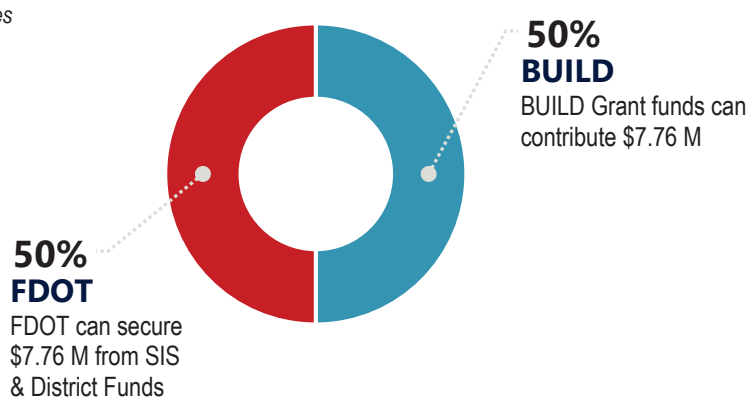
Table 1: *Project Cost*

STANDARD COST CATEGORY (SSC) CODE	TOTAL PROJECTCOST (2018 DOLLARS)	PERCENTAGE OF PROJECT COST
PLANNING	$1,500,000	10%
DESIGN	$2,050,000	13%
ROW	$305,500	2%
CONSTRUCTION	$11,655,987	75%
TOTAL	$15,511,487	100%

Funding Commitments

To fund the S.R. 60 Passing Lanes project, FDOT will utilize funding through a combination of District Five and Strategic Intermodal System (SIS) funding. Projects identified within the SIS Funding Strategy are considered financially feasible for implementation within the next 25-year period. As shown **in Figure 4**, FDOT can commit a 50% match to the S.R. 60 project.

Figure 4*: Project Funding Sources*



4.0 SELECTION CRITERIA

The following section demonstrates the benefits of the S.R. 60 project for each of the BUILD program merit criteria. The narrative establishes the need for these passing lanes and associated safety improvements to address the significant collision numbers and distracted driving conditions of this area.

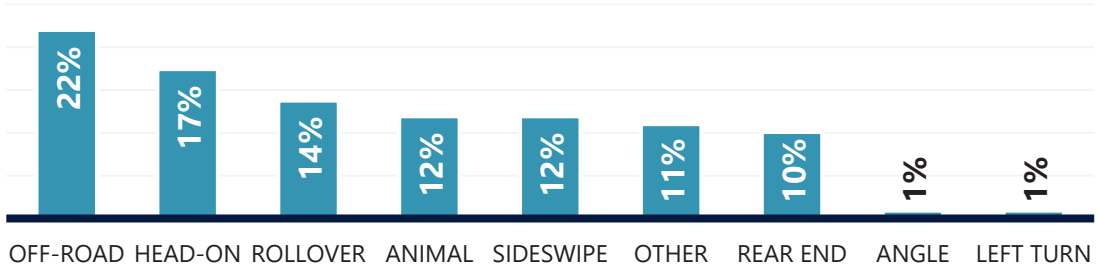
Safety

The safety of travelers along S.R. 60 is a priority for FDOT, and this project addresses a critical need for safety improvements to the selected section of the facility. The improvements for this project address the following collision challenges:

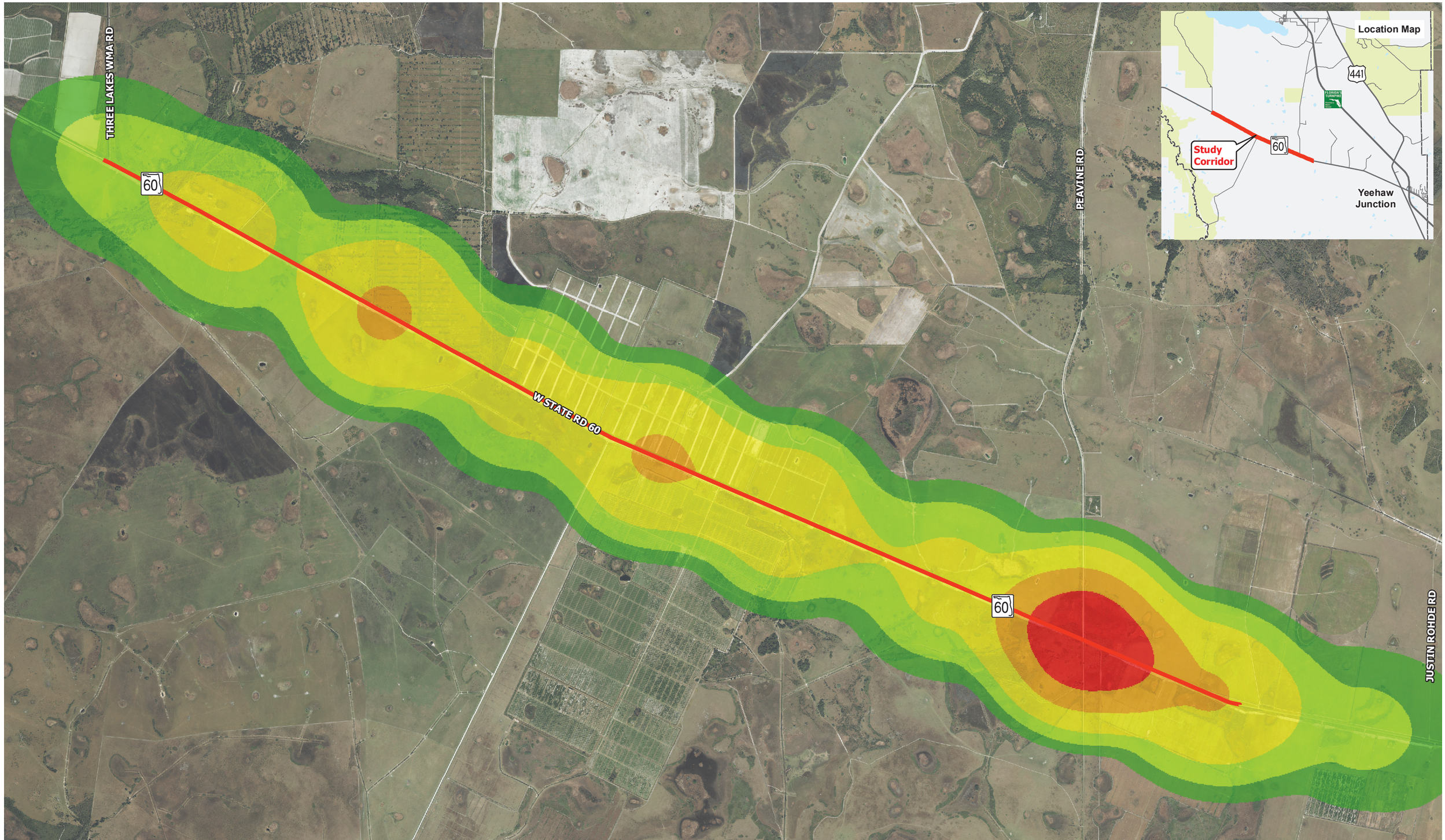
As such, the number, location, and severity of crashes on each mode are key performance measures. Other factors are important in determining potential corridor improvements; however, safety concerns along the corridor provide clear locations to consider for future improvements. In determining crash patterns along the S.R. 60 Study Area, analyses were completed using crash rates, total crash counts, and associated data to gain further insight.

