September 8, 2025

Project: I-75 Commercial Vehicle Lanes, Georgia DOT PI No. 0014203

Monroe, Lamar, Butts, Spalding, and Henry Counties

Georgia DOT Major Mobility Investment Program (MMIP)

ENVIRONMENTAL ASSESSMENT

GDOT Georgia Department of Transportation

Monroe, Lamar, Butts, Spalding, and Henry Counties
PI No.: 0014203

The project proposes the addition of two commercial vehicle lanes (CVLs) in the northbound (NB) direction along the Interstate (I)-75 corridor. The project begins north of Macon at the I-75/I-475 interchange near the Monroe/Bibb County line and ends at I-75/State Route 155 (SR 155) near McDonough in Henry County, and includes the addition of an auxiliary lane beginning south of SR 155 and between SR 155 and SR 20. The total length of the proposed Project is approximately 41 center-line miles with approximately 4.4 miles associated with cross-roads and interchanges. The CVL project is part of the Georgia Department of Transportation (Georgia DOT) Major Mobility Investment Program (MMIP), and is being implemented to improve trip time reliability along key freight and passenger corridors. Total project cost is currently estimated at $2.2 billion, including preliminary concept, right-of-way (ROW), and final design/construction.

ENVIRONMENTAL ASSESSMENT

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
AND
GEORGIA DEPARTMENT OF TRANSPORTATION
AND
COOPERATING AGENCY
UNITED STATES ARMY CORPS OF ENGINEERS UNITED STATES ARMY CORPS OF ENGINEERS
SUBMITTED PURSUANT TO 42 USC 4321 et. seq.
And 49 USC 303

	3/31/2026		3/31/2026
NEPA	DATE	Amber Phillips State Environmental Administrator	DATE

APPROVAL OF ENVIRONMENTAL ASSESSMENT AND ADVANCEMENT TO AVAILABILITY/PUBLIC HEARING PHASE

For FHWA: Sabrina S. David Date of Approval: 03/31/2026

Sabrina David, AICP, Division Administrator
Federal Highway Administration, Georgia Division

EXECUTIVE SUMMARY

The Georgia Department of Transportation (Georgia DOT) proposes to construct two (2) barrier-separated northbound CVLs[1] beginning at the Interstate (I)-75/I-475 interchange in Monroe County near the Bibb County line, and extending northward on the east side of the I-75 northbound corridor for approximately 38 centerline miles, which then transitions to a single auxiliary lane for an additional two (2) miles up to the I-75/State Route (SR) 155 interchange where trucks can either exit from the I-75 corridor or merge onto the I-75 mainline (**Exhibit ES-1**). A single auxiliary lane is also proposed to be added to the I-75 general purpose (GP) lanes to accommodate the merging trucks beginning at SR 155 and extending up to the I-75/SR 20 interchange approximately 1.0 mile to the north (total Project length approximately 41 miles).

ES.1. NEED AND PURPOSE

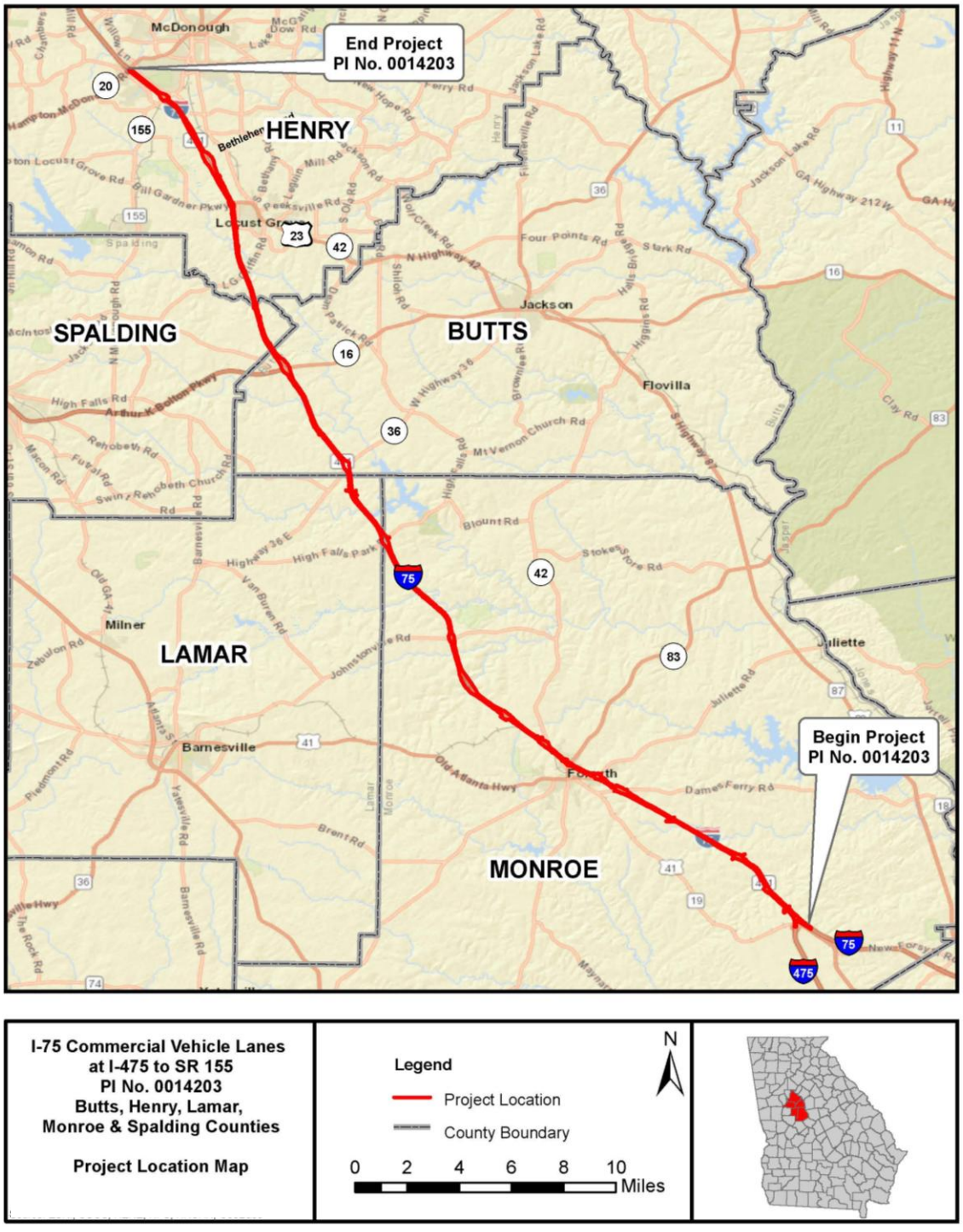
The planning basis for the Project is documented in local and regional planning initiatives, including the *2008 Statewide Truck Lanes Needs Identification Study*, the *2012 Statewide Freight and Logistics Plan*, the *2010 Atlanta Regional Managed Lane System Plan*, the *2015 Transportation Funding Act (TFA)*, the *2015 Managed Lane Implementation Plan*, and the *2050 Regional Transportation Plan*. Previous studies and the analysis presented in this EA document that I-75 in both directions experiences crash rates that are above the statewide average; however, the northbound direction has more crashes and a higher crash rate and is being prioritized for improvements for that reason.

The Project is needed in order to:

- Improve travel time reliability within the I-75 northbound corridor;
- Reduce the above-average crash rate that currently exists within the I-75 northbound corridor by limiting interactions between passenger vehicles and commercial vehicle traffic; and
- Improve the I-75 northbound corridor for freight generators in order to improve on freight delivery reliability and address continued freight movement growth in the Southeastern U.S.

[1] CVLs are extra travel lanes reserved exclusively for the use of commercial vehicles. They run parallel to, and are usually physically separated from, the main travel lanes of an interstate highway.

EXHIBIT ES-1: PROJECT LOCATION MAP



Source: ESRI, USGS, HERE, NPS, Georgia DOT

EXHIBIT ES-2: PROJECT NEED AND PURPOSE SUMMARY

	SUMMARY OF NEEDS	CORRESPONDING PROJECT PURPOSES
	Trip times on the Proposed Project corridor are anticipated to become more unreliable in the future as traffic volumes and corresponding delays increase.	Provide reliable trip times for commuters.
	Crash rates are higher than the statewide average, resulting in economic losses and travel time delays.	Reduce the above-average crash rate that currently exists within the I-75 northbound corridor by limiting interactions between passenger vehicles and commercial vehicle traffic.
	The growth of the Port of Savannah, Florida, and other southeastern U.S. states will increase the need to facilitate freight movement to Atlanta.	Improve the I-75 northbound corridor for freight generators in order to improve freight delivery reliability, and address continued freight movement growth throughout the southeastern U.S.

*Source: See **Appendix B, Need and Purpose Memorandum***

ES.2. ALTERNATIVES

Alternatives were developed to address the Project's need and purpose. The alternatives evaluation process consisted of Primary, Secondary, and Tertiary screening (detailed in **Section 2.1.1**). Alternatives evaluated include various types of transportation improvements to the Project corridor and taking no action beyond improvements already planned along the corridor (No-Build Alternative). The Project team incorporated measures to avoid and minimize impacts and considered public input throughout the alternatives evaluation process.

Three preliminary alternatives (Alternatives 3B, 3C, and 6C) were advanced for evaluation in the Practicable Alternatives Review (PAR) process conducted in August 2020.[2] Build Alternative (Alternative 3C) was recommended for advancement as a result of the PAR process. This alternative was presented at a Public Information and Detour Open House (PIOH/PDOH) in December 2020.

ES.2.1. PREFERRED ALTERNATIVE

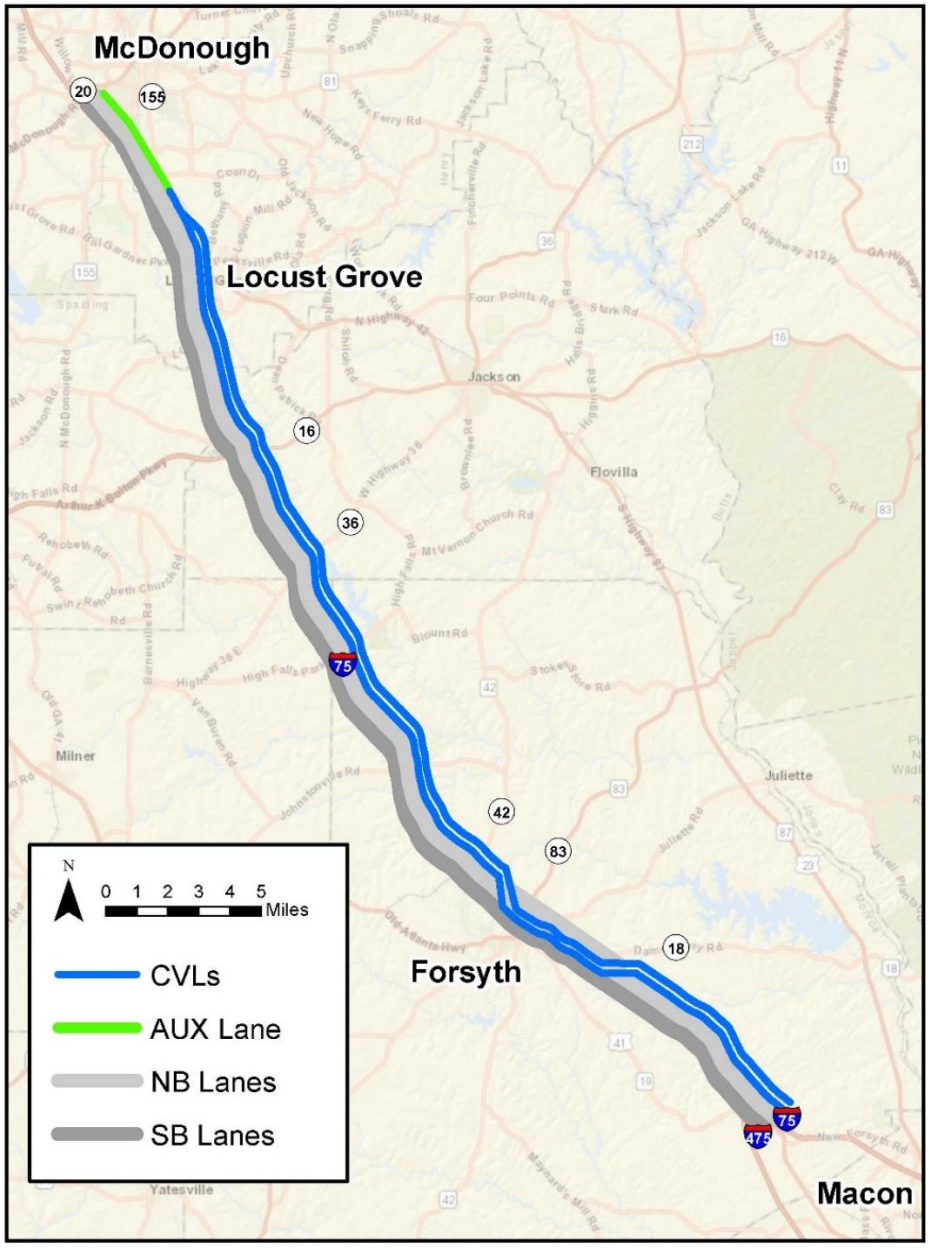
Georgia DOT compared Alternative 3C against the No-Build Alternative. Georgia DOT considered each alternative's ability to meet the Project's need and purpose, its environmental impacts, and public input.

[2] Additional information on the PAR process is provided in **Appendix D, Practical Alternatives Review Presentation** and **Appendix E, Practical Alternatives Review Report**.

The No-Build Alternative does not meet the Project's need and purpose and Georgia DOT, therefore, did not identify it as the Preferred Alternative. Georgia DOT identified Build Alternative 3C as its Preferred Alternative (**Exhibit ES-3)**.

Alternative 3C would include the addition of two northbound CVLs from the I-475 interchange to the SR 155 interchange, with auxiliary lanes beginning south of SR 155 and between SR 155 and SR 20. Egress from the CVLs to GP lanes would be provided between Rumble Road and SR 18, south of Johnstonville Road, and south of SR 36. Ingress from GP lanes to CVLs would be provided between SR 42 and Johnstonville Road, between SR 36 and SR 16, and between SR 16 and Bill Gardner Parkway. The two northbound CVLs would generally be located along the outside shoulder of the I-75 northbound GP lanes. The CVLs would be separated from the northbound GP lanes by concrete barriers constructed at the edge of the outside shoulder of the GP lanes. South of SR 18, the CVL alignment would be shifted into the existing median of I-75, thus reducing the required ROW necessary within the more densely developed area of Forsyth. North of the SR 83 interchange, the CVLs would flyover the northbound GP lanes to resume the location on the outside shoulder of the northbound GP lanes for the remainder of the corridor. Through Forsyth, access to the interchanges would be provided by a collector-distributor (CD) facility that would carry GP and commercial vehicle (CV) traffic.

EXHIBIT ES-3: PREFERRED ALTERNATIVE 1



Source: ***Appendix C, Alternatives Development Report***

ES.3. ENVIRONMENTAL CONSEQUENCES

The preferred alternative would affect resources or conditions present within the project area as summarized in **Exhibit ES-4** and discussed in further detail in **Chapter 3** of this EA

Exhibit ES-4: OVERVIEW OF THE ENVIRONMENTAL EFFECTS OF THE PREFERRED ALTERNATIVE

Resource/Condition	*Resource/ Condition Present?*		*Description of Effects (if resource presence)*	*Effects Determination*	*Description of Mitigation (if warranted)*
	N	Y			
Chapter 3					
Land Use		X	• Direct effects to land use, including the conversion of 344.1 acres of existing land uses to transportation use for areas that would be acquired • Acquisition of three residential buildings and one commercial building (partial displacement) • Facilitated development of 18 parcels	• Minimal adverse effects on adjacent land use	• Compensation to eligible recipients for full and partial property acquisitions will be provided in accordance with the federal Uniform Relocation Assistance and Property Acquisition Act of 1970
Community Facilities, Neighborhoods, and Cities		X	• Acquisition of frontage from two churches, the Georgia Diagnostic and Classification State Prison, and a hunting club • Temporary use of High Falls State Park • Displacement of three residences (one duplex and two single family) • One temporary detour would be required	• Existing community facilities or the services they provide would not be altered • Community cohesion, public access, and transportation circulation would not be disrupted	• Compensation to eligible recipients for full and partial property acquisitions will be provided in accordance with the federal Uniform Relocation Assistance and Property Acquisition Act of 1970 • Signage detailing detour routes and prohibiting through-traffic in neighborhoods would be required

Communities		X	• ROW would be required ranging in widths of 20 to 70 feet with three residential displacements anticipated (one duplex and two single family) • One temporary detour would be required	• Adverse effects would occur, but these effects are not anticipated to be significant • No significant environmental health risks or safety risks	• Compensation to eligible recipients for full and partial property acquisitions will be provided in accordance with the federal Uniform Relocation Assistance and Property Acquisition Act of 1970 • Signage detailing detour routes and prohibiting through-traffic in neighborhoods would be required • The construction of noise walls is anticipated
Economic Impacts		X	• Reduced crash rates and improved travel time reliability, leading to potential economic benefits across the region • One commercial displacement (partial take) that is not anticipated to impact economic conditions in the Study Area	• Overall beneficial effects	• Directional signage and provision of temporary access to businesses during construction
Historic Resources		X	• Small strips of ROW required from two historic properties within which physical alteration of the property would occur • Partial displacement required to the New Forsyth Motel	• Anticipated No Adverse Effect to Willingham Farm, and Colwell Farm • Anticipated Adverse Effect to the New Forsyth Motel	• Digital photographic documentation[3] of the New Forsyth Motel • Windshield survey of businesses identified in "The Negro Motorist Green Book" in Monroe and Bibb Counties. • A narrative describing the area along I-75 in Forsyth known as "Motel City"

[3] Will follow the *Guidelines for Establishing a Photographic Permanent Archival Record*

Archaeological Resources		X	• No ROW acquisition would occur within the boundaries of any of the archaeological resources	• Anticipated No Adverse Effect to two archaeological resources • Anticipated No Effect to two archaeological resources	NA
Historic Markers	X				
Water Quality		X	• Construction and replacement of culverts and bridges at the crossings of 10 303(d) listed streams; potential increased erosion and sedimentation from incremental increase in stormwater runoff volumes and velocities from additional impervious surfaces	• No significant adverse effects with mitigation	• Additional construction best management practices (BMP) in the project's Erosion, Sediment and Pollution Control Plan for discharges to impaired streams; permanent BMPs in accordance with GDOT's Drainage Design for Highways Manual and the Georgia Stormwater Management Manual
Farmland	X				
Wildlife and Habitat		X	• Proposed tree removal would reduce suitable habitat for migratory birds and bats; proposed bridge demolition and widening, and culvert extensions could disturb nesting migratory birds and roosting bats	• No significant adverse effects with mitigation	• Time of Year Restrictions or barriers would be put in place in accordance with GDOT SP 107.23G • GDOT would make a project-specific conservation fund payment to GADNR for proposed tree clearing
Invasive Species		X	• Project construction could potentially cause the spread of existing populations of invasive plants	• No significant adverse effects with mitigation	• Implementation of measures in accordance with Georgia Standard Specifications Section 201- Clearing and Grubbing of ROW