According to the Corridor Safety Study (May 2019) (**Appendix E**), over a recent seven-year period (2011 – March 2018) there were a total of 109 reported crash incidents within the subject corridor limits. The predominant crash types included 24 run-off-the-road crashes, 19 head-on crashes, and 15 rollover crashes. Of the 109 crashes, seven resulted in a total of 10 fatalities, 54 resulted in injuries, and combined caused a total of $1,462,525 in property damage. Fifty-three (53) crashes occurred at night, 18 occurred under wet pavement conditions, and 2 involved a driver under the influence. Twenty-five (25) crashes were caused by passing vehicles, trucks were involved in 29 crashes, and 19 crashes were caused by distracted drivers. The types of crashes are identified in **Figure 5,** and a map of all crashes is displayed in **Figure 6.**

Figure 5: *Type of Crashes (2011-2018)*



Source: S.R. 60 Corridor Safety Study, May 2019



FDOT

< 2
2 - 5
6 - 10
11 - 20
21 - 30
> 30

Study Corridor

Data Source:
Signal 4

0 0.5 1 1.5
Miles

SR 60 Study
Total Crashes per Square Mile (2011-18)
Figure 6

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FDOT District Five

This segment has a concerning overall crash rate when compared with similar segments both Districtwide and Statewide. **Table 2** shows that the segment crash rate from 2011 to 2015 is higher than both the Districtwide and the Statewide crash rates for the facility type over the same analysis period.

***Table 2**: Average Crash Rate Comparisons*

SEGMENT	2011-2015		SEGMENT LENTH (miles)	2011-2015 CRASH RATES (PER MVM)		
	AVERAGE AADT	AVERAGE NUMBER OF CRASHES		ACTUAL	RURAL 2-LN 2W UNDIVD	
					District	*State*
S.R. 60 between Three Lakes WMA & 1.1 mi east of Peavine Road	**6,040**	**14.8**	**8.200**	**0.819**	**0.550**	**0.687**

Source: S.R. 60 Corridor Safety Study, May 2019

The rural character of this segment of the facility contributes to the dangerous behaviors of drivers willing to take risks with speeding, passing vehicles, and not paying attention to the roadway. From field review, vehicles were observed operating at higher speeds on S.R. 60 due to the long tangents and rural environment. Motorists seem to become impatient while in a platoon and more inclined to perform dangerous and aggressive maneuvers to pass other vehicles as there are no passing lanes present within study limits. Vehicles passing multiple vehicles within a platoon present a potential for head-on collisions if they cannot return to their lane before opposing traffic approaches. The same potential exists when multiple vehicles are passing simultaneously and all passing vehicles cannot return to their lane in time. Sight is obstructed for vehicles that follow behind trucks or other large vehicles and are attempting to pass. These vehicles must cross the centerline to view opposing traffic which creates the potential for sideswipe or head-on collisions.

Other observations from field review include off tracking throughout the corridor, in addition to evidence of hard braking on the pavement. Objects in the roadway present a hazard to motorists. These objects may include animals, debris, and unsecured loads. Vehicles operating at speeds that exceed the safe limit due to conditions have less time to react to these hazards. These conditions are further exacerbated at night.

Safety Improvements

In order to address these challenges, a number of improvements are proposed including passing lanes, signage, audible and vibratory treatment, and intersection lighting. What these improvements entail and how they address the challenges in this segment of the corridor is detailed in the following sections.

Signage

An initial improvement is to enhance and modernize the signage and markings within the corridor. This includes Warning signs with yellow retroreflective sign post strips and No Passing Zone signs at the start of each no-passing zone along the corridor. Stop signs with red retroreflective sign post strips at the Peavine Road, Three Lakes WMA, and Access Road approaches to S.R. 60, and replacement of all existing delineators along the horizontal curves. Additionally, all retroreflective pavement markers (RPMs) along the corridor will be replaced and a white thermoplastic stop line on the Peavine Road approach will be installed.

Passing Lanes

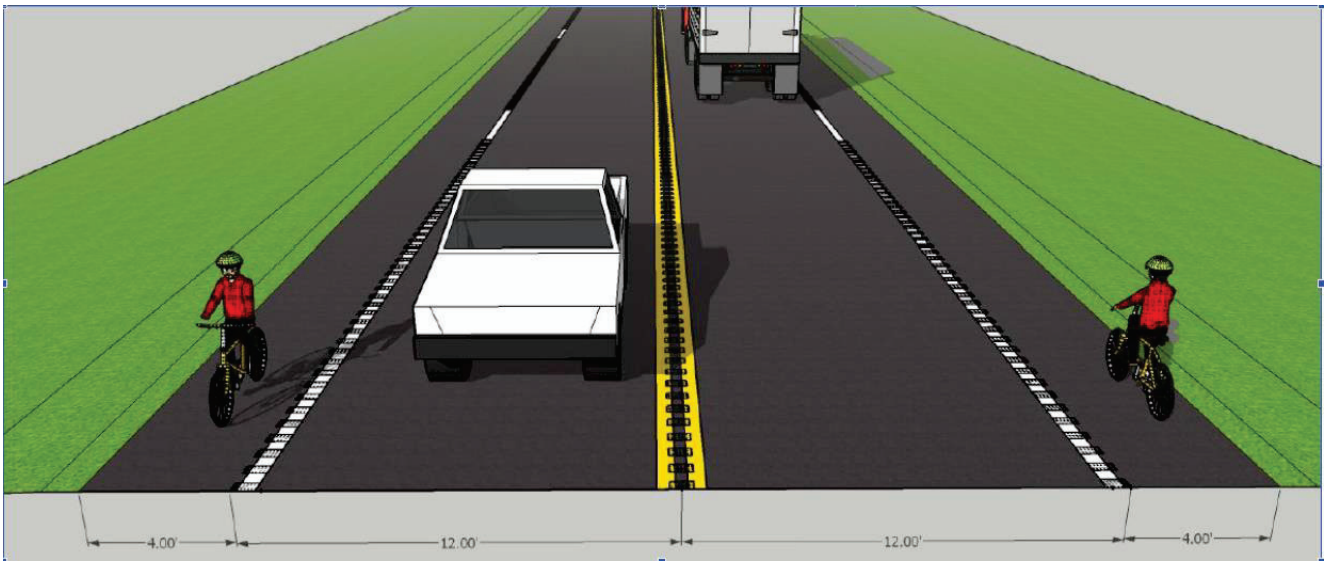
To better assist with safe passing of trucks and slower vehicles, construction of passing lanes is proposed. A passing lane is an added lane provided in one or both directions of travel on a conventional two-lane highway to improve passing opportunities. The previous study, FDOT S.R. 60 Study (S.R. 60 Evaluation & Preliminary Concept Development, April 2018) recommends the installation of passing lanes along the corridor to include one eastbound passing lane and one westbound passing lane.

The proposed passing lanes are each 1.371 miles in length and have a 70 MPH design speed. The concept calls for the center widening construction of three 12-foot wide lanes with 10-foot wide shoulders (7-foot paved) and offset rumble strips. The shoulder should be further increased to 12 feet (7-foot paved) to accommodate the high truck percentage present on the corridor. Audible and vibratory treatment should also apply to the passing lane sections for consistency along the study corridor. The proposed passing lanes would increase safety along this corridor in addition to improving operations as platoons are dispersed.

Audible and Vibratory Treatment

To assist distracted drivers, audible and vibratory treatments are recommended (see **Figure 7)**. Audible and vibratory treatments warn motorists that they are about to depart the roadway or cross over the centerline into the opposing lane. Installation of standard 6-inch profiled thermoplastic with ground-in cylindrical rumble strips per Index 546-010 along the centerline (Type D1) and edge lines (Type A1) is recommended for the length of the corridor (excluding the rigid pavement on the Blanket Bay bridge). If existing pavement conditions preclude the installation of ground-in rumble strips, profiled thermoplastic is recommended.

***Figure 7**: Audible & Vibratory Treatment*



Supplemental Intersection Lighting

The final safety improvement is roadway lighting. Roadway lighting increases visibility for motorists to quickly assess roadway conditions, thereby creating a safer roadway environment. Lighting is an alternative to consider along this corridor as the night-to-day crash ratio is greater than 2.0 for the corridor. Roadway lighting is recommended as a separate standalone project at the Peavine Road intersection. The need for lighting installation throughout the rest of the corridor should be determined with a Lighting Justification Report.

Anticipated Safety Benefits

To determine the expected crashes for the passing lane and lighting alternatives, the ratios between the no-build condition $N_{predicted}$ and $N_{expected}$ for each segment and intersection were used. The expected number of crashes $N_{expected}$ are estimated using the Empirical-Bayes (EB) Method. The EB analysis of a proposed condition requires data associated with the existing condition as there is no historical crash data for the proposed condition.

Predicted and expected crash calculations were performed for the following improvements with details provided in the Corridor Safety Study:

- Passing Lanes;
- Audible and Vibratory Treatment; and
- Supplemental Intersection Lighting.

The results of this analysis are summarized in **Table 3.**

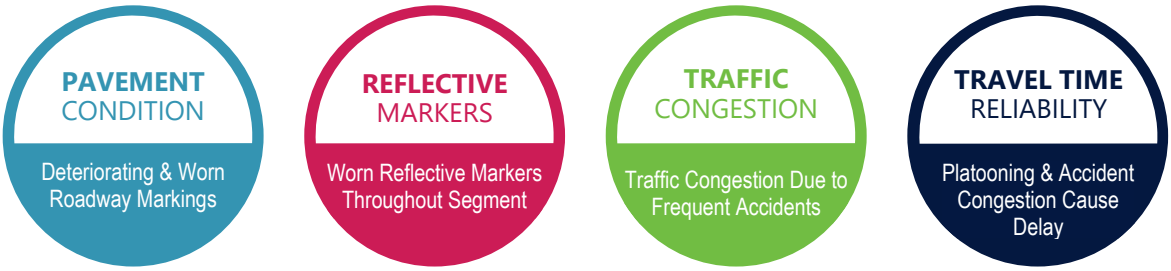
***Table 3**: Annual Safety Benefits (in millions of 2017$)*

SAFETY IMPROVEMENT	ANNUAL SAFETY BENEFIT
Passing Lanes	$1.2
Audible and Vibratory Treatment	$1.0
Supplemental Intersection Lighting	$0.07
TOTAL	**$2.3**

The annual safety benefits from the S.R. 60 improvements total $2.3 million per year, with the projected 25-year value at $56.9 million (before discounting), or $21.7 million after discounting.

State of Good Repair

The S.R. 60 Passing Lanes project will improve the condition of infrastructure throughout the study segment by focusing on the key challenges to the State of Good Repair, including:



These improvements are intended to address corridor vulnerabilities and risks, relieve congestion, and improve travel time reliability for people and goods.

S.R. 60 is one of two main east-west corridors within Osceola County, the other being US Highway 192. Other corridors, however, do not provide continuous access through the County. As a result, this segment of S.R. 60 is extensively used by both truck and automobile traffic. Through field review, several infrastructure features were determined to be worn or in poor condition and in need of improvement.

While pavement along S.R. 60 west of the pavement joint at MP 8.133 was in fair condition, pavement markings consisting of centerline and edge line rumble striping (MP 4.800 – 8.133) are worn down. Retroreflective pavement markers along this segment are also in poor condition and do not provide reflectivity at night. Signing conditions varied along the corridor. The Curve signs at the horizontal curve east of Peavine Road were in poor condition and the eastbound sign assembly at this curve had been struck down (struck sign has been replaced as of December 2018). Delineators placed roadside along the horizontal curves were in poor condition and some were missing.

Platooning is associated with benefits such as efficiency; however, in this segment it has led to perceived inconvenient travel experience where drivers exhibit dangerous driving behaviors. Vehicle collisions have resulted from this behavior and ultimately lead to congestion along the facility when there are accidents. Through field review, platooning was observed throughout the corridor when vehicles were unable to pass. The lead vehicle in the platoons were either slower moving trucks or passenger vehicles travelling at or near the speed limit. These platoons were more prevalent at the eastern and western ends of the study limits in advance of each direction's respective passing lanes.