Hazardous Waste and Materials		X	• The presence of subsurface hazardous materials at one location within or adjacent to proposed and existing ROW and work limits was identified	• No significant adverse effects with mitigation	• Removal of toxic or hazardous material would be performed in coordination with Georgia Environmental Protection Division (EPD)
Air Quality		X	• Consistent with state and federal air quality goals, including CO, O_3, $PM_{2.5}$. • Consistent with the state implementation plan (SIP) for the attainment of clean air quality in Georgia • Projected emissions of all MSAT pollutants in 2052 would be lower than what exists today. EPA's stringent vehicle emission and fuel regulations, combined with fleet turnover, are the primary factors that cause this reduction with time and mitigate emissions	• No significant adverse effects	NA
Noise		X	• Prior to noise abatement, noise levels would approach or exceed the NAC at 763 dwelling units/receptors in 2052	• No significant adverse effects with mitigation	• Traffic noise potentially mitigated at 637 dwelling units/receptors by noise abatement through feasible and reasonable noise barriers
Energy/Mineral Resources		X	• Project construction would consume energy and mineral resources	• No significant adverse effects	N/A
Construction/Utilities		X	• Project construction would create unavoidable inconveniences to motorists; utility relocations would not result in long-term interruption of services	• No significant adverse effects	N/A

Waters of the U.S. (Streams and Wetlands)		X	• Permanent loss impacts (Permitted/Mitigated)17,106 linear feet (5.392 acres) and Non-Permitted/Non-Mitigated Impacts 1,364 linear feet (0.186 acres) of streams, 0.34 acre of open waters, and 5.3802 acres of wetlands Temporary de-watering impacts to 189 linear feet (0.0488 acres) of streams where culvert extensions and constructions are proposed.	• No significant adverse effects with mitigation	• 12,221.05 (2018) credits (128,445.04 legacy credits) would be required for impacts to streams • 4.87 (2018) credits (38.96 legacy credits) would be required for impacts to wetlands
Ecosystems		X	• Potential impacts to federally protected monarch butterfly, fringed campion, tricolored bat, Ocmulgee skullcap, and relict trillium • The project would have no significant adverse effect on the state-protected Altamaha shiner • Potential impacts to state-protected bats • The project is not likely to jeopardize the continued existence of the monarch butterfly	No significant adverse effects with mitigation	• Identified habitat areas for fringed campion, relict trillium, and Ocmulgee skullcap and suitable forested habitat for tricolored bat would be protected by orange barrier fence (OBF) where feasible • Water quality BMPs would be implemented during construction in accordance with Georgia DOT Special Provision (SP) 107.23H and SP 165.3.05 • Protection of bats, including tricolored bat, would be implemented during construction in accordance with SP 107.23G and 107.23H • Protection of Altamaha shiner would be implemented during construction in accordance with SP 107.23H and 165.3.05

Chapter 4					
Section 4(f) and LWCF Resources		X	• Minor use and no adverse effect to two NRHP eligible historic resources. • Adverse effect to one NRHP eligible historic resource. • Avoids one LWCF resource completely and avoids permanent use of another LWCF resource	• De minimis determinations are anticipated for Willingham Farm and Colwell Farm • An Individual Section 4(f) evaluation is required for the New Forsyth Motel	• Digital photographic documentation[4] of the New Forsyth Motel • Windshield survey of businesses identified in "The Negro Motorist Green Book" in Monroe and Bibb Counties. • A narrative describing the area along I-75 in Forsyth known as "Motel City"
Chapter 5					
Section 404		X	• Placement of fill in Waters of the U.S.	• A Section 404 Individual Permit would be required	• Compensation would be provided for stream and wetland impacts in accordance with USACE, Savannah District, 2018 *Standard Operating Procedure for* • *Compensatory Mitigation Requirements for Adverse Impacts to Wetlands, Open Waters and Streams*
Stream Buffer Variance		X	• Non-exempt impacts to buffers associated with 70 streams	• A state buffer variance would be required	• Establishment of ESAs with OBF to avoid further impacts to stream buffers
National Pollutant Discharge Elimination System (NPDES)		X	• Proposed ground disturbing activities would exceed one acre	• A Notice of Intent (NOI) to the NPDES General Permit would be required	• Construction best management practices (BMPs) would be provided in the project's Erosion, Sediment and Pollution Control Plan

[4] Will follow the *Guidelines for Establishing a Photographic Permanent Archival Record*

U.S. Coast Guard Permit	X				
Forest Service/Corps Land	X				
Tennessee Valley Authority	X				
Coastal Zone Management Coordination	X				
Executive Order 11988 Floodplain Management		X	• Potential increase or decrease in floodplain water surface elevation	• Permit for Floodplain Development/ Conditional Letter of Map Revision (CLOMR) may be required	NA

NA=Not Applicable

CONTENTS

LIST OF APPENDICES

LIST OF EXHIBITS

1. INTRODUCTION

This section provides a brief description of the Interstate 75 (I-75) Commercial Vehicle Lanes (CVLs) [5] Project (the Project) and an overview of the Georgia Department of Transportation (Georgia DOT) Major Mobility Investment Program (MMIP). This section also provides a summary of the Project Need and Purpose, which is presented in detail in **Appendix B, Need and Purpose Memo**. It contains an overview of the state, regional, and local plans and policies that are the basis for its development. This section describes the purpose of the Project and how it will address the need to improve travel time reliability, safety in the corridor, and improve freight logistics to meet the increasing demand for the movement of goods. Lastly, this section describes how the Project would meet the requirements for logical termini.

Georgia DOT proposes to construct two barrier-separated northbound CVLs beginning at the I-75/I-475 interchange in Monroe County near the Bibb County line and extending northward on the east side of the I-75 northbound corridor for approximately 41 centerline miles, ending near the I-75/State Route (SR) 155 interchange in McDonough, Henry County, Georgia (**Exhibit 1-1**). Within these limits the Project also includes the addition of an auxiliary lane[6] beginning approximately two miles south of SR 155 and between SR 155 and SR 20 for approximately one (1) mile.

The proposed CVLs are considered managed lanes. Managed lanes are designated lanes or roadways within highway rights-of-way (ROW) where the flow of traffic is managed by restricting vehicle eligibility, limiting facility access, and/or in some cases, collecting variably-priced fees (i.e., tolls). Managed lanes are an innovative solution to reducing traffic congestion, improving mobility, and improving safety. The benefit of managed lanes is to carry more people along congested roadways during average commute times.

The proposed CVLs would be enforced by vehicle eligibility—only freight vehicles of a certain configuration and/or weight would be permitted to use the CVLs.[7] Access points were evaluated based on freight volumes, freight-oriented destinations (i.e., truck stops, warehouse facilities, and other industrial developments) and origin and destination patterns, in combination with stakeholder input, to determine desired locations for the CVLs' ingress/egress to minimize freight travel along the I-75 general purpose (GP) lanes (lanes that accommodate the public without any restrictions).

The Project does not include any commercial vehicle (CV)-only interchanges. At all interchanges, CVs will have to merge into the GP lanes before exiting. Entrance and exit ramps between the GP lanes and the CVLs will be from the right side of the GP lanes. The Project would be constructed within existing ROW where feasible. The majority of existing land use adjacent to the Project corridor consists of agricultural and forestry use, and therefore, when additional ROW is required, it is mostly in areas where existing structures would not be impacted (see **Section 3.1, Land Use**).

Due to funding constraints associated with the uncertainty of federal authorizations, along with the defeated 2012 regional sales tax referendum for transportation (the *Transportation Investment Act [TIA]*

[5] CVLs are extra travel lanes reserved exclusively for the use of commercial vehicles. They run parallel to, and are usually physically separated from, the main travel lanes of an interstate highway.
[6] Auxiliary lanes are extra travel lanes alongside the main travel lanes of an interstate highway between interchanges. Their purpose is to facilitate merging and weaving for vehicles entering and leaving the highway.
[7] Trucks with more than six wheels (anything larger than a FHWA Class 5 truck-single unit, two axle truck with six wheels) will be required to use the CVLs. I-75 CVL Policy Evaluation Tech Memo, July 24, 2020

of 2010), the Georgia legislature passed Georgia's *Transportation Funding Act (TFA) of 2015*.[8] The intent of TFA was to have a cost-conscious focused, prioritized list of managed lane projects that avoid the need to rely on long-term private financing agreements. Lower-cost solutions that maximize the delivery of travel-time reliability across the region and that could be implemented more quickly and efficiently were considered.

As a result of the TFA, the Georgia DOT MMIP was developed, which consists of several major mobility projects throughout Georgia over the next 10 years, including the I-75 CVLs (**Exhibit 1-2**).

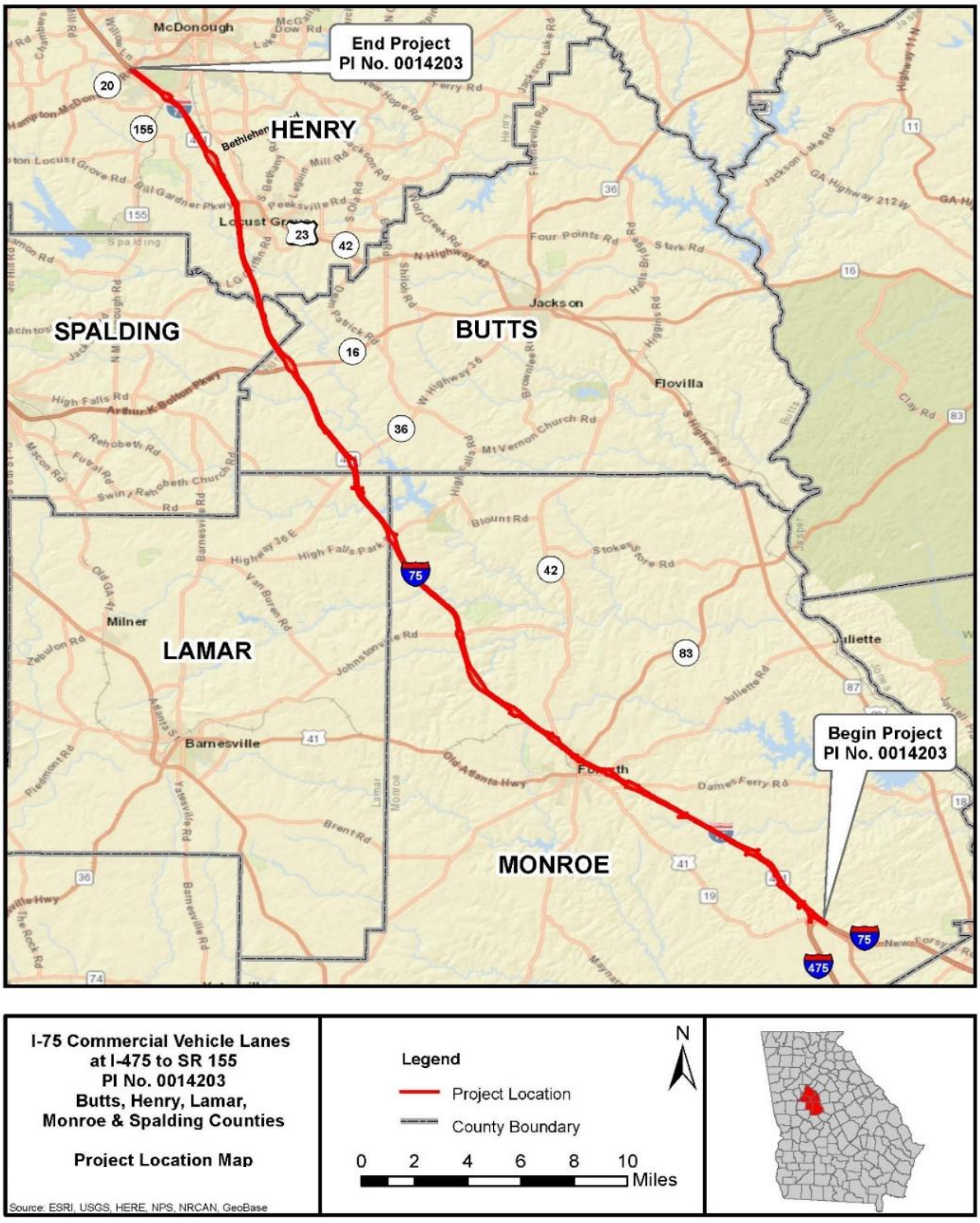
The National Environmental Policy Act (NEPA) of 1969 requires federal agencies to consider the environmental consequences of proposed actions conducted by the federal government. This Environmental Assessment (EA) has been prepared by Georgia DOT and the Federal Highway Administration (FHWA) to evaluate the environmental consequences of the proposed action of installing CVLs on the east side of I-75 from Monroe County to Henry County. This EA has been prepared in compliance with NEPA and documents compliance with other laws, regulations, and Executive Orders (EO) pertaining to the environment.

In fully complying with the obligations of NEPA, this EA discloses the following: the Project's need and purpose, its effectiveness in achieving the need and purpose, the process by which alternatives, including the No-Build Alternative, were evaluated and by which a Preferred Alternative has been chosen, the Project's environmental consequences, efforts that have been or would be undertaken to avoid, minimize, and mitigate environmental impacts, and the involvement of the public and other agencies in the decision making process.

It should be emphasized that this EA is a summary document. Many of the findings are taken from Survey Reports, Assessment of Effects (AOE) Reports, and other research reports. The most relevant of these reports are attached as appendices to this EA and are referenced as necessary. The remainder of these reports are available in their entirety by contacting the Georgia DOT Office of Environmental Services (OES) at (404) 631-1100, or by accessing the project website at https://0014203-gdot.hub.arcgis.com/

[8]Georgia General Assembly, House Bill 170 – Transportation Funding Act of 2015. Accessed from http://www.legis.ga.gov/Legislation/en-US/display/20152016/HB/170.

EXHIBIT 1-1: PROJECT LOCATION MAP



Source: Georgia DOT, ESRI, USGS, HERE, NPS

EXHIBIT 1-2: MMIP – PROGRAM MAP

Interchange Reconstruction:

1. I-16/I-95
2. I-285/I-20 West
3. I-285/I-20 East

Express Lanes:

4. I-285 Top End*
5. I-285 Westside*
6. I-285 Eastside*
7. SR 400 **

Interstate Widening:

8. I-85 Phase 1

9 I-85 Phase 2

10. I-16

Commercial Vehicle Lanes:

11. I-75

I-285 Advanced Improvement Projects:

12. I-285/Peachtree Boulevard Interchange Improvements
13. I-285 Eastside Bridge Replacements
14. I-285 Westbound Auxiliary Lane Extension

*Two procurements planned for the express lanes on I-285. The I-285 Top End Project will be split with the western portion being packaged with I-285 Westside as **I-285 West Express Lanes** and the eastern portion being packaged with I-285 Eastside as the **I-285 East Express Lanes**. Procurement has started on I-285 East Express Lanes (Phase 1).

**Includes the early delivery of SR 400 Phase 1 Bridge Replacement Project which advanced construction of three overpass bridges along the SR 400 corridor.

Source: Major Mobility Investment Program. Accessed from https://majormobilityga.com Accessed May 28, 2025.

1.1 PLANNING BASIS FOR THE ACTION

This subsection provides context for the Project and alternatives considered including a description of early Project activities, plans, policies, and legislation that serve as the basis for their development.

In 2008, Georgia DOT completed the *Statewide Truck Lanes Needs Identification Study*,[9] which developed preliminary criteria for determining truck lane viability. The study designated I-75 as a freight corridor from I-285 in the south Atlanta metro area to I-475 north of the Macon metro area.

In 2012, Georgia DOT adopted its *Statewide Freight and Logistics Plan* which identified the I-75 corridor as needing additional future capacity. This plan also documented a strong and growing economic connection between the Port of Savannah and the south side of the Atlanta metro area. This translates as substantial freight volumes flowing from the Port of Savannah to the Atlanta metro area, a significant tonnage of which moves by truck via I-16 and I-75. In 2014, the *I-75 South Corridor and Subarea Master Planning Study – Existing and Future Conditions Assessment* indicated that by Year 2040, the I-75 corridor would meet or exceed the preliminary criteria developed by the *Georgia Statewide Truck Lanes Needs Identification Study*.

Georgia DOT developed the *Atlanta Regional Managed Lanes Implementation Plan* (MLIP) in 2015, which updated the *Atlanta Regional Managed Lane System Plan* (MLSP) that was approved in 2010. The MLIP was developed to potentially lower costs and make it easier to implement managed lane projects that would address major capacity issues. The MLSP and MLIP were developed to satisfy transportation planning requirements, study the potential effects, and serve as the basis for a coordinated effort for the implementation of managed lanes within the Atlanta metro region.

1.2 PROJECT NEED AND PURPOSE

The I-75 corridor is a significant regional[10] and national transportation artery, traversing 1,786 miles from Miami, Florida, to Sault Ste. Marie, Michigan, at the Canadian border. The I-75 corridor is a vital transportation artery for the state of Georgia, linking communities, economic contributors, such as the Port of Savannah, commercial centers, and neighboring states, such as Florida. This portion of the I-75 corridor is one of Georgia's officially designated freight corridors.[11]

As a result of the population, employment, and economic growth throughout the state, increased demand for goods movement and resulting traffic volumes, the I-75 corridor, particularly in the northbound direction, already experiences reduced mobility, increasingly unreliable travel times, and safety issues. These issues, as detailed below in **Section 1.2.2**, are expected to worsen with increases in traffic volumes in the future. This growth is expected to continue in the near- and long-term, especially in the urban/suburban Atlanta and Macon metro areas, as well as the cargo container shipping and rail operations generated by the Port of Savannah. The Port of Savannah's growth in container throughput has increased from handling approximately 3.4 million twenty-foot equivalent units (TEUs) in 2015 to approximately 4.5 million TEUs in 2019. This represents a 7.3 percent annual increase. The Savannah

[9]Georgia DOT. 2008. Statewide Truck Lanes Needs Identification Study, Final. Accessed from http://dlg.galileo.usg.edu/ggpd/docs/2008/ga/t700_pp6/m1/2008/t7/exec_p_bsum_p/elec_p_btext.con/1.pdf

[10] The region being referenced here is the area between Macon and Atlanta, GA, including the cities of Forsyth, Locust Grove, and McDonough.

[11]Georgia DOT. 2023. Georgia Statewide Freight and Logistics Plan and Designated Freight Corridor Map. Accessed from https://www.dot.ga.gov/GDOT/pages/freight.aspx

Harbor Expansion Project (completed in March 2022) deepened the harbor from 42 feet to 47 feet and allows larger, more efficient container vessels to access the port. The Georgia Ports Authority (GPA) has an infrastructure development plan that will increase the capacity of the Savannah Port to approximately 11 million TEUs annually within the next decade.[12] See Section 2.1.1 of **Appendix B-Need and Purpose Memo**, which provides more details on the Savannah Port and how it affects the Project.

The Project is needed because:

- Trip times on the Proposed Project corridor are anticipated to become more unreliable in the future as traffic volumes and corresponding delays increase;
- Crash rates are higher than the statewide average, resulting in economic losses and travel time delays; and
- The growth of the Port of Savannah, Florida, and other southeastern U.S. states will increase the need to facilitate freight movement to Atlanta.