TRAFFIC PLATOONING ALONG S.R. 60 STUDY SEGMENT

In addition to the above-stated vulnerabilities, pavement conditions have deteriorated due to excessive off tracking and hard breaking. Hazards encountered by motorists are traffic congestion and objects in the roadway such as animals, debris, and unsecured loads. Vehicles operating at speeds that exceed the safe limit due to driving conditions, have less time to react to these hazards. This has resulted in further deterioration of the pavement throughout the corridor.

OFF TRACKING & HARD BREAKING S.R. 60 STUDY SEGMENT

The proposed improvements are intended to proactively address these conditions while preparing for future growth in traffic. To analyze future traffic impacts, the count total for both directions was multiplied by the 2017 Osceola County – Countywide seasonal factor to produce the seasonally-adjusted annual average daily traffic (AADT) as follows:

- AADT = (24-Hour Counts) x (Seasonal Factor)
- AADT = (192 x 0.98 (for week 18) = 7,048
- AADT = 7,100

Traffic volumes for the assumed design year (2040) were determined using a historical trend analysis. Historical AADT volumes from 2011 to 2017 exhibit a linear growth rate of 4.1% per year. Applying this growth rate to the current year (2018) AADT, the forecast AADT for 2040 is 17,200.[4] The results are presented in **Table 4**.

As evidenced in the projections, traffic in this segment is anticipated to increase and, therefore, experience further wear and tear. The improvements in this application are intended to address this increase and prepare for growth by addressing existing vulnerabilities in the segment and avoiding further deterioration.

Table 4: *Projected AADT Volumes*

YEAR	AADT
2018 (CURRENT)	**7,100**
2040 (DESIGN)	**17,200**
ANNUAL TREND LINEAR GROWTH (%)	**6.48%**
COMPOUNDED ANNUAL GROWTH TO DESIGN YEAR (%)	**4.1%**

Additionally, as part of this criteria, the residual value of the improved roadway asset was derived. The residual value of the proposed project was estimated using an assumption of a useful life of 30 years. Based on the construction value of $11.4 million in 2022, and assuming straight-line depreciation, the combined residual value of the passing lanes in place in year 2047 is projected to be $2.2 million (including $299 thousand in land/ROW, which is assumed not to depreciate over time), with a present discounted value of $331 thousand.

[4] FDOT Central Office, S.R. 60 Corridor Study. (2016)

Economic Competitiveness

The S.R. 60 Passing Lanes project will advance economic competitiveness by ensuring seamless movement of goods and people along the corridor. This includes fostering efficiency for travel to and between the following:

Travel Time Savings

The proposed investment can be expected to improve the traffic flow in the corridor segment leading to some travel time savings. Such travel time savings are projected to be roughly $31 thousand in the first year of operation (2023), increasing to $159 thousand in year 2047, for a 25-year total of $2.3 million (before discounting), and $0.7 million after discounting.

Freight Activity Generators

S.R. 60 plays an important role in the economic growth for the entire four-county, Central Florida region. Where the roadway begins on the west, the facility provides direct access to the Port of Tampa Bay that has a large regional impact with $17.2 billion of total economic value and handling more than 37 million tons of cargo, nearly one third of all cargo moving in and out of the State of Florida.[5] In addition, several large-scale logistical operations have been developed along the corridor because of its central location and supporting infrastructure. Several of these large-scale developments and the employers are highlighted below to display some of the economic impacts of the S.R. 60 corridor.

Florida's Gateway (Central Florida Intermodal Logistics Center)

Established in April 2014, Florida's Gateway (**Figure 8)** formerly known as the Central Florida Intermodal Logistics Center (ILC), is located one mile north of S.R. 60 in Polk County. The 318-acre terminal is able to process 300,000 shipping containers per year and includes energy-efficient features such as electric cranes, solar panels, LED lighting, and Silver LEED certification for several of the buildings.[6]

Figure 8: *Florida's Gateway*

Florida's Gateway is a major cog in the regional freight supply chain and provides for the transfer of freight from one mode of transportation, truck or rail car, to another mode. Located on Logistics Parkway connected to S.R. 60 corridor, Florida's Gateway is adjacent to the existing CSX Intermodal Terminal, and has direct access to the high-speed CSX cargo corridor (S-line). Florida's Gateway was developed to bypass Orlando traffic and congestion and provide Central Florida with a world class intermodal facility. It is a major origin and destination for freight traffic, trucks

5 https://www.porttb.com/dollar-impact
6 FDOT Central Office, S.R. 60 Corridor Study. (2016) Pg 4-121

and rail, along the S.R. 60 corridor and is of statewide importance. Florida's Gateway has been designated part of Florida's SIS.[7] Florida's Gateway is owned by the Evansville Western Railway and operated by CSX. Florida's Gateway has the capacity to handle 300,000 containers a year through the use of the site's three cranes which have the ability to move intermodal containers from trains to trucks. The freight impacts are anticipated to grow as 8 million square feet of industrial development is planned on 930 acres of land around Florida's Gateway, and is expected to accommodate warehouse distribution centers, light industrial facilities, and offices.[8]

Mosaic Phosphate Production Facility (Mulberry)

Mosaic's New Wales Phosphate Production Facility, **Figure 9**, is located six miles south of S.R. 60 in Polk County. Mosaic's facility is involved in the production of phosphate fertilizer and animal feed ingredients. Mosaic's New Wales facility in Polk County is currently the largest fertilizer manufacturing facility in the world. The 800 employees produce 4.8 million tons of phosphate fertilizer and animal feed ingredients each year.

Figure 9: *Mosaic's New Wales Phosphate Production Facility*

The New Wales facility has a significant impact on the local economy. In addition to providing 800 well-paying jobs, it generates hundreds of other indirect jobs required to support the capital projects and ongoing operations at the facility, which include turnaround maintenance, raw material deliveries by truck, rail, and pipeline, and transportation of finished products. In Central Florida, Mosaic contributes more than $300 million in payroll and more than $50 million in taxes and fees associated with the fertilizer mining and manufacturing business. Additional expenditures in the area include more than $330 million in capital expenditures and $53 million in reclamation activity annually.[9]

Amazon Fulfillment Center (Lakeland)

According to Amazon, fulfillment centers are where the journey begins: giant warehouses that hold anything customers can order on Amazon.com. A customer completes a purchase, and in the fulfillment center the items ordered are pulled from the shelves, packed for shipment, and sent on their way. The Amazon Fulfillment Center, **Figure 10**, is located approximately six miles north of S.R. 60 in Lakeland, Florida within Polk County. The facility opened in 2014, and is over one million square feet. The facility has over 800 employees and plans to employ over 1,000 in the near future. The fulfillment center focuses on shipping larger items such as televisions and kayaks.[10]