1.2.1 Increased Transportation Demand

The I-75 Project corridor is key to CVs moving goods west and north from the Port of Savannah, using the I-16 and I-75 corridors to reach the Atlanta metro area and to other markets further beyond. The I-75 Project corridor has a Truck AADT of 24,180, which is 53 percent higher than the next highest area interstate (I-20, west of Atlanta- **Exhibit 1-3**). Areas of the I-75 Project corridor in Henry County include fast-growing freight clusters, designated corridors, and activity centers that drive and support a substantial portion of the existing CV traffic volume in the south Atlanta metro area. Future commercial and industrial growth in these areas are consistent with land use framework for future development and the projected growth in CV traffic volume.[13]

EXHIBIT 1-3: 2023 AADT AND TRUCK AADT FOR AREA INTERSTATES[14]

LOCATION	AADT	TRUCK AADT (T%)
I-75, 2 miles north of SR 36 (within Project)	93,000	24,180 (26%)
I-16, 1.4 miles east of SR 338 (east of Macon)	26,200	7,860 (30%)
I-75, north of SR 26 (south of Macon)	57,600	15,552 (27%)
I-20, east of Eatonton Road/US 129 (east of Atlanta)	35,300	7,766 (22%)
I-20, east of SR 61 and Liberty Road (west of Atlanta)	83,200	15,808 (19%)

Note that all data is based on bi-directional volumes

[12] GPA's State of the Port of Savannah. Available at: https://www.gpastateoftheport.com/downloads-savannah.
[13] Henry County. 2018. Imagine Henry 2040. Our Vision. Our Community. Our Future: Henry County/Cities Joint Comprehensive Plan 2040 Update. Accessed from www.co.henry.ga.us/Portals/0/PlanningZoning/CompLandUse/10.12 Final Henry Plan.pdf.
[14] The GDOT Traffic Analysis & Data Application (TADA) was used to provide the contrasting Truck AADT between area interstates illustrated in Exhibit 1-3. Accordingly, a consistent comparison method was used since multiple interstates were compared outside of the I-75 Project corridor. https://gdottrafficdata.drakewell.com/publicmultinodemap.asp. (accessed June 2023)

Separating trucks and passenger traffic through the construction of CVLs is needed in order to add capacity for CVs, improve operational efficiency including travel time reliability, and improve safety along the I-75 corridor. The construction of CVLs is anticipated to benefit economic growth in the Atlanta region and improve the competitive position of Savannah as the port of choice on the east coast. The CVLs Project will address transportation needs associated with the growth of the Port of Savannah and the growth of Florida and southeastern U.S. and will improve overall national freight efficiencies.

To meet the growing demands on Georgia's freight corridors and routes, infrastructure improvements, such as the I-75 CVLs Project and the other MMIP projects, must continue to be developed to improve freight movements. Freight volume with an origin or destination in the Atlanta metro area (i.e., air, rail, and truck) was approximately 151 million tons and valued at approximately $313 billion dollars in 2013.[15] The Atlanta Regional Commission (ARC) estimates the tonnage to grow 76 percent by year 2040, which would be 266 million tons of freight moving through the Atlanta metro area. In the Atlanta metro area, 83 percent of freight tonnage is moved by truck, while 17 percent is handled by rail, and less than one percent by air.[16]

The existing I-75 Project corridor within the Project limits currently experiences significant (29.5-31 percent) CV/truck volumes.[17] Truck volumes are anticipated to continue to grow at 1.21 percent annually in the northbound direction, and 1.17 percent annually in the southbound direction, over the period from 2032 (opening year) to 2052 (design year).[18] Due to the age of the original traffic counts (completed in 2018), Georgia DOT completed updated traffic counts in April 2024 to confirm that the results in the original traffic analysis were still valid. Based on these updated counts it was determined that volume changes are within one half lane of capacity and therefore it has been concluded that the traffic forecasts, analyses and conclusions as reported in the Systems Interchange Modification Report (April 2022/revised March 2025) are still valid.[19] Although CV/truck volumes are higher in the northbound direction, southbound CVLs may be needed in the future as CV/truck volumes are also high in the southbound direction. Due to funding constraints, Georgia DOT has prioritized adding CVLs to northbound I-75 to meet the higher demonstrated need.

1.2.2 Crash Analysis

From 2016 to 2022, a total of 7,790 crashes occurred in the I-75 corridor within the Project limits, consisting of 4,195 crashes along I-75 northbound and 3,595 crashes along I-75 southbound.[20] Over this period, this is approximately an average of 599 annual crashes along I-75 northbound and 513 annual crashes along I-75 southbound. Overall, the crash, injury and fatality rates are higher for the northbound direction than for the southbound direction (**Exhibit 1-4**). The most common type of crashes in both

[15] Atlanta Regional Commission. 2016. Atlanta Regional Freight Mobility Plan Update, Executive Summary. 2013 Transearch Database for traffic originating and/or terminating in Atlanta. The projected growth was calculated using the FHWA's Freight Analysis Framework (FAF), version 3.5.

[16] Atlanta Regional Commission. 2016. ARC's Regional Freight Mobility Plan Update. Accessed from http://documents.atlantaregional.com/transportation/freight/ARFMPUpdate_Final_Report_05-26-16.pdf

[17] The percentage values are based upon the actual traffic data collection performed in 2018. The values reported in Exhibit 1-3 vary from the referenced percentage values due to the different data sources and different data collection methodologies used for each data source.

[18] *I-75 Commercial Vehicle Lanes Interchange Modification Report, GDOT PI No.: 0014203. ARCADIS, May 2023; and Traffic Forecasting Memorandum, I-75 Commercial Vehicle Lanes Project, PI No.: 0014203. ARCADIS, November 30, 2022.*

[19] *Traffic Sensitivity Analysis Technical Memorandum, PI 0014203, RS&H, March 2025* (see Appendix B)

[20] Although safety analysis typically only covers a 5-year period the analysis was expanded to include an additional two years of data since this data became available during the active preparation of the EA.

directions was rear-end, which is typically associated with congested conditions. The statewide average crash rate for a similar facility over the 2016-2020 period was 61 crashes per 100 million vehicle-miles traveled (100 MVM).[21] The northbound I-75 crash rate was 99 crashes per 100 MVM and the southbound crash rate was 83 crashes per 100 MVM. The northbound fatality rate was 0.60 crashes per 100 MVM and the southbound fatality rate was 0.54 crashes per 100 MVM. The fatality rates for both northbound and southbound were lower than the statewide average, which was 0.76 crashes per 100 MVM during the same period. The injury rate was higher than the statewide average (14 crashes per 100 MVM) for both the northbound and southbound directions, which were 22 and 19 crashes per 100 MVM, respectively. Previous studies and analyses presented in this section document that I-75 experiences crash rates above the statewide average, in both directions. However, the northbound direction has more crashes and a higher crash rate and is being prioritized for improvements for that reason.

EXHIBIT 1-4: I-75 CRASH SUMMARY (2016-2022)

CRASH ANALYSIS		5-YEAR (2016-2020)		7-YEAR (2016-2022)	
		NB	SB	NB	SB
Crash Type	Not a Collision with Motor Vehicle	796	773	1,013	1.009
	Rear End	1,319	843	1,930	1,253
	Sideswipe-Same Direction	620	657	953	1,024
	Total[22]	2,964	2,487	4,195	3,595
Crash Summary	Number of Fatal Crashes	18	16	23	21
	Number of Injury Crashes	646	555	908	806
	Number of PDO* Crashes	2,290	1,903	3,250	2,749
Crash Rate (per 100 Million Vehicle Miles)	Statewide Average Crash Rate	61		N/A	
	I-75 Crash Rate	**99**	**83**	98	84
	Statewide Fatality Rate	0.76		N/A	
	I-75 Fatality Rate	**0.60**	**0.54**	0.54	0.49
	Statewide Injury Rate	14		N/A	
	I-75 Injury Rate	**22**	**19**	21	19

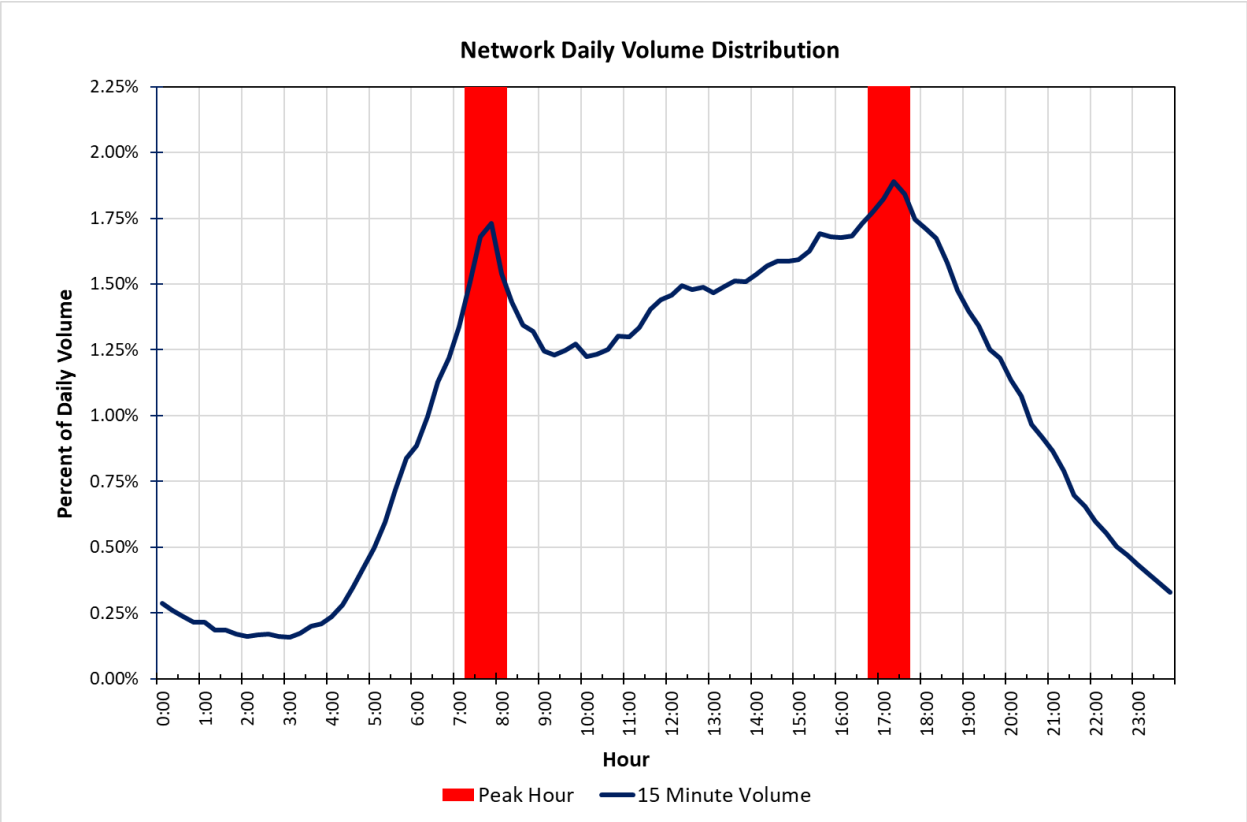
[21] Statewide Average Crash rate raw numbers are available through 2023, however the statistical comparisons are only available through 2020

[22] The total number of crashes includes the top three crash types as noted and other crashes that were not specifically classified by one of the types listed.

Source: Revised SIMIR, GDOT PI No.: 0014203 - I-75 CVLs Project. RS&H, May 9, 2024.
*Note: **Red** text= higher than statewide; **Green** text=lower than statewide.*
**PDO- Property Damage Only*

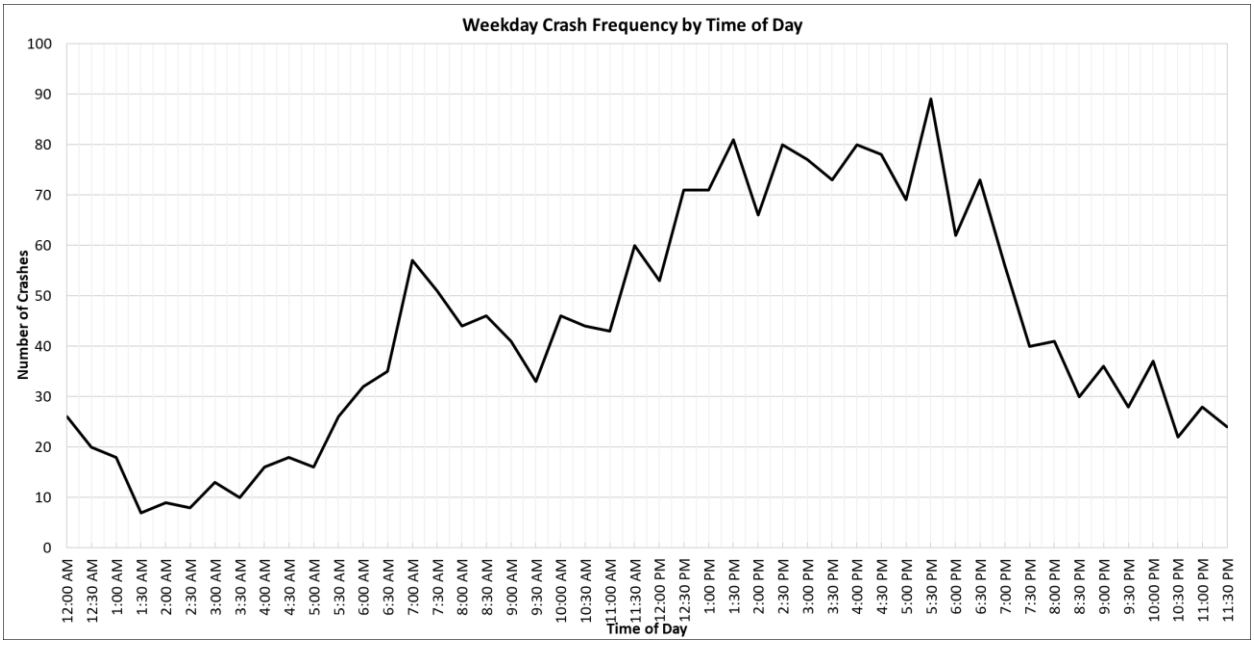
Traffic volumes on I-75 within the Project limits are highest during the morning peak hour, from 7:15 AM to 8:15 AM, and the afternoon peak hour from 4:45 to 5:45 PM **(Exhibit 1-5**), with the afternoon peak hour having a higher volume. Crashes also follow this pattern, with the afternoon peak hour having more crashes than the morning peak (**Exhibit 1-6**).

EXHIBIT 1-5: PEAK BI-DIRECTIONAL TRAFFIC VOLUMES BY TIME OF DAY



Source: Available 2019 data (end of July to mid-September) from I-75 Weigh-in-Motion stations

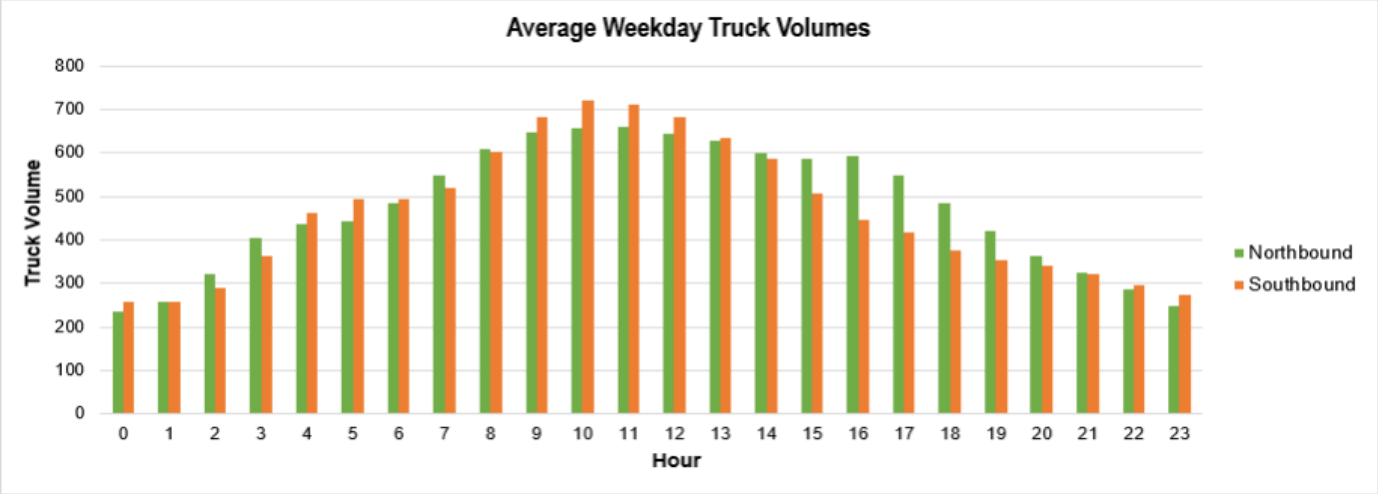
EXHIBIT 1-6: WEEKDAY BI-DIRECTIONAL CRASHES BY TIME OF DAY



Source: Available 2019 data (end of July to mid-September) from I-75 Weigh-in-Motion stations

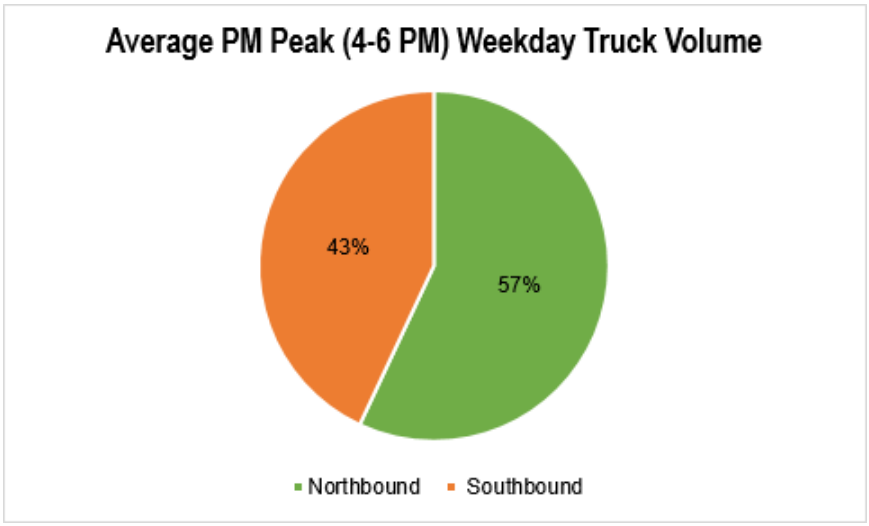
As shown in **Exhibit 1-7,** the number of trucks traveling northbound is higher than the number of trucks traveling southbound, beginning around 2 PM and ending around 9 PM. The directional split is most pronounced between 4 PM and 6 PM, which coincides with the peak hour for both traffic and crashes. Directional splits for northbound truck vehicle classes grow to 57 percent of the total truck traffic in the corridor during these hours (**Exhibit 1-8**).

EXHIBIT 1-7: WEEKDAY DIRECTIONAL TRUCK VOLUMES BY TIME OF DAY



Source: Available 2019 data (end of July to mid-September) from I-75 Weigh-in-Motion stations

EXHIBIT 1-8: TRUCK TRAFFIC DIRECTIONALITY IN THE WEEKDAY AFTERNOON PEAK HOUR



Source: Available 2019 data (end of July to mid-September) from I-75 Weigh-in-Motion stations

In the northbound direction, the following segments experience the highest crash rates (**Exhibit 1-9**):

- I-475 to Rumble Road – 98 crashes per 100 MVM
- Bill Gardner Parkway to SR 155 – 184 crashes per 100 MVM

- SR 16 (Arthur Bolton Parkway) to Bill Gardner Parkway – 126 crashes per 100 MVM
- High Falls Road to SR 36 (Barnesville-Jackson Road) – 105 crashes per 100 MVM

The segment of I-75 from SR 16 (Arthur Bolton Parkway) to Bill Gardener Parkway has the highest number of injuries/fatalities per crash (0.97) in the northbound direction.

204 EXHIBIT 1-9: CRASH ANALYSIS BY SEGMENT

Segment	Length (mi)	Functional Class (by counter)	Total Number of Crashes		Total Number of Fatal Crashes		Total Number of Injury Crashes		AADT	All Crashes per 100 MVM		Fatal Crashes per 100 MVM		Injury Crashes per 100 MVM	
			NB	SB	NB	SB	NB	SB		NB	SB	NB	SB	NB	SB
I-75/I-475 - Rumble Road	2.94	Rural	335	341	2	2	78	80	45621	98	100	0.58	0.58	23	23
Rumble Road - SR 18 (Dames Ferry Road)	4.57	Rural	344	514	1	2	83	114	44829	66	98	0.19	0.38	16	22
SR 18 (Dames Ferry Road) - Juliette Road	0.85	Rural	51	93	0	1	19	26	43750	54	98	0.00	1.05	20	27
Juliette Road - Cabiness Road	1.07	Rural	84	168	0	1	14	35	42871	72	143	0.00	0.85	12	30
Cabiness Road - SR 42	1.06	Rural	64	177	0	0	5	32	41636	57	157	0.00	0.00	4	28
SR 42 - Johnstonville Road	5.24	Rural	393	415	3	1	83	83	40886	72	76	0.55	0.18	15	15
Johnstonville Road - High Falls Road	4.43	Rural	275	299	4	1	51	72	40636	60	65	0.87	0.22	11	16
High Falls Road - SR 36 (Barnesville-Jackson Road)	3.13	Rural	338	196	1	0	72	48	40311	105	61	0.31	0.00	22	15
SR 36 (Barnesville-Jackson Road) - SR 16 (Bolton Parkway)	4.25	Rural	349	294	2	4	82	70	42386	76	64	0.43	0.87	18	15
SR 16 (Bolton Parkway) to Bill Gardner Parkway	6.59	Urban	910	505	7	7	187	139	43039	126	70	0.97	0.97	26	19
Bill Gardner Parkway to SR 155 (McDonough Road)	4.56	Urban	1052	593	3	2	234	107	49100	184	104	0.52	0.35	41	19
Total between SR 36 (Barnesville-Jackson Road) and SR 155 (McDonough Road)			**2311**	**1392**	**12**	**13**	**503**	**316**	**44842**	**128**	**79**	**0.64**	**0.73**	**28**	**18**
Total Crashes in Study Area			**4195**	**3595**	**23**	**21**	**908**	**806**	**43188**	**88**	**94**	**0.40**	**0.50**	**19**	**21**

205 *Source: Revised SIMIR, GDOT PI No.: 0014203 - I-75 CVLs Project. RS&H, May 9, 2024.*
206

In addition to the overall crash rate analysis as described above a separate analysis of CV-involved crashes was completed. The segment of I-75 from SR 36 (Barnesville-Jackson Road) to SR 16 (Arthur Bolton Road) has the highest percentage (23 percent) of CV-involved crashes in the northbound direction, whereas the segment between Bill Gardner Parkway and SR 155 (McDonough Road) has the highest total number of CV-involved crashes (176) in the northbound direction. The segment from Bill Gardner Parkway to SR 155 has the highest overall crash rate and accounts for the highest number of CV-involved crashes (**Exhibit 1-10**).

EXHIBIT 1-10: COMMERCIAL VEHCLE CRASHES BY SEGMENT (2016-2022)

Segment	Length (mi)	Functional Class (by counter)	Total Number of Crashes		Number of Commercial Vehicle Crashes		% of Commercial Vehicle Crashes		Total Commercial Vehicle Crashes	% of Commercial Vehicle Crashes
			NB	SB	NB	SB	NB	SB	Total	Total
I-75/I-475 - Rumble Road	2.94	Rural	335	341	59	113	18%	33%	172	25.4%
Rumble Road - SR 18 (Dames Ferry Road)	4.57	Rural	344	514	54	101	16%	20%	155	18.1%
SR 18 (Dames Ferry Road) - Juliette Road	0.85	Rural	51	93	8	15	16%	16%	23	16.0%
Juliette Road - Cabiness Road	1.07	Rural	84	168	8	19	10%	11%	27	10.7%
Cabiness Road - SR 42	1.06	Rural	64	177	13	15	20%	8%	28	11.6%
SR 42 - Johnstonville Road	5.24	Rural	393	415	65	84	17%	20%	149	18.4%
Johnstonville Road - High Falls Road	4.43	Rural	275	299	42	68	15%	23%	110	19.2%
High Falls Road - SR 36 (Barnesville-Jackson Road)	3.13	Rural	338	196	65	28	19%	14%	93	17.4%
SR 36 (Barnesville-Jackson Road) - SR 16 (Bolton Parkway)	4.25	Rural	349	294	80	49	23%	17%	129	20.1%
SR 16 (Bolton Parkway) to Bill Gardner Parkway	6.59	Urban	910	505	153	118	17%	23%	271	19.2%
Bill Gardner Parkway to SR 155 (McDonough Road)	4.56	Urban	1052	593	176	172	17%	29%	348	21.2%
Total between SR 36 (Barnesville-Jackson Road) and SR 155 (McDonough Road)	-	-	**2311**	**1392**	**409**	**339**	**18%**	**24%**	**748**	-
Total Crashes in Study Area	-	-	**4195**	**3595**	**723**	**782**	**17%**	**22%**	**1505**	-

Source: Revised SIMIR, GDOT PI No.: 0014203 - I-75 CVLs Project. RS&H, May 9, 2024.

The economic impact of crashes can be determined by converting fatal crashes, injury crashes, and property damage only (PDO) crashes into a metric called Equivalent Property Damage Only (EPDO). Monetary values[23], based on GDOT Highway Safety Manual calibrations costs, are assigned as:

- Fatal crash ($9,100,000)[24]
- Injury crash ($955,000)
- PDO crash ($27,300)

Using the crash data from 2016 to 2022, **Exhibit 1-11** shows the values for EPDO. EPDO values for fatalities, injuries, and PDO are all higher for the northbound direction of I-75.

EXHIBIT 1-11: EQUIVALENT PROPERTY DAMAGE ONLY CRASH ANALYSIS

DIRECTION	FATAL EPDO	INJURY EPDO	PDO EPDO	7-YEAR EPDO	ANNUAL EPDO
Both	14,652	59,990	6,032	80,674	11,524
Northbound	7,659	31,780	3,264	42,703	6,100
Southbound	6,993	28,210	2,768	37,971	5,424

Source: Revised SIMIR, GDOT PI No.: 0014203 - I-75 CVLs Project. RS&H, May 9, 2024.

1.2.3 Crash Delay and Travel Time Reliability

The crash clearance time is the time it takes to clear a crashed vehicle from the roadway and for traffic to then return to normal operating conditions. Data on 3,011 crashes from 2017 to 2019 were analyzed to determine the average delay associated with a crash, resulting in an average of 59 minutes to clear a crash, with morning crashes taking slightly longer.

Using VISSIM (traffic simulation computer program), traffic engineers created a traffic simulation using the average delay crash clearance data results, as described above. A crash simulation was performed of delays caused by crashes blocking two lanes in the northbound direction at two different locations. One simulation was located at a segment of I-75 northbound with relatively low crash rates (between Juliette Road and SR 83) and another was at a segment of I-75 northbound with relatively high crash rates (Bill Gardner Parkway to SR 155).[25] The simulation measured delays in both directions of I-75, even though the crash was only in the southbound direction. The high-crash location northbound results indicated a travel time (delay) of approximately 45-51 minutes between the Open Year (2032) and Design Year (2052).

A reliability analysis was performed to assess the consistency and predictability of travel times along I-75 going beyond average conditions to evaluate the variability caused by recurring congestion (like daily demand) and non-recurring disruptions (such as crashes). Long-term travel time data, microsimulation,

[23] The EPDO monetary values were taken from the *Highway Safety Manual; American Association of State Highway and Transportation Officials, 2014*

[24] Traffic Report, GDOT PI No.: 0014203 - I-75 CVLs Project. ARCADIS, November 12, 2020, and Traffic Sensitivity Analysis Technical Memorandum – I-75 Commercial Vehicle Lanes," PI 0014203, prepared by RS&H, August 2, 2024

[25] The high crash and low crash segments were selected based on consideration of both the crash rate and geometrics. Specifically, locations were selected that were of sufficient distance between CVL access and egress points so that the simulated crash backup did not spill over onto connecting ramps or roadways. The high crash location had the highest crash rate (155 per 100 MVM) on the corridor and met the geometric (access point spacing) criteria. The low crash location had one of the lower crash rates (78 per 100 MVM) on the corridor and met the geometric (access point spacing) criteria.

and reliability measures such as the Buffer Index (BI) and the Planning Timing Index (PTI) were used to assess the reliability of the facility. The BI represents the extra buffer time (or time cushion) that most travelers add to their average travel time when planning trips to ensure an on-time arrival. This buffer time accounts for unexpected delay and is expressed as a percentage whose value increases as reliability decreases. The PTI represents how much total time a traveler should allow to ensure an on-time arrival. While the BI represents the additional travel time, the PTI shows the total travel time necessary. The PTI is calculated as the 95th percentile travel time divided by the free-flow travel time. A PTI greater than 1.3, which represents a travel time more than 30% longer than the free-flow travel time at average speeds 25% below the posted speed limit, is considered unreliable based on guidance from the Oregon Department of Transportation. The travel time reliability assessment measured unreliable travel times in the afternoon for the Open Year as well as both in the morning and afternoon for the Design Year (See Exhibit 1-12).

EXHIBIT 1-12: NORTHBOUND TRAVEL TIME RELIABILITY ANALYSIS - HIGH CRASH SCENARIO

PEAK	YEAR	CONDITION	LOCATION	AVERAGE TIME (MM:SS)	PLANNING TIME (MM:SS)	BUFFER TIME (MM:SS)	BUFFER INDEX (%)	PLANNING TIME INDEX	RELIABILITY (PTI<1.3)
AM	2032	No-Build	GP	37:10	44:54	07:44	21%	1.27	**Reliable**
	2052	No-Build	GP	37:37	47:28	09:51	26%	1.34	**Unreliable**
PM	2032	No-Build	GP	37:50	47:19	09:29	25%	1.34	**Unreliable**
	2052	No-Build	GP	38:46	50:52	12:07	31%	1.44	**Unreliable**

Source: I-75 Commercial Vehicle Lanes Interchange Modification Report Re-Evaluation (March 2025)

1.3 LOGICAL TERMINI

Logical termini are end points for a project that make sense in terms of transportation improvements and environmental impacts. FHWA lists three factors to be considered in establishing logical end points for a project:

- Connect logical termini and be of sufficient length to address environmental matters on a broad scope;
- Have independent utility or independent significance (i.e., be usable and be a reasonable expenditure even if no additional transportation improvements in the area are made); and,
- Not restrict consideration of other reasonably foreseeable transportation improvements.

For this Project, the logical termini are the I-475 interchange on the south and SR 20 on the north. The I-475 interchange is a location where traffic volumes change substantially, as traffic originating from I-16 and I-75 traffic converge. The two northbound CVLs included under the Preferred Alternative will originate as one lane from I-75 north and one lane from I-475 north.

The SR 155 interchange is the southern terminus of the I-75 South Metro Express Lanes project. The South Metro Express Lanes project, completed in 2020, constructed two reversible express lanes in the median of I-75 from SR 155 to SR 138 in Clayton County and includes access points to the express lanes from SR 155 and SR 20.[26] The express lanes provide additional capacity for passenger vehicles as trucks are not permitted to use the express lanes, which also provides the opportunity for the separation of passenger vehicles and trucks. In addition, as discussed in **Section 1.0 of Appendix B**, the warehouses at the SR 155 interchange area are a freight-oriented destination for trucks traveling northbound on I-75. The two CVLs implemented under the Preferred Alternative will merge back into the I-75 northbound GP lanes through an auxiliary lane that is proposed between the Bill Gardner Parkway interchange and SR 155 interchange. The Preferred Alternative also includes an auxiliary lane from SR 155 to SR 20 to facilitate the entry of northbound traffic entering I-75 from SR 155 into the traffic stream.

The primary purpose of the Project is to improve safety and mobility on this section of I-75 by segregating truck traffic from vehicular traffic. Traffic projections show that I-75 is not expected to exceed capacity through the design year. Induced demand due to the Preferred Alternative improvements is approximately 1 percent; therefore, increases in traffic volumes due to the Preferred Alternative improvements would not cause adjacent roadways to exceed capacity.

Safety issues also exist on I-75 southbound, although to a lesser degree than northbound I-75. Should it be desired in the future to add CVLs to the southbound direction of I-75, the Preferred Alternative improvements would not restrict those improvements. Further, this Project will be effective in meeting its need and purpose, regardless of whether future similar improvements to southbound I-75 are made.

[26] Area development in Henry County served by the SR 155, SR 20, and Bill Gardner Parkway interchanges, is comprised mainly of distribution, warehousing, and light industrial facilities. This development type which is served mainly by large commercial vehicles has expanded from less than two (2) million square feet in the early 1990s to over 25 million square feet by 2017 (see **Appendix B, Need and Purpose Memo**, pages 3-4)

2. ALTERNATIVES

This section describes the alternatives considered for the I-75 CVLs Project prior to identifying the Preferred Alternative. This section describes the range of alternatives developed, evaluated, and removed from consideration, including why certain early concepts were eliminated from further evaluation. For a detailed description of the process by which alternatives were developed, refer to **Appendix C, Alternatives Development Report**.

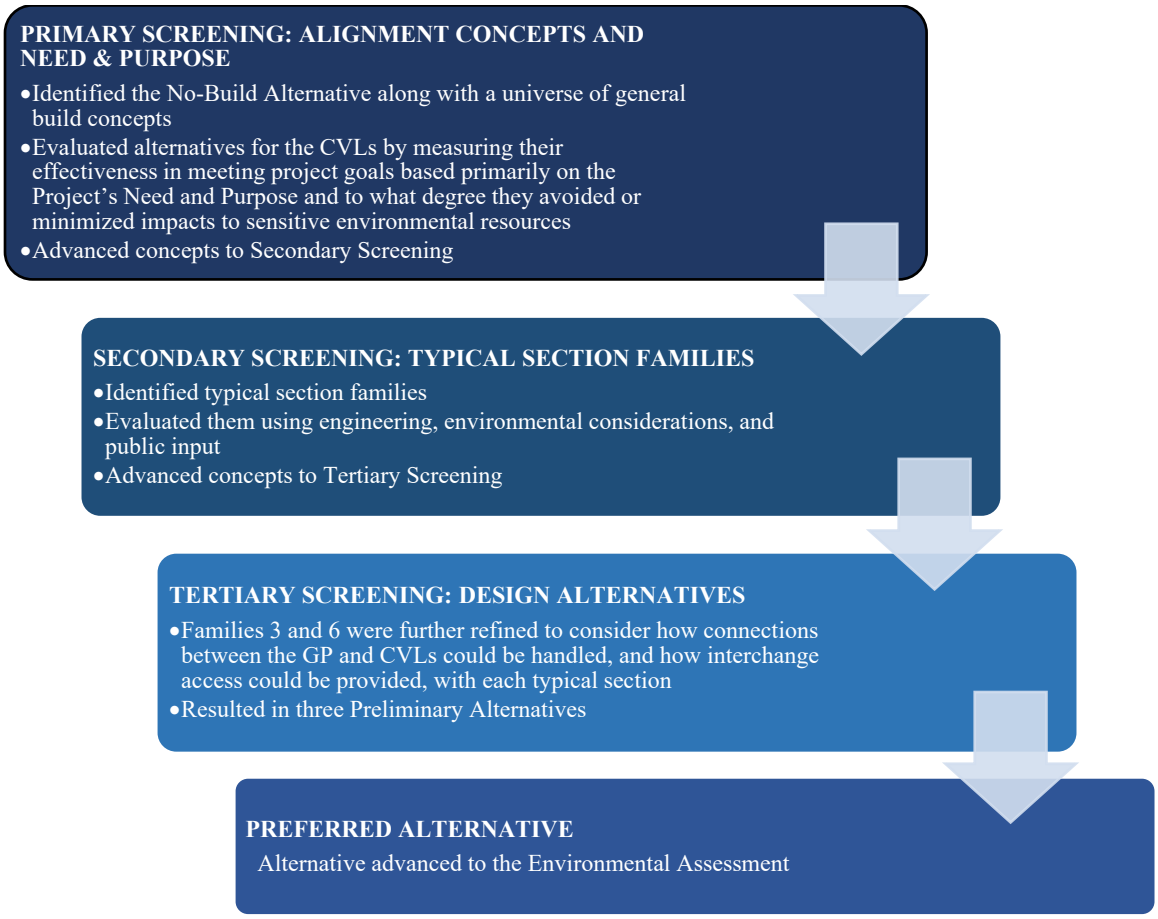
2.1 DEVELOPMENT AND SCREENING OF ALTERNATIVES

This section discusses early studies and concepts, the alternatives screening process, and the determination of the range of reasonable alternatives.

2.1.1 Alternatives Evaluation Framework

An alternatives evaluation framework was established to screen CVL alternatives in three steps: Primary, Secondary, and Tertiary Screening (**Exhibit 2-1**).

EXHIBIT 2-1: ALTERNATIVES SCREENING PROCESS



2.1.1.1 PRIMARY SCREENING

The following components of the Project Need and Purpose were considered as part of the Primary Screening:

- Improve operations and logistics for freight generators;
- Reduce passenger vehicle/truck interactions; and
- Provide reliable trip times through the corridor.

A fourth screening metric, which is not part of the Project Need and Purpose, was to avoid and minimize impacts to sensitive environmental resources.