Figure 10*: Amazon Fulfillment Center*

7 FDOT Central Office, S.R. 60 Corridor Study. (2016) Pg 4-122
8 FDOT Central Office, S.R. 60 Corridor Study. (2016) Pg 4-122
9 FDOT Central Office, S.R. 60 Corridor Study. (2016) Pg 4-122
10 FDOT Central Office, S.R. 60 Corridor Study. (2016) Pg 4-123

Florida's Natural Growers (Lake Wales)

Florida's Natural Growers is a cooperative of citrus growers located in Lake Wales, Florida (**Figure 11**). Florida's Natural Growers is the largest citrus cooperative in the State of Florida, and the second largest orange juice producer in the country, behind Tropicana. The company was founded by a group of Florida citrus growers in 1933, and it grows, processes and packages citrus juices in the United States. The cooperative comprises 13 grower organizations that represent more than 1,000 farmers and 800 employees. The company credits its not-from-concentrate (NFC) juice for much of its $605 million in annual sales and says the juice has that "right-from-the grove, fresh-squeezed taste." Florida's Natural Growers markets its NFC juice under the brand name Florida's Natural.[11]

***Figure 11**: Florida's Natural Growers Processing Plant*

***Figure 12:** CVS Caremark Distribution Center*

CVS Caremark Distribution Center

The CVS Caremark Distribution Center, **Figure 12**, has direct access to S.R. 60 in Vero Beach, Florida (Indian River County). The facility is over 400,000 square-feet, and was opened in 2005. The distribution facility has nearly 300 employees working two shifts, processing 1.75-million pieces (products) per year and serving 330 stores from mid-to-south Florida.[12]

Other Economic Connections

The Yeehaw Transportation Distribution Center Overlay District is a 671-acre area identified in the Osceola County Comprehensive Plan 2025. This is located at the Yeehaw Junction area along S.R. 60 and is anticipated to create employment opportunities for southeast Osceola County. Safe access to this area via S.R. 60 will assist in this development.

In addition to the presence of activity generators, S.R. 60 also provides direct access to other interstate commerce facilities including US 441, Florida's Turnpike, I-75, US 27, and I-95. Maintaining a congestion free connection to these facilities is possible with the proposed project improvements, ultimately leading to improved economic travel conditions.

11 FDOT Central Office, S.R. 60 Corridor Study. (2016) Pg 4-124

12 FDOT Central Office, S.R. 60 Corridor Study. (2016) Pg 4-124

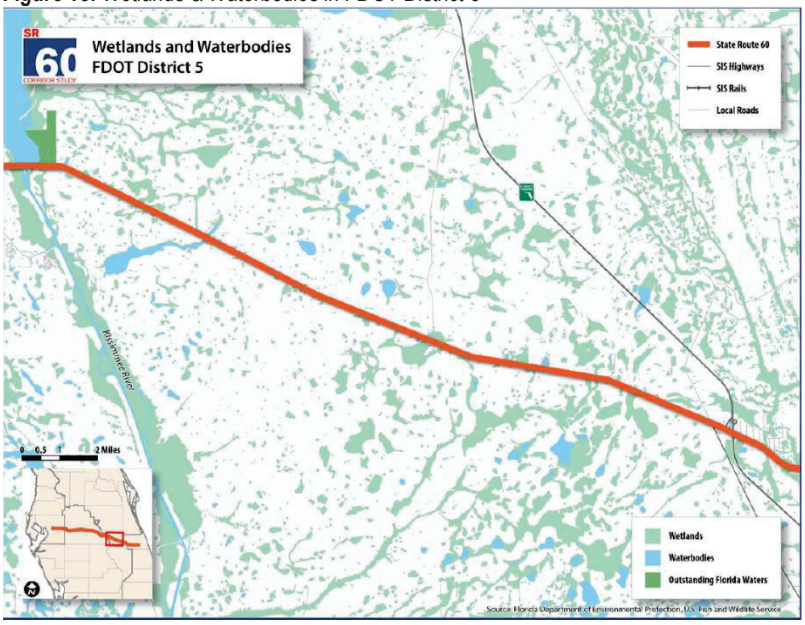
Environmental Sustainability

FDOT considers the maintenance of the sensitive natural conditions of the project's location as a top priority. To protect the environment within this corridor, the following measures are considered:

Study Area Environmental Conditions

The project study area traverses through several pristine natural environments and wetlands (**Figure 13**). Traveling east, there are several waterbodies and wetland features associated with the Kissimmee Chain of Lakes watershed area and the Lake Kissimmee State Park. Lake Kissimmee is mostly in Osceola County, with a smaller portion located in Polk County. The watershed area itself forms the headwaters of the Kissimmee-Okeechobee-Everglades System. There are several wetland areas associated with this system, which cross the corridor including Lake Kissimmee, Lake Rosalie, Lake Weohyakapka, and Tiger Lake.

Figure 13: *Wetlands & Waterbodies in FDOT District 5*



The Kissimmee River, along with its associated watershed area, represents a significant wildlife habitat, a potable water source, and a recreation area. At the eastern terminus of S.R. 60 within Osceola County, the corridor itself crosses over the Kissimmee River, just north of the first lock and spillway. The Kissimmee River Restoration Project is ongoing, with a projected completion date of 2020.

Phases 1 and 4 are complete, while Phases 2 and 3 are currently underway. The completed restoration area (Phase 1) has seen the return of native wildlife and vegetation, absent since the river was dredged in the 1960s.[13]

The Yeehaw Junction exit at Florida's Turnpike currently contains the only set of fueling stations for travelers and motor carrier vehicles for this stretch of the corridor. A significant portion of this area is undeveloped. There are extensive wetlands throughout this area associated with the Kissimmee system and the Blue Cypress system, which is located to the southeast. The entire area through which the S.R. 60 corridor traverses in southern Osceola County is located within the Biscayne Sole Source Aquifer and Recharge Zone, as designated by the EPA.

The Bombing Range Ridge project is located between Lake Kissimmee and Lake Weohyakapka. It adjoins the SUMICA and North/Walk in Water Creek areas and Lake Kissimmee State Park, Lake Wales Ridge State Forest and Kissimmee Chain of Lakes areas. The Lake Wales Ridge Ecosystem Florida Forever project (Hesperides portion) is to further support the ecosystems in the Lake Wales Ridge State Forest, and to further the US Fish and Wildlife goals as this area was designated as a top priority for the Lake Wales Ridge National Wildlife Refuge efforts. There are additional lands to be potentially acquired in the future that abut the corridor to the north, east of the Lake Wales Ridge Ecosystem Florida Forever project – Hesperides portion. These lands will be associated with the Bombing Range Ridge Florida Forever project.