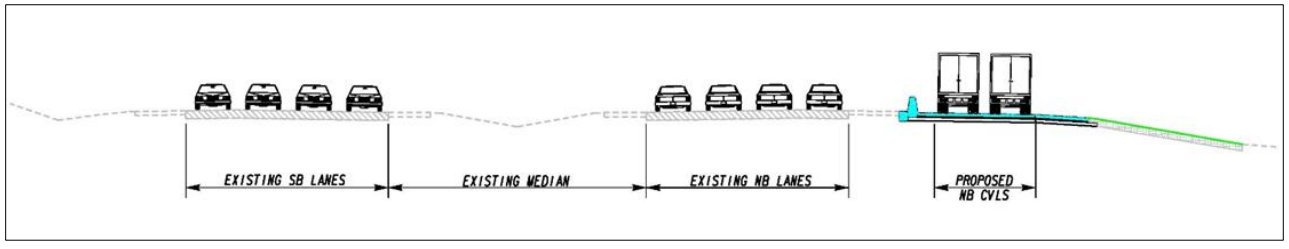
The concepts screened in the Primary Screening process varied by location of the CVLs, number of CVLs, and number of CVL-only interchanges and associated weave zones at locations with high truck volumes. Of the seven concepts that were screened through the Need and Purpose, only one concept (B3) did not have any unfavorable scores for any of the screening metrics (see **Appendix C, Exhibit 2-2**). Concept B3 was determined to best meet the Project's Need and Purpose while minimizing Project impacts and was advanced to the Secondary Screening.

2.1.1.2 SECONDARY (TYPICAL SECTION) SCREENING

Concept B3 was further refined into four "families"[27] of typical sections (Families 3, 4, 5, and 6 [see **Appendix C, Alternatives Development Report**]). Each typical section family included various similar alternative typical sections which varied from other families by certain distinguishing features, including the method of separation from the GP lanes (barrier separation or guardrail separation), and the location of the CVLs with respect to the GP lanes.

The Typical Section Family 3 included barrier separated CVLs along the outside shoulder of the northbound GP lanes (**Exhibit 2-2**). The Typical Section Family 4 provided a greater offset with the CVLs separated by guardrail along the outside shoulder of northbound GP lanes (**Exhibit 2-3**). The Typical Section Family 5 provided barrier separated CVLs within the median (**Exhibit 2-4**). The Typical Section Family 6 involved barrier separated CVLs along the outside shoulder of northbound GP lanes, similar to the Typical Section Family 3; however, differs in that it eliminates one GP lane and shifts the remaining GP lanes towards the median to minimize the ROW needed for the CVLs along the outside shoulder (**Exhibit 2-5**).

EXHIBIT 2-2: TYPICAL SECTION FAMILY 3



[27] The term "family(ies)" was established as part of the Secondary Screening process to help group and organize the concept alignments, which are based upon the potential typical section.

EXHIBIT 2-3: TYPICAL SECTION FAMILY 4

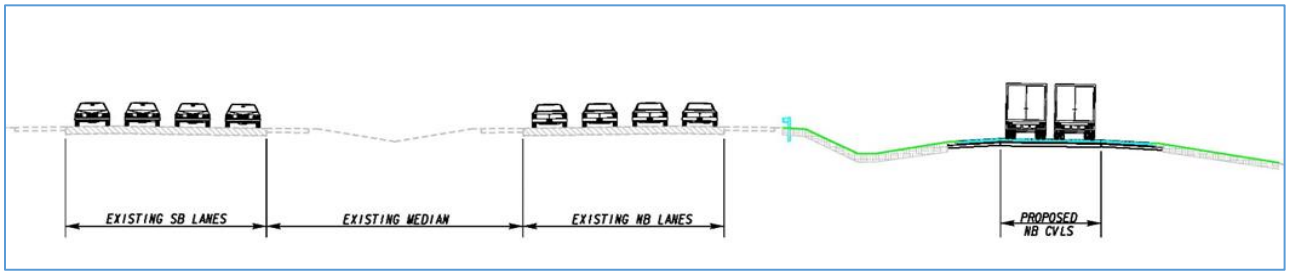


EXHIBIT 2-4: TYPICAL SECTION FAMILY 5

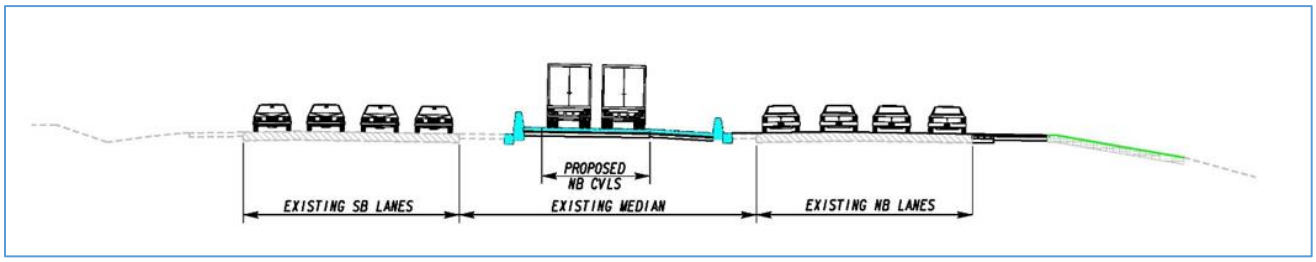
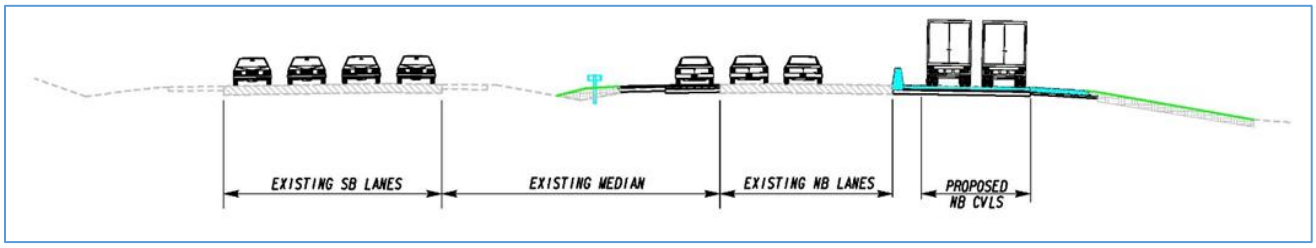


EXHIBIT 2-5: TYPICAL SECTION FAMILY 6



The families of typical sections were evaluated in the Secondary Screening based on construction cost, environmental impacts, operations and performance, ROW impacts, conformance to design criteria and impacts to the public. The environmental impact screening consisted of evaluating approximate impacts to natural, cultural, and social resources. An estimate was made of the approximate number of natural resources (wetlands, streams and protected species), cultural resources (historic resources),[28] and social resources (community features) within the footprint of each typical section family. The results of the secondary screening are presented in (**Exhibit 2-6**). Based on this analysis, Typical Section Families 3 and 6 were recommended for advancement into Tertiary Screening.

[28] No archaeological survey results were available for consideration at the time of the screening.

EXHIBIT 2-6: TYPICAL SECTION FAMILIES CHARACTERISTICS

FAMILIES	SCREENING CATEGORIES					
	PROJECT COST	ENVIRONMENTAL IMPACTS	OPERATIONS AND PERFORMANCE	RIGHT-OF-WAY IMPACTS	CONFORMANCE TO DESIGN CRITERIA	IMPACTS TO THE PUBLIC
Family 3	Good	Good	Good	Fair	Fair	Good
Family 4	Good	Poor	Good	Poor	Good	Fair
Family 5	Poor	Fair	Fair	Fair	Fair	Poor
Family 6	Poor	Good	Poor	Good	Good	Poor

Source: ***Appendix C, Alternatives Development Report***

2.1.1.3 TERTIARY SCREENING

Advancing through the Tertiary Screening process, Concept B3 Typical Sections Families 3 and 6 were further refined to consider connections between the GP and CVLs and how interchange access could be provided.

2.1.1.4 TYPICAL SECTION FAMILY 3 ALTERNATIVES

The Typical Section Family 3 was further refined to create Alternative 3, which involved moving the CVL alignment away from I-75 at the Rumble Road, SR 18, Juliette Road, Johnstonville Road, SR 36, and SR 16 interchanges to avoid conflicts with the existing ramps.

Upon extensive evaluation of Alternative 3, it became apparent that multiple modifications could be made to further improve operations, particularly related to GP-CVL connection and interchange access. While these improvements were certain throughout the majority of the CVL project limits, multiple options were available with the Forsyth area. As such, four variations of Alternative 3 were developed (3A, 3B, 3C, and 3D), all inclusive of the following changes to Alternative 3:

- Reconfigured the CVLs interface with the I-475/I-75 interchange;
- Reconfigured the CVLs interface with the Rumble Road/I-75 interchange;
- Added CVLs egress between Rumble Road and SR 18;
- Relocated CVLs ingress location from north of SR 16 to north of SR 36 in Butts County; and
- Reconfigured the CVLs' interface with the proposed I-75/Bethlehem Road interchange and tie-in of the CVLs into the northbound GP lanes. The separate GP and CVL interchanges at Bethlehem Road were replaced with a combined GP/CVL interchange.

The four alternatives differed from each other within the Forsyth area. During early public outreach efforts, this was a high interest area and variations to Alternative 3 were developed to minimize impacts. Alternative 3A aligned the CVLs as a detached, separate facility along the outside shoulder of the northbound GPs, with significant modifications to the SR 18, Juliette Road, SR 83, and SR 42 interchanges, including removal of ramps, realignment/improvements to local roads (Frontage Road and Benson Ham Road), and a new connector roadway between SR 83 and SR 42. Alternative 3B similarly aligned the CVLs as a detached, separate facility along the outside shoulder of the northbound GPs, however, with considerably less impacts to local traffic patterns via realignment (flyover) of existing

interchange ramps. Alternative 3C realigned the CVLs from the outside shoulder of the northbound GP lanes to the I-75 median. The CVLs cross over the northbound GP lanes on structure south of SR 18 and continue in the median until north of SR 83, where the CVLs would again cross over the northbound GP lanes on structure and resume their alignment along the outside shoulder of the northbound GP lanes. The CVLs bridged over the GP lane exit and entrance ramps to SR 42; therefore, access to SR 42 would not be lost under this alternative. Under this alternative, CVLs would access the northbound GP lanes south of SR 18 onto a collector-distributor (CD) facility, which would continue through the Forsyth area. Exit and entrance to the SR 18, Juliette Road, and SR 83 interchanges would occur from the CD facility. Alternative 3D involved elevating the CVLs on structure above the outside shoulder of the northbound GP lanes. Similar to Alternative 3B, the CVLs would be a detached, separate facility, precluding access to the northbound GP lanes or interchanges.

Alternatives 3A-3D were evaluated using the same parameters used in the Secondary Screening but to a greater level of detail. Only Alternatives 3B and 3C were recommended for advancement as Preliminary Alternatives. Compared to the recommended alternatives, Alternatives 3, 3A, and 3D were recommended for elimination:

- Alternative 3 had a relatively high number of potential impacts to eligible historic resources, did not allow CVL traffic to access the GP lanes through the City of Forsyth, had a relatively high number of residential property displacements, and had substandard inside shoulder width.
- Alterative 3A had a relatively high number of potential impacts to eligible historic resources, had vertical stopping sight distance issues, and was judged to have potential for major public concern within the City of Forsyth due to the impact to local access patterns.
- Alternative 3D had a relatively high construction base cost, had a high potential for visual and audible impacts, and involved difficult construction staging with potential impacts to I-75 traffic during construction. Impacts to the public rated particularly poor for this alternative, based on the potential for impacts and the substantial anticipated impact to existing traffic on I-75 during construction.

2.1.1.5 TYPICAL SECTION FAMILY 6 ALTERNATIVES

The Typical Section Family 6 was further refined to create Alternatives 6A, 6B, 6C, and 6D. These alternatives generally followed the alignments of Alternatives 3A, 3B, 3C, and 3D, however, varied in the typical section location/offset of the CVLs with respect to the existing GP lanes. Specifically, these alternatives widened into the median to replace the GP lane eliminated along the outside (to minimize ROW needed for the CVLs along the outside shoulder of the GP lanes).

The considerations leading to the recommendation of Alternatives 3B and 3C for the Typical Section Family 3 alternatives similarly applied to the Typical Section Family 6 alternatives. Consequently, only Alternatives 6B and 6C were advanced for further secondary screening evaluation.

Outside of Forsyth, Alternatives 6B and 6C entails widening into the median to replace the GP lane eliminated along the outside (to minimize ROW needed for the CVLs along the outside shoulder of the GP lanes). Within Forsyth, Alternative 6B realigns the CVLs similar to Alternative 3B, resulting in the CVLs being on a separate, detached alignment from the I-75 GP lanes. Alternative 6C maintains the core concept of Alternative 3C in Forsyth, with the alignment of the CVLs crossing over northbound I-75 and continuing within the existing I-75 median. Outside of Forsyth, Alternative 6C adapts the narrower

proposed construction footprint enabled by the Typical Section Family 6 concept, which consists of constructing a northbound GP lane in the median of I-75 and eliminating one of the remaining existing I-75 northbound GP lanes, allowing two CVLs to be constructed on the outside shoulder of the northbound GP lanes.

As mentioned, the primary objective of the Typical Section Family 6 was to reduce ROW and environmental impacts. Alternative 6B impacts property and resources within Forsyth at a significantly higher level than Alternative 6C, which uses the existing median for the CVLs to minimize the required widening along the outside shoulder for the NB GP lanes. Thus, Alternative 6B is ineffective at its goal of reducing impacts within the most sensitive segment of the project corridor, and was recommended for elimination from tertiary screening.

2.1.1.6 TERTIARY SCREENING RESULTS

The Tertiary Screening resulted in three alternatives being advanced as Preliminary Alternatives: Alternative 3B, Alternative 3C, and Alternative 6C.

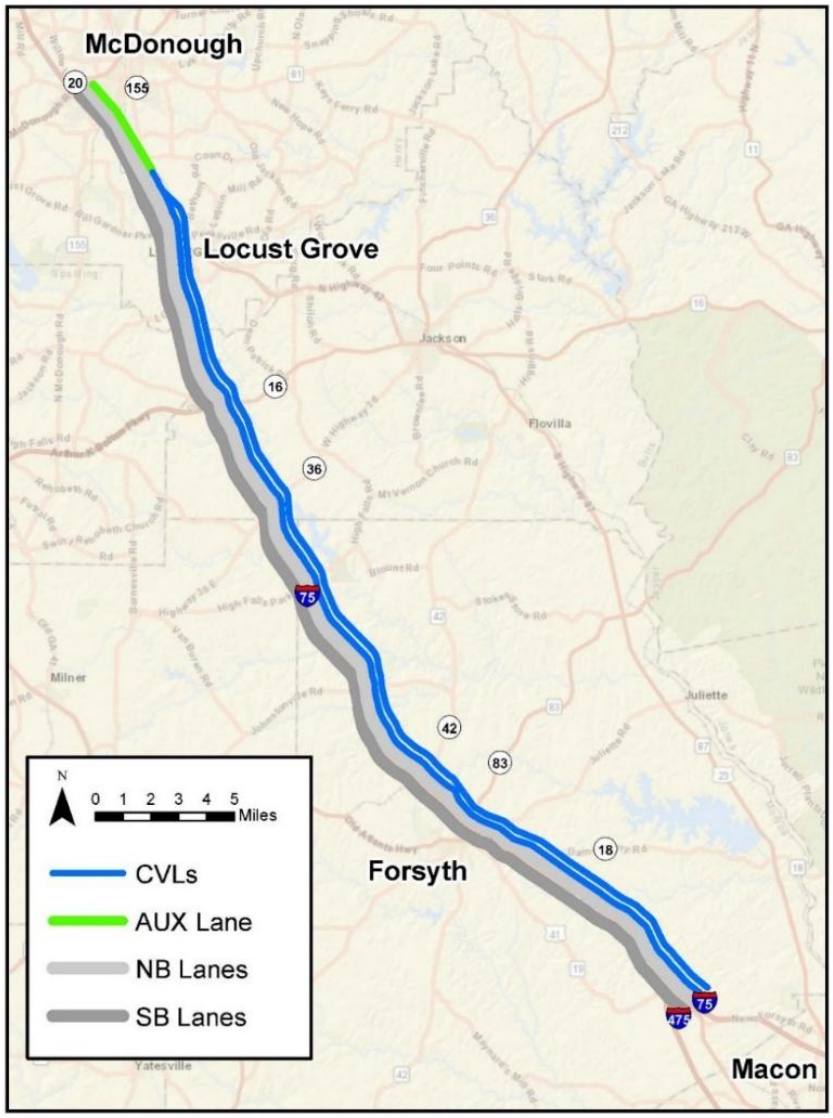
2.1.2 Preliminary Alternatives

All Preliminary Alternatives involve the addition of two northbound CVLs from the I-475 interchange to the SR 155 interchange, with northbound auxiliary lanes beginning south of SR 155 and extending to SR 20. Egress from the CVLs to GP lanes is provided between Rumble Road and SR 18. Ingress from GP lanes to CVLs is provided between SR 36 and SR 16. The differences between the Preliminary Alternatives principally involve the location of the CVLs within the I-75 typical section, especially within the Forsyth area. The following sections describe the Preliminary Alternatives. For additional information, see **Appendix C, Alternatives Development Report**.

2.1.2.1 ALTERNATIVE 3B

Alternative 3B includes the construction of two northbound CVLs along the outside shoulder of the I-75 northbound GP lanes (**Exhibit 2-7**). The CVLs are separated from northbound GP lanes by concrete barriers constructed at the outside shoulder edge of the GP lanes. Various segments of the CVLs detach from the northbound GP lanes to align outside of the existing GP interchanges at Rumble Road, SR 18, Juliette Road, Johnstonville Road, SR 36, and SR 16 to avoid alignment conflict with the existing ramps. GP lane traffic would be maintained throughout the construction of Alternative 3B.

EXHIBIT 2-7: ALTERNATIVE 3B OVERVIEW

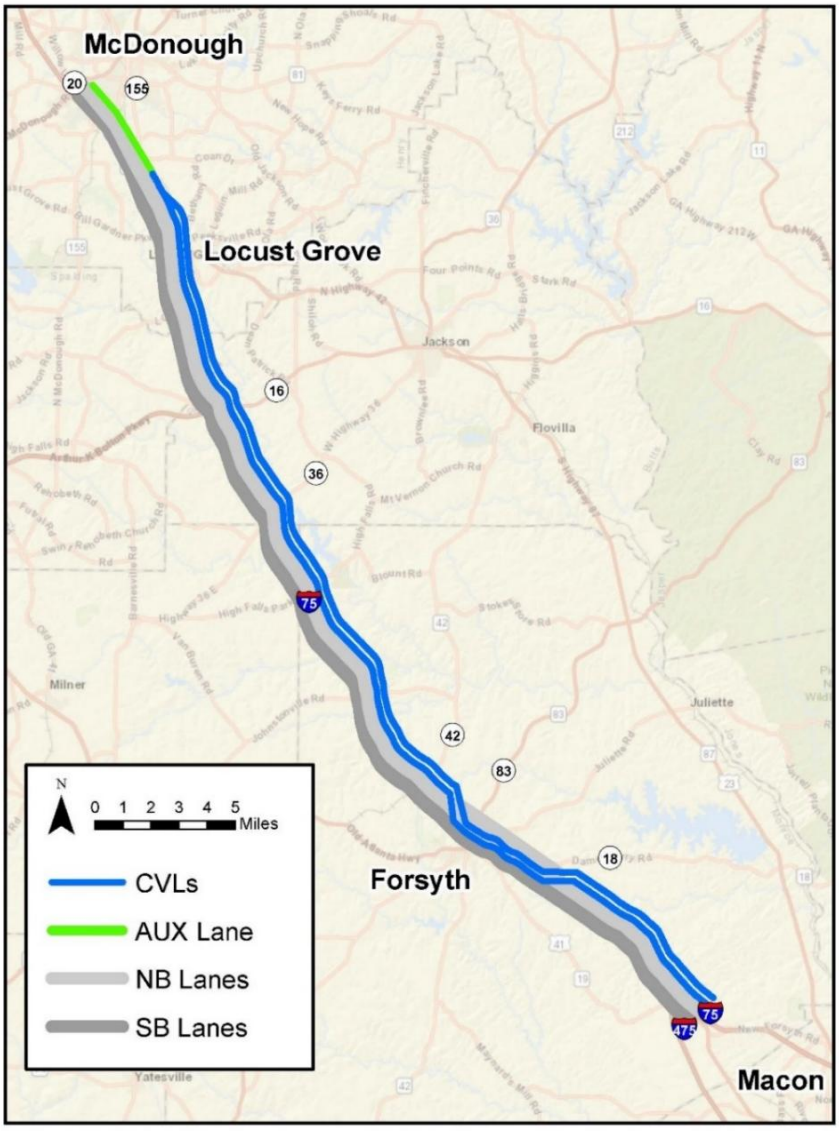


Source: ***Appendix C, Alternatives Development Report***

2.1.2.2 ALTERNATIVE 3C

Alternative 3C includes the construction of two northbound CVLs along the outside shoulder of the I-75 northbound GP lanes (**Exhibit 2-8**). The CVLs are separated from the northbound GP lanes by concrete barriers constructed at the outside shoulder edge of the GP lanes. In comparison to Alternative 3B in the Forsyth area, Alternative 3C proposes to locate the CVLs within the existing median of I-75, thus reducing the required ROW necessary within the more densely developed area of Forsyth. Access to the SR 18 and Juliette Road interchanges is provided by a collector-distributor (CD) facility that combines GP and CVL traffic. CD facilities are roadways parallel to the GP lanes that carry traffic from one interchange to an adjacent interchange. The lanes are separated from the GP lanes by a barrier.

EXHIBIT 2-8: ALTERNATIVE 3C OVERVIEW

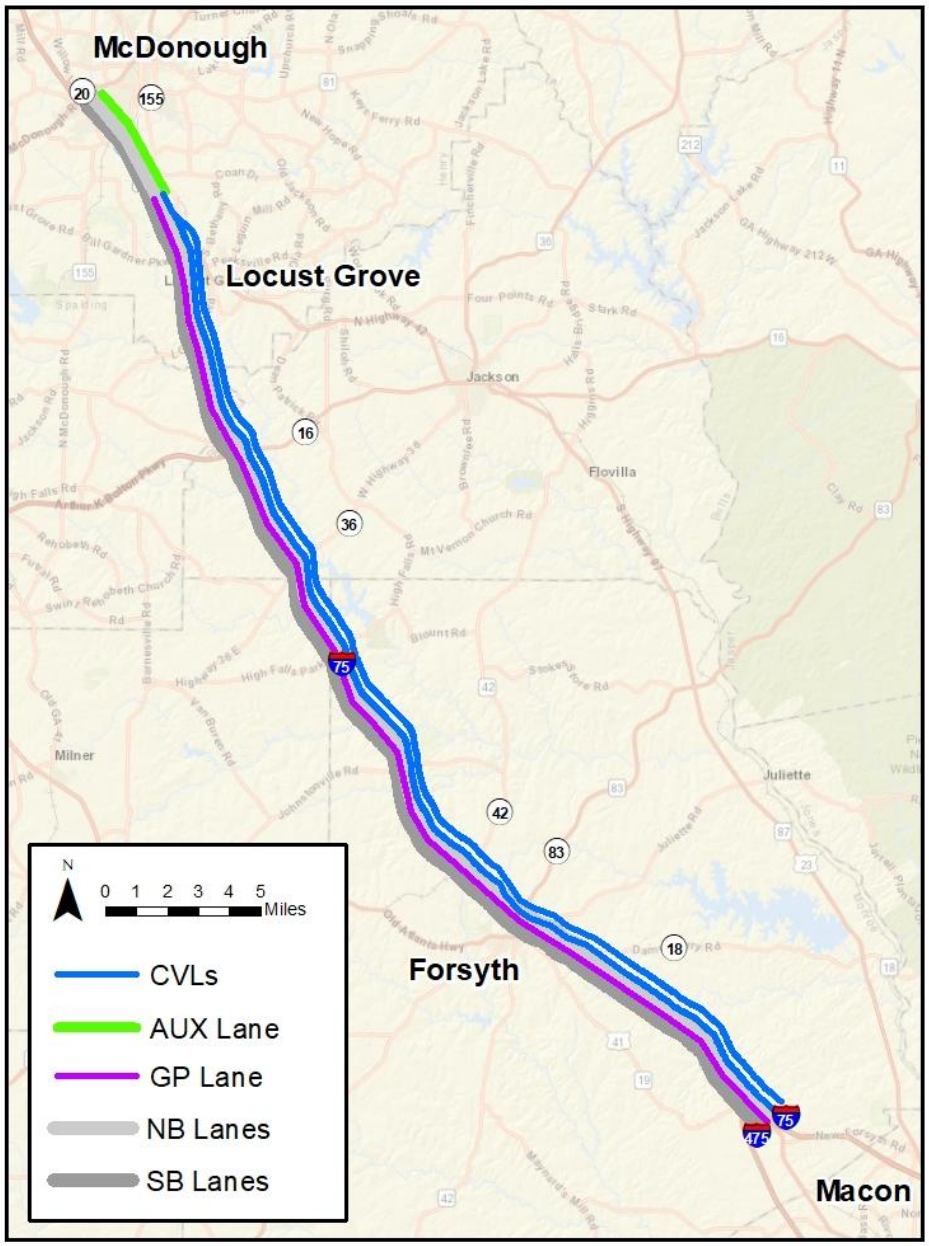


Source: ***Appendix C, Alternatives Development Report***

2.1.2.3 ALTERNATIVE 6C

Alternative 6C includes the construction of a GP lane within the existing median of I-75 throughout the corridor and the loss of one existing northbound GP lane, allowing two CVLs to be constructed on the outside shoulder of the northbound GP lanes (**Exhibit 2-9**). This alternative allows for a reduced footprint through the City of Forsyth, reducing the required ROW and, therefore, impacts to environmental resources.

EXHIBIT 2-9: ALTERNATIVE 6C OVERVIEW



Source: ***Appendix C, Alternatives Development Report***

DESIGN OPTION 1

A minor revision to the design was developed to potentially reduce environmental impacts of the three Preliminary Alternatives. The refinement is referred to as Design Option 1. In the area between the Weigh Station and the Johnstonville Road interchange in Monroe County, the median ranges from 40 feet to 750 feet wide. Design Option 1 relocates the existing I-75 northbound GP lanes into the existing wide median area and aligns the proposed CVLs onto the footprint of the existing I-75 northbound GP lanes. Relocating the I-75 northbound GP lanes into the median requires no additional ROW and re-purposing the existing I-75 northbound GP lanes to accommodate the proposed CVL facility would only require

minimal reconstruction. Design Option 1 eliminates the need for any construction outside the existing I-75 northbound GP lanes through this approximately 2-mile segment. However, because impacts to Waters of the United States (WOTUS) within the I-75 median under Design Option 1 were higher than impacts to waters outside the ROW, Design Option 1 was eliminated from further consideration.

2.1.3 Alternatives Considered and Eliminated

Exhibit 2-10 presents the evaluation of Alternatives 3B, 3C and 6C conducted during the Practicable Alternatives Review (PAR) process between April and August 2020.[29] The PAR process provides an early opportunity for the U.S. Army Corps of Engineers (USACE) to review the impacts of a range of alternatives, in order to determine the Least Environmentally Damaging Practicable Alternative (LEDPA). **Appendix D, Practicable Alternatives Review Presentation** and **Appendix E, Practicable Alternatives Review Report** includes the PAR documentation for this Project. The PAR informs the EA which presents information sufficient to support permitting determinations by the USACE as they relate to the Project. The alternatives were compared based on impacts to key environmental features, community impacts, and cost.

Alternative 3B is not recommended. Alternative 3B would add CVLs to the outside of I-75. Although the cost is the lowest ($797,849,453) of the three alternatives, the impacts are the highest in the following resource areas:

- Highest amount of stream impacts (19,596 LF);
- Highest acreage of impacts to historic resources (38 acres);
- Highest acreage of impacts to the Monroe County Recreational Complex in Forsyth (0.9 acre); and
- Highest number of displacements (6).

Alternative 6C is not recommended. Alternative 6C would shift the location of the GP lanes towards the median to allow the CVLs to be constructed on the outside of the GP lanes with less impact. The cost of this alternative is the highest of the three alternatives ($843,286,744).

- Highest amount of wetland impacts (4.3 acres);
- Lowest acreage of impacts to historic resources (31 acres);
- Highest impact to the public during construction (requires the greatest amount of pavement reconstruction); and
- Highest impacts to communities and neighborhoods (impacts to seven community facilities and neighborhoods).

[29] Note that the nomenclature differs between this section and **Appendix E, Practicable Alternatives Review Report**. Alternatives 3B, 3C, and 6C in this EA are equivalent to Alternatives 1, 2, and 3 in **Appendix E**.

EXHIBIT 2-10: PRELIMINARY ALTERNATIVES COMPARISON

	ALTERNATIVE 3B	ALTERNATIVE 3C (PREFERRED)	ALTERNATIVE 6C
Wetlands Estimated Impacts	**4.2 ac**	**4.2 ac**	**4.3 ac**
Streams Estimated Impacts	**19,596 lf**	**19,208 lf**	**19,292 lf**
Open Waters	**0.05 ac**	**0.05 ac**	**0.05 ac**
Section 106 Resources	6 Recommended Eligible Historic Resources, including 1 displacement **38 ac**	6 Recommended Eligible Historic Resources, including 1 displacement **33 ac**	6 Recommended Eligible Historic Resources, including 1 displacement **31 ac**
Reconstruction/ Construction Staging on Existing I-75	The CVL facility can be readily constructed along the outside edge of the NB GP lanes with minimal impact to existing I-75. Through the City of Forsyth, the CVL facility would require reconfigurations of the existing ramps at the Forsyth interchanges.	The CVL facility can be readily constructed along the outside edge of the NB GP lanes with minimal impact to existing I-75. In the 4 miles though the City of Forsyth, the median location of Alternative 2 minimizes direct conflicts between the CVL facility and existing ramps at the Forsyth interchanges.	Requires more pavement construction. Encroachment of the existing median interferes with future corridor expansion opportunities for GP, freight, or express lane facilities.
Monroe County Recreational Complex	**0.9 ac**	**0.5 ac**	**0.5 ac**
Displacements	Total: **6** Residential: **2** Commercial**: 4**	Total: **5** Residential: **2** Commercial: **3**	Total: **5** Residential: **2** Commercial: **3**
Required ROW	**296 ac**	**276 ac**	**260 ac**
Community/ Neighborhoods	**Assumed Frontage Required:** • Bethany Baptist Church of Macon • Christ United Methodist Church • Monroe County Recreation Complex • Shady Point Apartments • Indian Creek Mobile Home Community (displacements required)	**Assumed Frontage Required:** • Christ United Methodist Church • Unnamed neighborhood park • Monroe County Recreation Complex • Shady Point Apartments • Indian Creek Mobile Home Community (displacements required)	**Assumed Frontage Required:** • CrossOver Ministries • Christ United Methodist Church • Unnamed neighborhood park • Monroe County Recreation Complex • Lane Oaks Farms Neighborhood • Shady Point Apartments • Indian Creek Mobile Home Community (displacement required)
Construction Cost*	**$797,849,453**	**$803,290,597**	**$843,286,744**

Source: Appendix E, Practicable Alternatives Review Report. *Please note that the row related to proposed Design Option 1 has been eliminated from this table since it is no longer under consideration.*
** Cost includes Preliminary Engineering, Developer, ROW, Stipulated Fee, and Design-Build Construction costs as presented in the June 2020 I-75 CVLs Practicable Alternatives Review Report*

2.1.4 Alternatives Advanced

Based on the preliminary evaluation presented above, Alternative 3C was advanced as the Build Alternative. The following sections describe the No-Build and the Build Alternatives.

2.1.4.1 NO-BUILD ALTERNATIVE

The No-Build Alternative provides a baseline for comparing impacts with the Build Alternative. Under the No-Build Alternative, Georgia DOT would take no action to construct the I-75 CVLs. The No-Build Alternative would consist of several important assumptions as follows:

- Construction and the associated adverse and beneficial effects of all other projects in the approved Regional Transportation Plan (RTP) would occur. The NEPA documentation, impacts, mitigation, and construction of those projects would proceed on their respective schedules.
- The adverse effects of the Proposed Project would be avoided, including inconvenience of construction, residential and commercial displacements, and impacts to WOTUS and other environmental resources. However, independent projects in the RTP could impact WOTUS and other resources identified within the I-75 CVLs corridor, subject to independent environmental and permitting requirements where applicable.
- Crash rates throughout the corridor are currently higher than statewide averages. Crashes result in non-recurring delays, which causes unreliable travel times. As traffic volumes increase, travel times are expected to become more unreliable for commuters to regional employment centers and for freight operators and emergency response vehicles using the I-75 corridor.

While this alternative would avoid the adverse effects associated with the Proposed Project implementation, it would not meet the Proposed Project's Need and Purpose to improve safety and mobility as described above. The projected growth in truck traffic would result in increasing delays due to crashes and less reliable travel times. Therefore, the No-Build Alternative would not be feasible as adverse effects to regional mobility would remain in the absence of a Build Alternative to address the Need and Purpose.

The No-Build Alternative will remain under consideration until a final decision is made on the Proposed Project.

2.1.4.2 PREFERRED ALTERNATIVE

Alternative 3C is recommended for advancement as the Preferred Alternative. Alternative 3C would consist of two lanes that extend approximately 38 miles northward along the east side of the I-75 mainline, which then transition to a single auxiliary lane for an additional two miles up to the I-75/SR 155 interchange where trucks can either exit from the I-75 corridor or merge onto the I-75 mainline GP lanes of I-75. A single auxiliary lane is also proposed to be added to the I-75 GP lanes to accommodate the merging trucks beginning at SR 155 and extending up to the I-75/SR 20 interchange approximately 1.0 mile to the north (total project length approximately 41 miles). The project would be constructed within existing roadway ROW, where feasible, and it would end in McDonough, Henry County, Georgia.

Egress from the CVLs to GP lanes to the south of the northern terminus would be provided between Rumble Road and SR 18, south of Johnstonville Road, and south of SR 36. Ingress from GP lanes to

CVLs would be provided between SR 42 and Johnstonville Road, between SR 36 and SR 16, and between SR 16 and Bill Gardner Parkway. The two northbound CVLs would generally be located along the outside shoulder of the I-75 northbound GP lanes. The CVLs would be separated from the northbound GP lanes by concrete barriers constructed along the outside shoulder edge of the GP lanes. South of SR 18, the CVL alignment would be shifted into the existing median of I-75, thus reducing the required ROW necessary within the more densely developed area of the City of Forsyth. North of the SR 83 interchange, the CVLs would flyover the northbound GP lanes to resume the location on the outside shoulder of the northbound GP lanes for the remainder of the corridor. Through Forsyth, access to the interchanges would be provided by a CD facility that would carry GP and CVL traffic. In comparison to the alternatives that were eliminated, Alternative 3C would:

- Minimize overall impacts to WOTUS to a greater extent than in Alternatives 3B and 6C. Additional measures would be applied during environmental documentation and Section 404 permit coordination.
- Require assessments of up to six eligible or potentially eligible historic resources while minimizing the total worst-case physical impacts to a greater extent than possible in Alternative 3B due to the majority of historic resources being located within the City of Forsyth. Consultation with Georgia State Historic Preservation Officer (SHPO) will continue throughout the Project.
- Simplifies maintenance of traffic in the I-75 GP lanes during construction as compared to Alternative 6C.
- Minimize displacements to a greater extent than possible in Alternative 3B.
- Minimize, to a greater extent than possible in Alternatives 3B and 6C, the overall impacts to communities, when both displacements and community/neighborhood impacts are considered.

In addition, Alternative 3C was preferred by the public during outreach at the Tertiary Screening process.

The USACE concurred with Alternative 3C as the preliminary LEDPA on September 2, 2020 (see email in **Appendix I**).

2.1.5 Project Financing and Schedule

The Project is funded through the MMIP, with preliminary design and the NEPA process completion expected by July 2026. The Project would be delivered by a Public Private Partnership (P3), which allows the state to further leverage limited funding sources by allowing private-sector participation in the delivery and financing of the transportation projects. Final design, environmental permitting, and ROW acquisition are expected to be completed by the end of 2027, with construction planned to begin in 2028 and end in 2032.

2.1.6 Capital Cost Estimate

The total project cost is currently estimated at $2.2 billion, including preliminary concept, ROW, and final design/construction. Georgia DOT is procuring a Developer that will enter into a Project Agreement to design, build, finance, and maintain the project. The Developer will be responsible for the final design and construction of the project, as well as bringing its own financing, which will determine the final price,

which is currently estimated at $5.5 billion. Both the $2.2 billion total project cost estimate and the $5.5 billion financed total project cost are the cost in year of expenditure dollars.

2.2 PROJECT EFFECTIVENESS

This section describes the effects of the 2052 No-Build and Preferred Alternatives on total regional travel, travel in the Project corridor, freeway ramp terminal intersections, safety and travel time reliability.

By separating CV traffic from vehicular traffic through construction of CVLs, the Preferred Alternative will increase travel time reliability for freight and passenger vehicles using the I-75 corridor by reducing crashes, especially those between trucks and passenger vehicles.

The purpose of the Proposed Project is to:

- Improve travel time reliability within the I-75 northbound Project corridor;
- Reduce the above-average crash rate that currently exists within the I-75 Project corridor in the northbound direction by limiting interactions between passenger vehicle and truck traffic; and
- Improve operations and logistics throughout the I-75 northbound corridor for freight generators, such as the Port of Savannah and state of Florida, in order to support economic growth and development to maintain the state's economic competitiveness for freight distribution.

2.2.1 Regional Highway System Impacts

The impacts of the Preferred and No-Build Alternatives on the regional highway system were compared for Vehicle Miles Traveled (VMT), Vehicle Hours Traveled (VHT), and total vehicles served (network throughput) (**Exhibit 2-11**). The Preferred Alternative will have a beneficial impact on regional highway systems. The decrease in VHT under the Preferred Alternative indicates reduced congestion, improved mobility, and travel time savings for the traveling public. The increase in VMT along with a decrease in VHT in the 2052 Preferred Alternative reflects the additional highway system capacity provided by the CVLs on I-75.