To maintain the conditions of these natural features, proactive planning, design, and construction efforts will be implemented to minimize the impact of the project, specifically to the Three Lakes Wildlife Management Area and the Kissimmee Chain of Lakes, Kissimmee River.

Mitigating Stormwater Runoff

To mitigate any contamination to the surrounding waterbodies, new and improved drainage features have been included within the project. With the implementation of the proposed passing lanes, the existing ditches along the roadway will need to be re-graded to accommodate the wider pavement section. There are also several cross drains and two Concrete Box Culverts under S.R. 60 that will need to be extended within the limits of the passing lanes. It is anticipated that this work will be completed within the existing right-of-way.

Each passing lane is 1.371 miles long and adds approximately 0.2 acres of new impervious area. The Water Management District (WMD) rules exempt turn lanes and safety improvements that are less than 0.25 miles in length. Therefore, a modification to the existing permit will likely be required by the WMD. In addition, the Army Corps of Engineers (ACOE) may require a Section 404 Permit for impacts to the existing ditches considering wetland impacts as a result of the re-grading.

13 FDOT Central Office, S.R. 60 Corridor Study. (2016) Pg 4-66

Quality of Life

A number of Quality of Life improvements are derived from the S.R. 60 Passing Lanes, specifically for the rural Yeehaw Junction community, including:

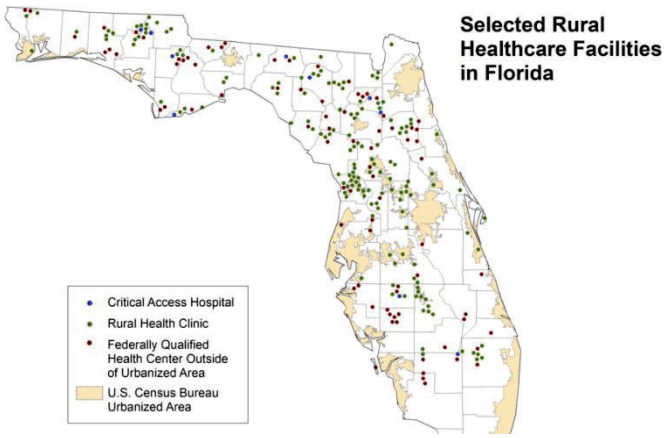
Improving the quality of life for the rural community, as well as the truck drivers using the facility, is a major driving force behind the project. Connectivity to key interstate facilities and safe access to emergency evacuation routes for rural communities are the key quality of life benefits focused on in this section.

Since 2000, Osceola County has had the fastest growth rate of all S.R. 60 counties, with an increase in population of over 74%. In contrast, Osceola County had the lowest average annual wage at $35,870 per year, which was over $10,000 less than the statewide average.[15] Additionally, while the poverty rate for the County is comparable to the state (14%), the rural area of the County, specifically the Census Tract where the project corridor is located, is much higher at 17% (see **Table 5**). The US poverty rate is 12%, which suggests this area can benefit from improved travel conditions. A key contributor to this is safer access to the major roads of US 441 and Florida's Turnpike which both provide access to the booming urban area of Osceola County and the Metro Orlando area.

Table 5: *Poverty Rates S.R. 60 Region (2018[14])*

GEOGRAPHY	POVERTY RATE
STATE OF FLORIDA	**14%**
OSCEOLA COUNTY	**14%**
TRACT 0438.00	**17%**

Figure 14*: Rural Healthcare Facilities in Florida*



In addition, S.R. 60 provides the only direct route to a Rural Health Clinic or Federally Qualified Heath Center for the community of Yeehaw Junction. **Figure 14** shows the only medical facilities available in Lake Wales to the west and Vero Beach to the east. S.R. 60 is the only route that provides connectivity to these critical health facilities.[16]

Evacuation Route for Four Counties

Due to Florida's unique coastal geography and location, the state is vulnerable to several different types of natural hazards including hurricanes. With the state's ever-growing population and attractiveness to domestic and international visitors alike, evaluating and planning for evacuations and sheltering of residents and visitors during storm events is paramount. In response to the destructive hurricane seasons of 2004 and

14 https://www.census.gov/quickfacts/fact/table/FL,osceolacountyflorida,polkcountyflorida,hillsboroughcountyflorida,US/PST045218
15 FDOT Central Office, S.R. 60 Corridor Study. (2016) Pg 4-120
16 https://www.ruralhealthinfo.org/states/images/florida-rural-health-facilities.jpg?v=2

2005, the state moved forward and developed the Statewide Regional Evacuation Study Program (SRESP). The SRESP was intended to streamline hurricane evacuation methodologies used across the state.

As a designated SRESP evacuation route, S.R. 60 provides an evacuation opportunity for four counties including Hillsborough, Polk, Osceola, and Indian River. In 2015, evacuees intending to leave the County completed their evacuation within 16 hours during an Evacuation Level A event. County clearance times increased slightly by a half hour to an hour in 2020. Osceola County has a relatively low public shelter clearance time of 13 hours for both years and all levels of storm intensity. The time it took evacuees to seek refuge at a non-public shelter location within the County ranged from 13.5 hours to 15.5 hours in 2015 and 13.5 to 21 hours in 2020. The proposed improvements seek to continue the positive evacuation times by avoiding incidents of congestion resulting from accidents along the corridor, potentially disrupting evacuation times for the four counties.

Innovation.

The S.R. 60 Passing Lanes project will execute innovative approaches to project implementation using the following strategies:

Innovative Technologies

To address safety and the dangerous impacts of distracted or drowsy drivers, this project will install Audible/Vibratory Treatments along the centerline and the edge line markings of the study corridor. Otherwise known as Rumble Strips, these features are raised patterns that alert drivers that they are drifting from their lane. This is a proven method of reducing collisions from distracted driving. According to a study from Kansas State University (2012), the presence of rumble strips were shown to reduce correctable crash incidents by 29%, and fatalities and injuries are reduced by 34%.[17]

Another innovative infrastructure approach is for improving the speed management and congestion of the selected corridor through the construction of passing lanes. The team analyzed adding two passing lanes (one in each direction of travel) and four passing lanes (two pairs of passing lanes per direction of travel). This is a cost effective approach, and it should be noted that there are passing lanes throughout the rest of the S.R. 60 corridor. The construction of this feature will provide continuity in travel experience for drivers using longer segments of the corridor.