EXHIBIT 2-11: DESIGN YEAR (2052) REGIONAL HIGHWAY SYSTEM IMPACTS

	AM PEAK PERIOD (7:15-8:15)			PM PEAK PERIOD (4:45-5:45)		
	NO-BUILD	PREFERRED	DIFFERENCE	NO-BUILD	PREFERRED	DIFFERENCE
VMT (miles)	1,277,575	1,277,724	149	1,531,217	1,531,883	666
VHT (hours)	22,739	22,111	-628	27,753	27,052	-701
Total Vehicles Served	103,160	104,804	1,644	124,209	127,911	3,702

Source: I-75 Commercial Vehicle Lanes Interchange Modification Report, GDOT PI No.: 0014203. ARCADIS, May 2023; and Traffic Forecasting Memorandum, I-75 Commercial Vehicle Lanes Project, PI No.: 0014203. ARCADIS, November 30, 2022.

2.2.2 Corridor Highway System Impacts

Compared to the No-Build Alternative, implementation of the Preferred Alternative would provide a slight overall beneficial impact by accommodating increased traffic volumes, decreasing travel time, and increasing speed. Projected peak hour volumes for the highway segments are presented in **Exhibit 2-12.**

EXHIBIT 2-12: DESIGN YEAR (2052) PEAK HOUR TRAFFIC VOLUMES

LOCATION	DIRECTION	AM PEAK PERIOD (7:15-8:15)			PM PEAK PERIOD (4:45-5:45)		
		NO-BUILD	PREFERRED	DIFFERENCE[1]	NO-BUILD	PREFERRED	DIFFERENCE
I-475 south of Zebulon Road	Northbound	1,740	1,786	+3%	2,912	2,928	+1%
	Southbound	2,492	2,521	+1%	2,545	2,584	+2%
I-75 south of Pate Road	Northbound	1,580	1,634	+3%	2,722	2,759	+1%
	Southbound	2,725	2,753	+1%	1,640	1,650	+1%
I-75 north of SR 155	Northbound	5,061	5,204	+3%	4,952	5,135	+4%
	Southbound	5,310	5,367	+1%	6,465	6,551	+1%

Source: I-75 Commercial Vehicle Lanes Interchange Modification Report, GDOT PI No.: 0014203. ARCADIS, May 2023; and Traffic Forecasting Memorandum, I-75 Commercial Vehicle Lanes Project, PI No.: 0014203. ARCADIS, November 30, 2022.

[1] The percent difference is calculated by subtracting the No-Build volume number from the Preferred volume number and dividing the difference by the No-Build volume number.

The Preferred Alternative peak hour volumes in **Exhibit 2-12** are higher than the No-Build Alternative volumes in both directions due to the increased capacity from the northbound CVLs. The increase is greater in the northbound direction compared to the southbound direction. For the Preferred Alternative, the travel times are shown for both the CVLs and GP lanes, as the Preferred Alternative improvements would benefit travelers in both facilities compared to the No-Build Alternative (**Exhibit 2-13**). A slight

increase (or negative reduction) in the southbound travel time of less than 10 seconds is observed in the Preferred Alternative, compared to the No-Build Alternative. This is because the CVLs are not proposed in the southbound direction; therefore, similar southbound travel times are expected between the alternatives.

EXHIBIT 2-13: DESIGN YEAR (2052) PEAK HOUR TRAVEL TIMES (MIN:SEC)

DIRECTION	SCENARIO	FACILITY	AM	REDUCTION*	PM	REDUCTION*
Northbound	No-Build	GP	37:37		38:46	
	Preferred	GP	35:59	1:38 (4.4%)	36:13	2:33 (6.6%)
		CVL	36:28	1:10 (3.1%)	36:48	1:57 (5.1%)
Southbound	No-Build	GP	37:51		37:35	
	Preferred	GP	37:53	-0:02 (-0.1%)	37:43	-0:08 (-0.4%)

**Reduction as compared to travel time in GP lane in No-Build Scenario.*

Source: I-75 Commercial Vehicle Lanes Interchange Modification Report, GDOT PI No.: 0014203. ARCADIS, May 2023; and Traffic Forecasting Memorandum, I-75 Commercial Vehicle Lanes Project, PI No.: 0014203. ARCADIS, November 30, 2022.

The improvements under the Preferred Alternative result in an increase in speed and decrease in travel time for northbound travelers in both the CVL and GP lanes. In addition, the improvement in travel time in the GP lanes are greater than those in the CVL lanes in both the AM and PM peaks. As detailed in **Section 1.3.6**, these travel time savings result in a benefit of $215 Million over the design life of the project.

Currently, Express Bus service is provided only in the segment of the Project Area between SR 155 and SR 20. The addition of the northbound auxiliary lane to the GP lanes in this segment under the Preferred Alternative may reduce congestion in the GP lanes through this segment, indicated by the reduced northbound travel times in **Exhibit 2-13,** and have a beneficial effect on transit. At present, there are no plans to provide transit in the future south of SR 155; however, the removal of trucks from the GP lanes under the Preferred Alternative would reduce the potential for crashes and for delays associated with crashes. The removal would benefit all users of the GP lanes, including any future transit users.

2.2.3 Intersection Impacts

The Preferred Alternative will impact intersections by changing Level of Service (LOS). At all interchanges, CVs will have to merge into the GP lanes before exiting the freeway. Entrance and exit ramps between the GP lanes and CVLs will be from the right side of the GP lanes. No improvements are proposed for the ramp terminal intersections or arterial roadways under the Preferred Alternative.

Intersection traffic operational analysis for the 69 total highway ramp terminal intersections in the project study area showed five will have a change in LOS in the design year (2052) with the Preferred Alternative showing a worse LOS than the No-Build Alternative. Two of these intersections are unsignalized, and the

difference in LOS was attributed to the difficulty in analyzing unsignalized intersections with Synchro[30] Details for the remaining three intersections are shown in **Exhibit 2-14**.

EXHIBIT 2-14: INTERSECTION ANALYSIS, LEVEL OF SERVICE (AVERAGE DELAY, SECONDS)

INTERCHANGE	INTERSECTION	EXISTING YEAR 2018		DESIGN YEAR 2052			
				AM		PM	
		AM	PM	NO-BUILD	PREFERRED	NO-BUILD	PREFERRED
SR 16	Southbound Ramps	B (14.6)	C (23.1)	C (22.7)	C (23.4)	C (24.8)	D (44.6)
	Northbound Ramps	B (15.3)	B (17.5)	C (21.1)	C (21.5)	D (54.7)	E (64.2)
	Shell Driveway	A (6.4)	A (7)	B (15.0)	B (14.4)	B (19.2)	C (29.4)

Source: I-75 Commercial Vehicle Lanes Interchange Modification Report, GDOT PI No.: 0014203. ARCADIS, May 2023; and Traffic Forecasting Memorandum, I-75 Commercial Vehicle Lanes Project, PI No.: 0014203. ARCADIS, November 30, 2022.

At the SR 16/Southbound and SR 16/Northbound ramp intersections, the River Park Development of Regional Impact (DRI),[31] which was included in the traffic projections, has recommended the addition of turn lanes in 2025, which will provide an acceptable LOS through the first three phases of their development. In 2035, more extensive changes to the interchange will be required. At the SR 16/Shell Driveway intersection, the River Park DRI has recommended full signalization and the addition of turn lanes in 2025. DRIs are further discussed in **Appendix F-1, Community Impacts Assessment**.

The Intersection Control Evaluation (ICE) includes an intersection pre-screening determination that an additional 10 intersections would be impacted by the Project improvements. Intersections would not be substantially altered by the Preferred Alternative improvements; consequently, ICE waivers were requested in lieu of a full ICE study.

2.2.4 Predictive Crash Analysis

The Preferred Alternative improvements will result in beneficial impacts by reducing 353 PDO crashes and 46 fatality and injury crashes compared to the No-Build Alternative. The safety improvements will result in reduced delays due to crashes and a more reliable travel time.

The results of the predictive crash analysis for the No-Build and Preferred Alternatives for the design year are shown in **Exhibit 2-15.**

[30] Synchro is a software that models intersection operations.
[31] The River Park facility is a major mixed use development project currently under construction. The build out is proposed to consist of up to 20 million square feet (SF) in industrial and one (1) million SF of commercial facilities, including a hotel.

EXHIBIT 2-15: PREDICTIVE CRASH ANALYSIS FOR THE DESIGN YEAR (2052)

FACILITY	SEGMENT TYPE	CRASH SEVERITY					
		PDO		FATAL AND INJURY		TOTAL	
		NO-BUILD	PREFERRED	NO-BUILD	PREFERRED	NO-BUILD	PREFERRED
GP Lanes	Freeway	1,780	1,361	363	295	2,143	1,656
	Speed Change Entrance	33	28	8	7	41	35
	Speed Change Exit	172	157	40	36	212	193
	Total	1,985	1,546	411	338	2,396	1,884
CVLs	Freeway		80		26		106
	Speed Change Entrance		1		0		1
	Speed Change Exit		5		1		6
	Total		86		27		113
Total Crashes		1,985	1,632	411	365	2,396	1,997

Source: I-75 Commercial Vehicle Lanes Interchange Modification Report, GDOT PI No.: 0014203. ARCADIS, May 2023; and Traffic Forecasting Memorandum, I-75 Commercial Vehicle Lanes Project, PI No.: 0014203. ARCADIS, November 30, 2022.

2.2.5 Travel Time Reliability

The Preferred Alternative will result in a beneficial impact of reduced delay time caused by northbound crashes in the northbound direction, but not in the southbound direction where CVLs are not proposed. The reduction is more pronounced at the high crash location, where delay times are reduced up to 27.8 percent in the PM peak in the CVLs. At the low crash location, the reduction in delay time is more effective in the GP lanes than the CVLs, with a reduction of up to 8.6 percent in the PM peak (**Exhibit 2-16** and **Exhibit 2-17**).

The Preferred Alternative will result in beneficial impact to travel time reliability as compared to the No-Build Alternative. **Exhibit 2-18** and **Exhibit 2-19** present Preferred and No-Build Alternative 2052 AM and PM buffer indices and planning time indices for high crash and low crash locations. Travel was characterized as unreliable or reliable for the northbound direction of I-75 only, as delays in the southbound direction due to crashes in the northbound direction were shown to be minimal. The Preferred Alternative improvements result in reliable travel in both the GP lanes and CVLs as compared to the No-Build Alternative, with the CVLs showing the highest reliability. The reliability analysis shows that, at the low crash location, the No-Build and Preferred Alternative travel is reliable for both the AM and PM peaks. At the high crash location, travel is unreliable for both the AM and PM peaks for the No-Build Alternative.

EXHIBIT 2-16: DESIGN YEAR (2052) CRASH DELAYS FOR HIGH CRASH LOCATION (MIN:SEC)

DIRECTION	SCENARIO	FACILITY	AM	REDUCTION*	PM	REDUCTION*
Northbound	No-Build	GP	47:28		50:52	
	Preferred	GP	42:26	5:03 (10.6%)	44:48	6:04 (11.9%)
		CVL	36:24	11:04 (23.3%)	36:45	14:07 (27.8%)
Southbound	No-Build	GP	37:53		37:34	
	Preferred	GP	37:51	0:02 (0.1%)	37:40	-0:06 (-0.3%)

**Reduction as compared to travel time in GP lane in No-Build Scenario.*

Source: I-75 Commercial Vehicle Lanes Interchange Modification Report, GDOT PI No.: 0014203. ARCADIS, May 2023; and Traffic Forecasting Memorandum, I-75 Commercial Vehicle Lanes Project, PI No.: 0014203. ARCADIS, November 30, 2022.

EXHIBIT 2-17: DESIGN YEAR (2052) CRASH DELAYS FOR LOW CRASH LOCATION (MIN:SEC)

DIRECTION	SCENARIO	FACILITY	AM	REDUCTION*	PM	REDUCTION*
Northbound	No-Build	GP	38:14		40:00	
	Preferred	GP	36:13	2:00 (5.2%)	36:32	3:28 (8.6%)
		CVL	36:29	1:45 (4.6%)	36:50	3:10(7.9%)
Southbound	No-Build	GP	37:52		37:35	
	Preferred	GP	37:49	0:04 (0.2%)	37:38	-0:03 (-0.1%)

**Reduction as compared to travel time in GP lane in No-Build Scenario.*

Source: I-75 Commercial Vehicle Lanes Interchange Modification Report, GDOT PI No.: 0014203. ARCADIS, May 2023; and Traffic Forecasting Memorandum, I-75 Commercial Vehicle Lanes Project, PI No.: 0014203. ARCADIS, November 30, 2022.

EXHIBIT 2-18: DESIGN YEAR (2052) RELIABILITY FOR HIGH CRASH LOCATION

PEAK HOUR	SCENARIO	FACILITY	BUFFER TIME (BUFFER INDEX*)	PLANNING TIME INDEX**	RELIABILITY
AM	No-Build	GP	9:47 (26%)	1.34	**Unreliable**
	Preferred	GP	6:29 (18%)	1.20	**Reliable**
		CVL	0:00 (0%)	1.03	**Reliable**
PM	No-Build	GP	12:01 (31%)	1.44	**Unreliable**
	Preferred	GP	8:42 (24%)	1.27	**Reliable**
		CVL	0:00 (0%)	1.04	**Reliable**

**Buffer Index is the "cushion", expressed as a percentage of free-flow travel time, that travelers must add to their average travel time to account for delays and ensure on-time arrival.*

***Planning Time Index is the ratio of the total travel time that travelers must plan for to ensure on-time arrival, including typical and unexpected delays (worst-case travel time), and free-flow travel time.*

Source: I-75 Commercial Vehicle Lanes Interchange Modification Report, GDOT PI No.: 0014203. ARCADIS, May 2023; and Traffic Forecasting Memorandum, I-75 Commercial Vehicle Lanes Project, PI No.: 0014203. ARCADIS, November 30, 2022.

EXHIBIT 2-19: DESIGN YEAR (2052) RELIABILITY FOR LOW CRASH LOCATION

DIRECTION	SCENARIO	FACILITY	BUFFER TIME (BUFFER INDEX*)	PLANNING TIME INDEX**	RELIABILITY
AM	No-Build	GP	0:45 (2%)	1.08	**Reliable**
	Preferred	GP	0;22 (1%)	1.03	**Reliable**
		CVL	0:00 (0%)	1.03	**Reliable**
PM	No-Build	GP	1:10 (3%)	1.13	**Reliable**
	Preferred	GP	0:22 (1%)	1.03	**Reliable**
		CVL	0:00 (0%)	1.04	**Reliable**

**Buffer Index is the "cushion", expressed as a percentage of free-flow travel time, that travelers must add to their average travel time to account for delays and ensure on-time arrival.*

***Planning Time Index is the ratio of the total travel time that travelers must plan for to ensure on-time arrival, including typical and unexpected delays (worst-case travel time), and free-flow travel time.*

Source: I-75 Commercial Vehicle Lanes Interchange Modification Report, GDOT PI No.: 0014203. ARCADIS, May 2023; and Traffic Forecasting Memorandum, I-75 Commercial Vehicle Lanes Project, PI No.: 0014203. ARCADIS, November 30, 2022.

2.2.6 Cost Benefit Analysis

The Preferred Alternative will have a present-day operational benefit of $214,935,044. Operational benefits are generated from time savings and reduction in vehicle operating costs due to reduced travel time. The No-Build Alternative will provide no operational benefits.

The Preferred Alternative will have a present-day reliability benefit of $346,211,628. Reliability benefits are similar to operational benefits, in that they are calculated based on time savings and reduction in vehicle operating costs. While operational benefits are calculated from average time savings, reliability benefits also consider the buffer time savings discussed in **Section 1.2.3**. Buffer time is the additional time that travelers must plan for to arrive on time on the heaviest traffic days, those days represent only 5 percent of travel days (95th percentile). The No-Build Alternative will provide no reliability benefits.

The Preferred Alternative will have a present-day safety benefit of $1,188,986,000. Safety benefits are generated from reduction in costs (using crash costs provided in **Section 1.2.2**) associated with crashes, as shown in **Exhibit 2-20**. The No-Build Alternative will provide no safety benefits.

EXHIBIT 2-20: SAFETY BENEFITS DUE TO PREFERRED ALTERNATIVE

YEAR	SCENARIO	CRASH SEVERITY		REDUCTION IN CRASHES*		MONETARY VALUE		
		PDO	FATAL AND INJURY	PDO	FATAL AND INJURY	PDO	FATAL AND INJURY	TOTAL BENEFITS
Open Year (2032)	No-Build	1,311	300	247	37	$6,770,400	$44,828,000	$51,598,400
	Preferred	1,064	263					
Design Year (2052)	No-Build	1,985	411	353	46	$9,664,200	$57,636,000	$67,300,200
	Preferred	1,632	365					

**Reduction in crashes from No-Build to Preferred Alternative*

Source: I-75 Commercial Vehicle Lanes Interchange Modification Report, GDOT PI No.: 0014203. ARCADIS, May 2023; and Traffic Forecasting Memorandum, I-75 Commercial Vehicle Lanes Project, PI No.: 0014203. ARCADIS, November 30, 2022.

Total design life benefits, including operational, reliability and safety benefits, of the Preferred Alternative are $1,750,132,672. Preliminary engineering, ROW, construction, and utility costs are estimated at $1,195,100,000, for a benefit-cost ratio of 1.46. The design life benefits of the No-Build Alternative are zero.

3. ENVIRONMENTAL CONSEQUENCES

This chapter describes the affected environment; environmental consequences; and avoidance, minimization, and mitigation of Project impacts to resources. It provides information on the affected environment and environmental consequences as it relates to: land use; community facilities, neighborhoods, and cities; children's health; economics; historic and archaeological resources; hazardous waste and materials; air quality; noise; water resources; ecosystems and construction. The following resources are not being considered due to the limited potential for impacts: coastal barriers, coastal zones, prime farmland, wild and scenic rivers, and energy resources. This determination was achieved during early coordination with agencies and stakeholders (located in Appendix I). This chapter also presents analyses and comparisons of the No-Build Alternative and Preferred Alternative to identify **direct effects** of the Project on resources identified in the study area. In addition, this chapter will identify measures for avoiding, minimizing, or mitigating adverse temporary or permanent impacts of the Project.

3.1 LAND USE

This subsection presents the study methodology and analyses of the affected environment and environmental consequences for land use. Discussions on the potential impacts of the No-Build and Preferred Alternative on land use and future growth are presented. Also provided are any avoidance, minimization, and mitigation measures that were or will be implemented as a result of potential impacts by the Preferred Alternative on land use and future growth.

3.1.1 Methodology

A summary of the methodology is presented in **Exhibit 3-1** and detailed information is found in **Appendix F-1, Community Impacts Assessment**.

The Land Use Local Study Area consists of a 1.5-mile wide corridor on each side of I-75. This width was established based on interviews with local land use planners to account for effects on land use due to the Project as well as the Project's effects on development trends. Within the Land Use Local Study Area, land converted for transportation uses was quantified by land use category.