Innovative Project Delivery

Innovation is infused throughout the project delivery process via the use of Design/Build. FDOT is seeking to incorporate swift, quality measures for optimizing efficiency and resources. The project design team will integrate techniques that enhance quality, reduce costs, and advance the construction timeline.

Innovative processes such as FHWA's new initiative, "Every Day Counts," will guide the team to accelerate project delivery. FDOT is receptive to any innovative options/ideas partnering with US DOT to deliver a quality project in a safe and timely fashion.

17 https://www.transportation.gov/utc/use-center-line-rumble-strips-improve-safety-two-lane-highways

Partnership

Strong collaboration will be essential during the development of the S.R. 60 Passing Lanes project. FDOT has a robust plan for providing sustainable state funding for this project and has sought support from a variety of partners including Osceola County, MetroPlan Orlando, and other interested parties.

FDOT District Five (Grant Recipient)

The Florida Department of Transportation is decentralized in accordance with legislative mandates. Each district is managed by a District Secretary. District Five is one of the fastest growing areas of the state. It covers nine counties, covers nearly 9,000 square miles, and is home to nearly 4,000,000 residents who log more than 55.6 million (estimated) vehicle miles traveled daily.[18] FDOT will oversee the project design, permitting, and construction.

MetroPlan Orlando

The MetroPlan Orlando is the region's Metropolitan Planning Organization (MPO) and provides transportation planning support for Seminole, Orange, and Osceola counties. MetroPlan Orlando has recognized the importance of improvements to the selected segment of S.R. 60 and has been strategic in the prioritization of S.R. 60 Passing Lanes project within planning documents. The project has improvements mentioned in the MetroPlan Orlando LRTP as well as the MetroPlan Freight Mobility Plan.

Osceola County

Osceola County government maintains approximately 1,506 square miles and serves a population of 336,015. The County is one of the fastest growing in the State of Florida. A quality transportation system is important for the County and as such, recognizes the importance of the S.R. 60 corridor. The County has been instrumental in supporting the corridor and has also supported studying improvements.

Partner support letters have been requested and are included online in **Appendix C**.

18 https://www.fdot.gov/agencyresources/districts/index.shtm

5.0 PROJECT READINESS

Technical Feasibility

The Florida Department of Transportation has extensive experience planning and implementing safety improvement projects throughout the state. The passing lane design and other improvements are consistent with FDOT and NEPA policies and technical standards.

Previous planning efforts at the regional and state levels have led to the development of this project. The proposed improvements have been reviewed for initial social, environmental, and economic impacts. The vast majority of the project improvements may be implemented within the existing right-of-way, with minimal right-of-way acquisition to accommodate the drainage improvements.

- Roadway: The passing lanes and widened shoulders will be implemented by milling and resurfacing the existing pavement and widening the roadway where required.
- Drainage: A full Pond Siting Report and a Location Hydraulics Report will be completed to aid in the implementation of drainage and floodplain improvements.
- Utilities: Utility coordination will occur, though no impacts to the existing utilities are anticipated.
- Structural: Existing cross drains and box culverts will be upgraded to improve water flow and stormwater treatment within the area.
- Traffic: New signing and pavement markings will be implemented within the study area to inform drivers of the upcoming passing lanes. Audible and vibratory treatments will also be implemented along the centerline and edge lines of the roadway.
- Lighting: New lighting will be installed at the intersection of S.R. 60 and Peavine Road.
- Survey: Updated survey data will be collected to aid in the design/build project implementation.
- Geotechnical: Soil borings will be performed to support the widening/reconstruction of S.R. 60. Pavement Cores will also be collected to evaluate the condition of the existing pavement within the study area.
- Environmental: A Type II Categorical Exclusion will be completed for consistency with the NEPA process.

Based upon the engineering and environmental evaluations required to implement the project, a cost estimate was developed using the Florida Department of Transportation's Long Range Estimate (LRE) tool. The LRE (provided in the **Appendix E**) details the anticipated construction costs and appropriate contingencies for the design.

Project Schedule

The S.R. 60 Passing Lanes project will follow the project schedule identified in **Table 6**. The planning, environmental evaluations, and permitting will likely be completed prior to the award notifications. The remaining four major tasks will be initiated following the award notifications in 2020-2022. The project construction is scheduled for completion in 2022.

***Table 6**: Project Schedule*

TASK	2019	2020	2021	2022
Planning, Environmental Evaluations, & Permitting				
Right-of-Way Acquisition				
Preliminary Design (30%)				
Design/Build Procurement*				
Final Design & Construction				

**Project will be obligated before the stipulated September 30, 2021 deadline.*

Required Approvals

Environmental Permits and Reviews

The Florida Department of Transportation has assumed the Federal Highway Administration's responsibilities under NEPA for highway projects on the State Highway System (SHS) and Local Agency Program projects off the SHS. This includes responsibilities for environmental review, interagency consultation, and other activities pertaining to NEPA.

A Type II Categorical Exclusion will be developed to evaluate the minimal environmental impacts associated with this project. The document will be approved by the FDOT Office of Environmental Management (OEM).

Permits with the following agencies will also be needed to implement the project:

- South Florida Water Management District
- Army Corps of Engineers
- Florida Department of Environmental Protection (National Pollution Discharge Elimination System)
- Additional environmental permits as needed

All required permits will be secured prior to the design phase of the project. Any additional local permits required will be prioritized and expedited.

Public Engagement

This project has developed in large part due to public support. Crashes on this corridor impact the local community, and many citizens have written to their public agencies and local leaders to support safety improvements on S.R. 60. The receipt of a BUILD grant to support this project would provide a boon to the entire community.

State and Local Approvals

Safety on this corridor is a primary concern and has garnered support from state, regional, and local agencies as well as from the public. Letters of support are included in the **Appendix C**.

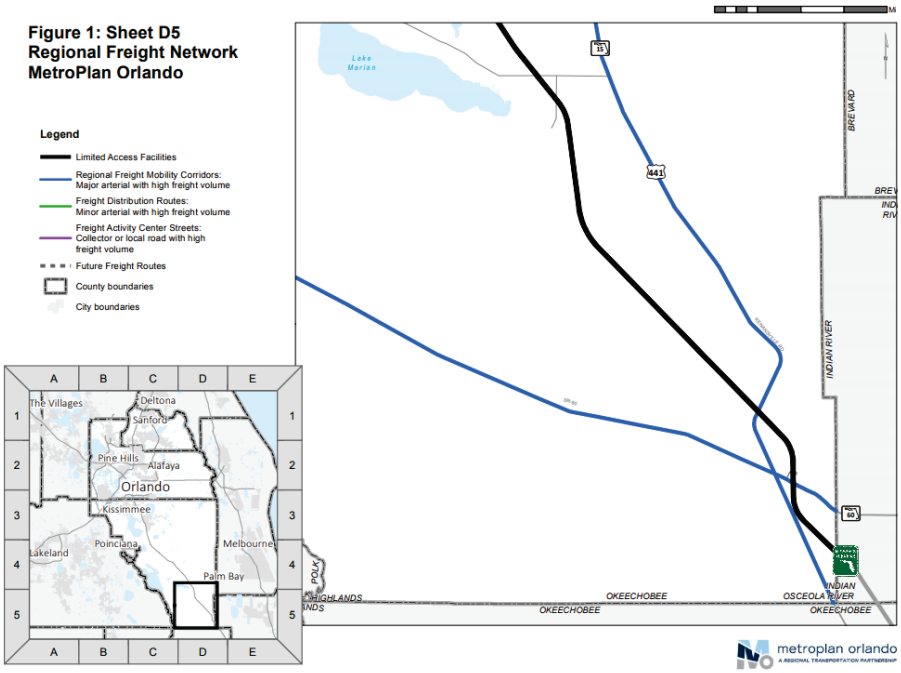
Federal Transportation Requirements Affecting State and Local Planning.

The need for this project has been documented in several state, regional, and local agency plans, including:

- MetroPlan Orlando Long Range Transportation Plan (Freight Mobility)
- MetroPlan Orlando Freight Mobility Plan (see **Figure 15**)
- FDOT 5 Year Work Program
- FDOT SIS 2029-2045 Cost Feasible Plan

The S.R. 60 Passing Lanes project, as proposed, is in the process of being adopted into the Long Range Transportation Plan through an amendment.

Figure 15: MetroPlan Orlando's Freight Network



Assessment of Project Risks and Mitigation Strategies

This project has already undergone extensive reviews and is anticipated to have minimal risks. If risks arise, FDOT has a wide depth and breadth of experienced planning, design, and construction professionals prepared to respond immediately. In the event that there are disruptions to the project, the following risk mitigation strategies have been identified:

Pre-Construction Delays *(right-of-way acquisition, permitting, environmental evaluations, approvals, etc.)*	Pre-Construction project tasks have been advanced in the project schedule, allowing for additional time to resolve issues, if they arise, without impacting subsequent design or construction tasks.
Construction Delays	The design-build construction method will be utilized to mitigate any potential construction delays before they arise.

7.0 BENEFIT COST ANALYSIS

This section summarizes the findings of the Benefit-Cost Analysis (BCA) performed in accordance with the latest BUILD guidelines.[19]

All monetary values in this summary are expressed in 2017 dollars, and, unless stated otherwise, discounted to year 2019. The period of analysis used to project benefits and costs related to the differences between the Build (with the proposed passing lanes) and the No-Build (without the passing lanes) runs from 2019 to 2047, including four years of project development and construction (2019-2022), and 25 years of operations (2023 through 2047). The analysis is based on the growth rates in the regional travel demand projected between the base year and 2045 (the horizon year used in the regional travel demand model).

The tables below summarize the BCA findings.

***Table 7**: Benefit-Cost Analysis Results (in millions 2017$)**

Benefit and Cost Metrics	2019-2047 Totals	
	Discounted at 7%	Before Discounting
Project Benefits		
Safety	$21.7	$56.9
Travel Time Savings	$0.7	$2.3
Residual Value	$0.3	$2.2
Total Benefits	$22.7	$61.4
Project Costs		
Capital	$12.8	$15.2
O&M Costs	$0.6	$1.6
Total Project Costs	$13.5	$16.8
Total Benefits less Total Costs (NPV)	**$9.2**	NA
Benefit-Cost Ratio**	**1.72**	
Internal Rate of Return	**13.5%**	
Breakeven Year	**2032**	

** Unless specified otherwise. **Note that the Benefit-Cost Ratio was calculated as: (Benefits – O&M Costs) / Capital Costs, in compliance with the latest BCA Guidance for Discretionary Grant Programs.*

As shown in **Table 7**, with a 7% real discount rate, the total monetized benefits of the proposed passing lanes project are projected at $22.7 million (in present discounted value terms) while the total costs of the project (including capital expenses, and incremental operating and maintenance costs) are forecasted at $13.5 million. This results in a benefit-cost ratio of 1.7, and a net present value (NPV) of $9.2 million. The corresponding internal rate of return (IRR) of the project is projected at 13.5 percent, while the breakeven year would be in 2032.

Table 8 below presents the breakdown of total quantified benefits by category, with the applicable key outcome criteria set forth by US DOT: Safety, Economic Competitiveness, and State of Good Repair.

19 US DOT, Benefit-Cost Analysis Guidance for Discretionary Grant Programs, December 2018.

***Table 8**: BCA Results by Long-Term Merit Criteria (in millions of 2017$, present value terms)*

Key Selection Criteria	Benefit or Impact Categories	Results (7% Discount Rate)
Safety	Accident cost savings	$21.7
Economic Competitiveness	Travel time savings to roadway users	$0.7
State of Good Repair	Residual value of capital investment	$0.3
Total Project Benefits		**$22.7**

Safety benefits are the largest category, which is in line with the main premise behind this passing lanes project. User benefits for travelers in the region (travel time savings) account for the second largest category of the total monetized benefits of the project, and are included in the economic competitiveness criteria. The residual value (state of good repair) is the third category applicable to this project.

Details pertaining to the methodology, assumptions, and additional BCA results presentation are presented in **Appendix B**.

8.0 APPENDICES

The following appendices are available online at: http://cfgis.org/FDOT-Resources/BUILD-2019.aspx

Appendix A

- BUILD Project Information Form
- SF 424
- SF 424 C
- Federal Wage Certificate

Appendix B

- Benefit-Cost Analysis Technical Appendix
- Benefit-Cost Analysis Spreadsheet Model

Appendix C

- Project Support Letters

Appendix D

- MetroPlan Long Range Transportation Plan
- MetroPlan Freight Mobility Plan
- FDOT 5 Year Work Program
- FDOT SIS 2029-2045 Cost Feasible Plan

Appendix E

- Long Range Estimate
- S.R. 60 Safety Report
- State Road 60 Corridor Study
- S.R. 60 Study: Evaluation & Preliminary Concept Development

S.R. 60 PASSING LANES

FY 2019 BUILD GRANT APPLICATION

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