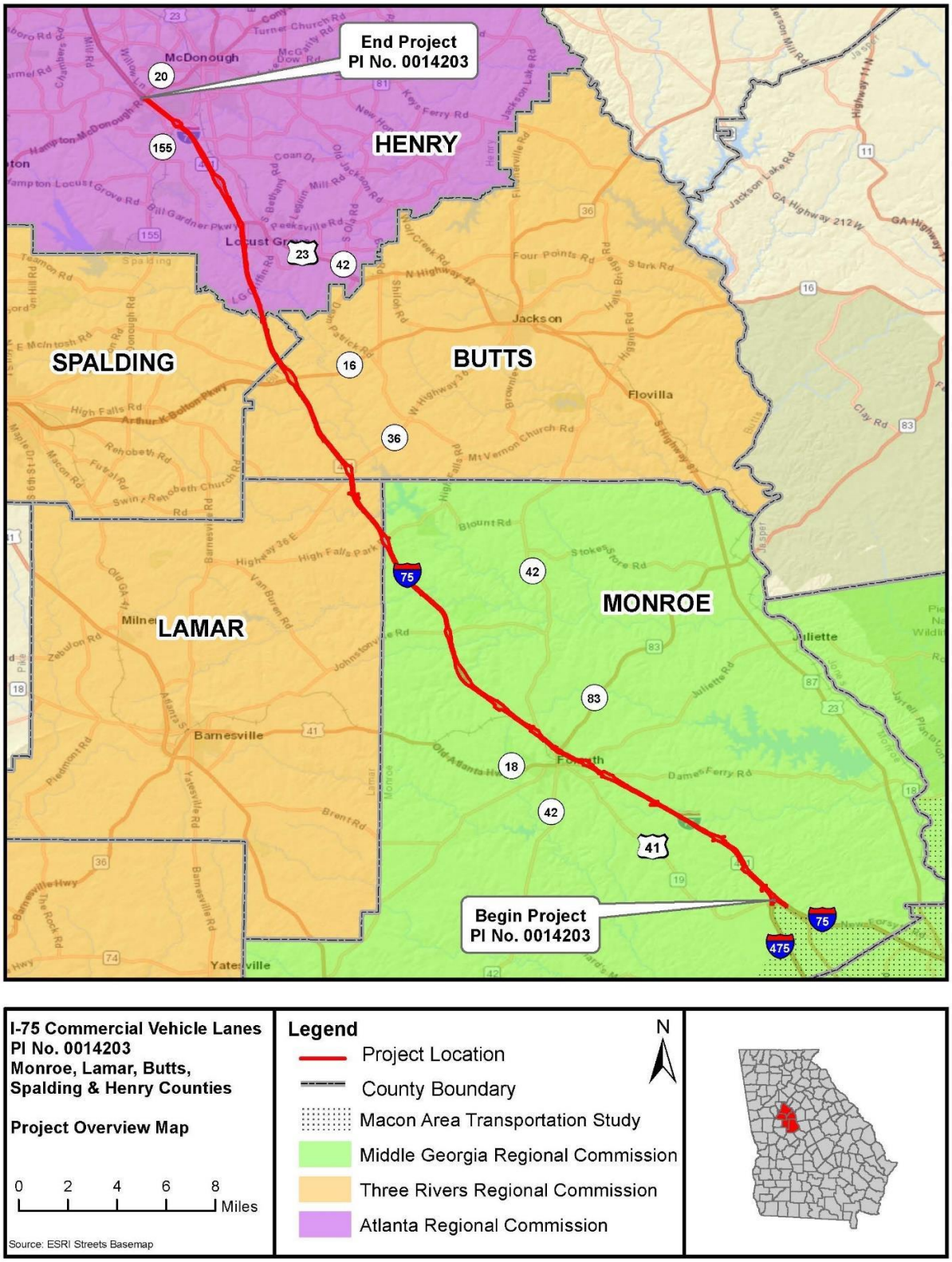
A Land Use Regional Study Area, consisting of the five counties through which the Project passes (**Exhibit 3-2**), was also evaluated for the Project. Data from the three land use planning organizations, the Middle Georgia Regional Commission (MGRC), Three Rivers Regional Commission (TRRC), and the ARC, as well as the five counties and municipalities of Forsyth, Locust Grove, and McDonough, were assessed. Existing and future land use information is based on the review of community planning documents and conducting interviews with local planning officials. Land use data sources from the five counties included geographic information systems (GIS), tax assessor, and comprehensive plans. Planning, public works, and community/economic development staff from the regional commissions, counties, and municipalities affected by the Project participated to provide insights about land use trends.

More information on regional land use planning can be found in **Appendix F-1, Community Impacts Assessment**. The land use and transportation elements of comprehensive plans were reviewed for each jurisdiction.

EXHIBIT 3-1: LAND USE EVALUATION METHODOLOGY

DATA	DESCRIPTION OF ANALYSIS
Land Use Change	• Information and predictions taken from planning documents and interviews with local planning officials in the Project corridor • Planning, public works, and community development staff provided information about land use trends and planning • Interviews conducted through Land Use Questionnaire per Georgia DOT OES guidance
Project Effects on Land Use	• Evaluated within Land Use Local and Regional Study Area • Effects on land use considered against No-Build and Preferred Alternative • Evaluated land use changes as a result of ROW and easement acquisition • Threshold for land use impact was defined as land or easement acquisition converting land from current use to transportation use

EXHIBIT 3-2: LAND USE REGIONAL STUDY AREA



SOURCE: MGRC, TRRC, ARC, GEORGIA DOT, ESRI

3.1.2 Affected Environment

This section describes existing land uses in the Land Use Local and Regional Study Areas, trends in land use along the I-75 corridor, and local and regional land use policies.

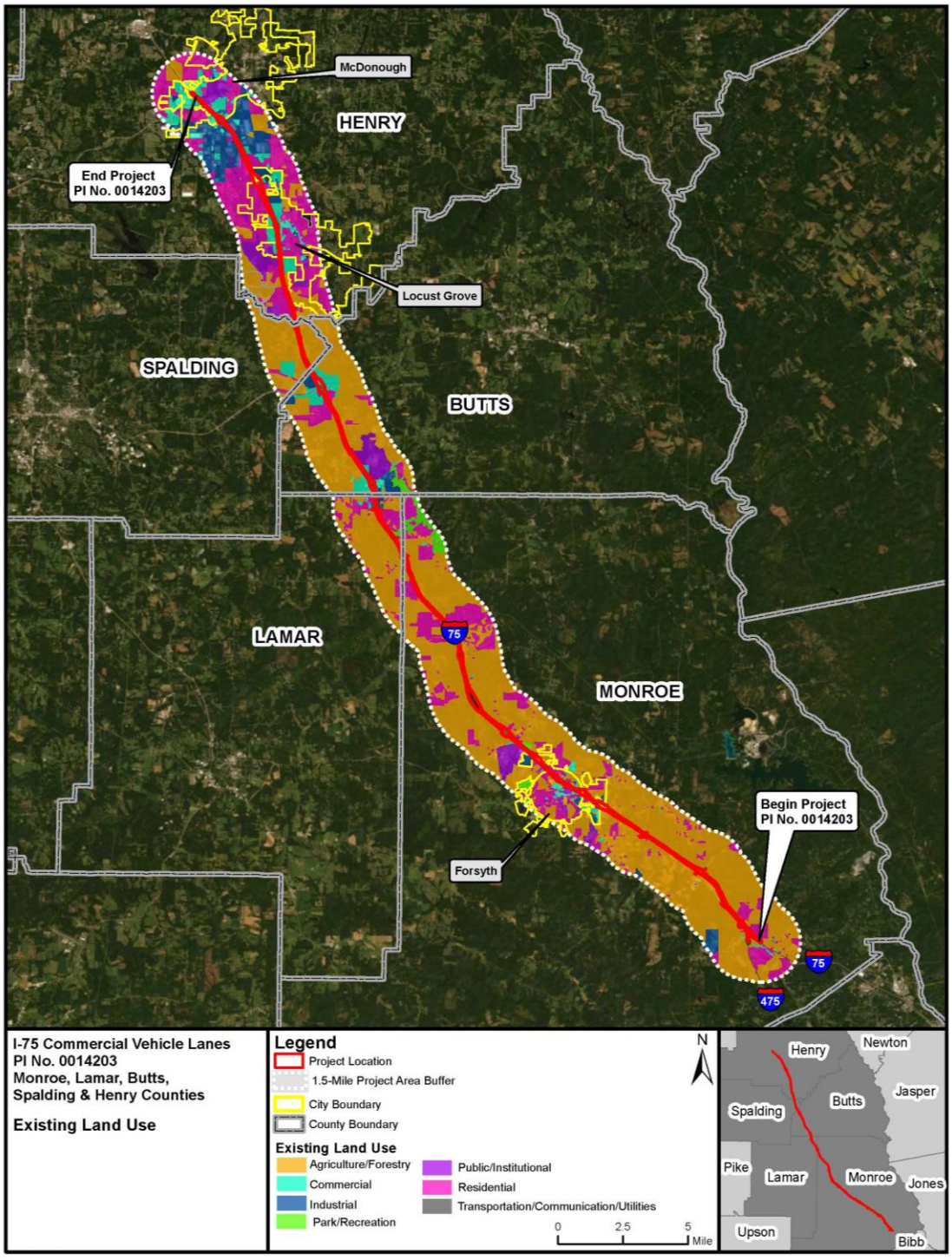
3.1.2.1 EXISTING LAND USE

Land uses within the Land Use Local Study Area are shown in **Exhibits 3-3 and 3-4**. The predominant existing land uses within the 41-mile Land Use Local Study Area are agricultural, forested, and undeveloped at 61 percent. Residential is the next highest land use at 24.2 percent. Industrial, commercial, public/institutional, and park/recreational are on the lower end of land use at between 1 percent and 6 percent. Transportation, communications, and utilities comprise less than 1 percent of land use. For more information on land use types, see **Appendix F-1**, and **Exhibit 3-3**.

EXHIBIT 3-3: LAND USES BY PERCENTAGE WITHIN THE LOCAL STUDY AREA

LAND USE	ALL COUNTIES	MONROE	LAMAR	BUTTS	SPALDING	HENRY
Agriculture/ Forestry/ Undeveloped	61.0	76.4	77.4	68.0	92.0	12.0
Residential	24.2	16.3	18.6	7.1	4.1	54.0
Industrial	5.8	1.4	1.8	6.1	-	16.5
Commercial	5.5	1.4		9.1	3.9	13.1
Public/Institutional	2.2	2.5	1.2	8.1	-	3.7
Park/Recreation	1.2	1.8	1.0	1.6	-	-
Transportation/ Communications/ Utilities	0.2	0.1	-	-	-	0.6

EXHIBIT 3-4: LAND USES WITHIN THE LAND USE LOCAL STUDY AREA



Source: Monroe County Tax Assessor (2020), Lamar County Tax Assessor (2020), Butts County Tax Assessor (2020), Spalding County Tax Assessor (2020), Henry County Tax Assessor (2020)

The Regional Study Area land uses show some of the same trends noted in the Local Study Area (**Exhibit 3-5**). Agriculture/forested land uses in the southern counties of Monroe, Lamar, and Butts give way to

residential land uses in the northern counties of Spalding and Henry. Commercial and industrial land uses within the Regional Study Area are less prevalent than within the Land Use Local Study Area, indicating that these land uses are more likely to be near I-75.

EXHIBIT 3-5: LAND USES BY PERCENTAGE WITHIN THE REGIONAL STUDY AREA

LAND USE	ALL COUNTIES	MONROE	LAMAR	BUTTS	SPALDING	HENRY
Agriculture/ Forestry/ Undeveloped	71.6	89.2	72.2	78.4	53.5	59.3
Residential	16.7	7.7	9.8	10.4	36.3	23.0
Industrial	1.1	0.1	1.6	2.2	-	2.2
Commercial	3.4	0.2	12.3	4.5	2.8	1.6
Public/Institutional	2.2	1.1	0.2	0.7	7.4	2.2
Park/ Recreation	0.6	0.4	0.2	0.2	-	1.7
Transportation/ Communications/ Utilities	4.4	2.4	3.6	3.6	-	10.4

3.1.2.2 LOCAL LAND USE PLANS AND POLICIES

In accordance with state law, Official Code of Georgia Annotated (O.C.G.A.) § 36-66-1 (2009) "The Zoning Procedures Law," local governments are responsible for future land use planning and zoning within their respective incorporated limits. Therefore, existing and future land use plans were evaluated to identify development trends in the Land Use Local Study Area, which includes the Cities of Forsyth, Locust Grove and McDonough and portions of unincorporated Monroe, Lamar, Butts, Spalding and Henry counties. The comprehensive plans were similar in expressing a desire to promote high quality residential growth while allowing commercial and industrial growth in certain areas. In all cases, the importance of the I-75 corridor was recognized for future employment centers. (**Exhibit 3-6**)

EXHIBIT 3-6: SUMMARY OF COUNTY COMPREHENSIVE PLANS WITHIN THE LAND USE REGIONAL STUDY AREA

COUNTY	COMPREHENSIVE PLAN
Monroe County and Forsyth	Monroe County and the cities of Forsyth and Culloden Joint Comprehensive Plan 2022:[32] • Goals for economic development, housing, transportation, community services, natural and cultural resources, and land use. • Designates areas adjacent to I-75 as a Highway Corridor, with commercial land uses and high density residential envisioned at the four interchanges that serve Forsyth.
Lamar County	Lamar County Comprehensive Plan, 2019:[33] • Establishes the land use vision for the county. • Designates the northeast portion of the county adjacent to I-75 as the I-75 Corridor Development Area. This area is home to several industrial parks and is seen as more suited for commercial and industrial development than residential growth. The area is anticipated to accommodate new business growth in existing industrial parks and in greenfield sites.
Butts County	Butts County Comprehensive Plan, 2022:[34] • Creates broad policies to guide land use and rezoning as the County evolves in the areas of transportation, housing, parks and other public facilities, natural resources and historic resources. • Includes the following community goals: housing, economic development, natural and cultural resources, community facilities and services, land use, transportation, and intergovernmental coordination. • Encourages transportation, distribution, and logistics industries. • The Plan shows the I-75 corridor as including Highway Activity Center, Rural Activity Center, Suburban Residential, Institutional Campus and Industrial/Commercial designations. Highway Activity Centers are envisioned to function as regional focal points and are designed to accommodate commercial uses that serve multiple neighborhoods, as well as the greater regional area.
Spalding County	Spalding County 2022 Comprehensive Plan:[35] • Serves as the vision and policy guide for decisions about the development of unincorporated Spalding County through 2037. • Creates broad policies to guide land use and rezoning as the County evolves in the areas of transportation, housing, parks and other public facilities, natural resources, and historic resources. • Recommends a campus-style business or industrial park with light industrial, commercial, or mixed-use at the Jenkinsburg Road overpass of I-75.

[32] Monroe County and the Cities of Forsyth and Culloden 2022 Joint Comprehensive Plan Update. Accessed from https://www.dca.ga.gov/sites/default/files/monroeco_jointcompplan_adopted_10.12.22.pdf.
[33] Lamar County Comprehensive Plan, Embracing the Future 2019-2039. Accessed from https://www.dca.ga.gov/sites/default/files/lamar_co_plan_update_2019.pdf
[34] Butts County 2022 – 2042 Comprehensive Plan. Accessed on July 28, 2023. Accessed from https://www.dca.ga.gov/sites/default/files/butts_county_comprehensive_plan_2022-2042_adopted.pdf.
[35] Spalding County Comprehensive Plan 2022-2042. Accessed from https://www.dca.ga.gov/sites/default/files/spalding_county_comprehensive_plan_2022-2042_adopted_with_resolutions.pdf.

COUNTY	COMPREHENSIVE PLAN
Henry County and the Cities of Locust Grove and McDonough	The Henry County/Cities Joint Comprehensive Plan, 2018:[36] • Identifies the I-75 corridor as an area that is projected to change and intensify, as it is considered to likely experience rapid industrial development in the near future. The Plan recognizes that one development policy does not fit the character of all locations in this diverse county and divides the county into Character Areas with specific strategies and policies for each. • The I-75 corridor travels through several Character Areas including Suburban Residential, Industrial, Mixed-Use, and Regional Activity Center. Regional Activity Centers are large-scale vibrant mixed-use areas that serve as regional destinations for employees and shoppers. Along I-75, there is a Henry Global Gateway encompassing the cities of Locust Grove and McDonough, which is recognized as the main employment center of the county. South and north of the Henry Global Gateway along I-75, Henry County envisions Activity centers. These are intended to be the main retail and commercial districts outside of the cities of Locust Grove and McDonough.

3.1.2.3 REGIONAL LAND USE PLANS AND POLICIES

Regional land use policies are the responsibility of both the Regional Planning Commissions (RPCs) and Metropolitan Planning Organizations (MPOs). Monroe County is within the MGRC, Lamar, Butts, and Spalding Counties are within the TRRC, and Henry County is within the ARC. The ARC is also an MPO encompassing a 20-county Atlanta Metropolitan Region, which includes Henry County and portions of Spalding County. The policies of the RPCs with regards to growth in the Land Use Regional Study Area are described in **Appendix F-1, Community Impacts Assessment**, but in general are consistent with the policies of the counties and cities in promoting sustainable economic development.

3.1.3 Environmental Consequences

3.1.3.1 LAND USE IMPACTS RELATED TO RIGHT OF WAY ACQUISITION

The following subsections describe the land use types that would be converted to transportation use by the Preferred Alternative and No-Build Alternative as well as how compatible and consistent the Project would be with local land use plans and policies. The Preferred Alternative would impact land use through conversion of 344.1 acres of various land uses to transportation use. The Preferred Alternative would also have effects on land use through facilitated development, primarily near the interchanges.

Impacts of the No-Build Alternative

Under the No-Build Alternative, Georgia DOT would take no action to construct the I-75 CVLs. The No-Build Alternative would consist of several projects that will be implemented within the next 10 years independent of the Proposed Project. These projects would have their own NEPA documentation, impacts, mitigation, and schedule:

- SR 155 widening from I-75 to SR 42/US 23 (PI No. 0007856) and from I-75 to Bill Gardner Parkway (PI No. 0015284);
- I-75 at CR 312/Bethlehem Road interchange (PI No. 0017182);

[36] Henry County with Cities of Hampton, Locust Grove, and McDonough Comprehensive Plan Update 2018. Accessible from: https://www.dca.ga.gov/sites/default/files/2018.12.10.henryco.hamptonci.locustgroveci.mcdonoughci.jointcompplanupdate_adopted_0.pdf

- Bill Gardner Parkway widening (PI No. 0000562) from SR 155 to Lester Mill Road and from Lester Mill Road to I-75; and,
- SR 16 (PI No. 0013619) from west of CR 299/Colwell Road to CR 188/Dean Patrick Road.

The No-Build Alternative would also include DRIs within the Local and Regional Area. DRIs are discussed in **Appendix F-1, Community Impacts Assessment**.

The No-Build Alternative would not result in the acquisition of additional ROW within the Local or Regional Land Use Study Areas and no existing land uses would be converted to transportation uses.

Impacts of the Preferred Alternative

Existing ROW ranges along the corridor from approximately 180 feet to 1,300 feet in width. Proposed ROW also ranges from approximately 180 feet to 1,300 feet. The Preferred Alternative would convert existing land uses to transportation use for areas that would be acquired (e.g., CVLs, ramps, local road intersections, and drainage). Much of the Preferred Alternative is located within the existing I-75 ROW. The total estimated acquisition is approximately 344.1 acres over the 41-mile Project length, or an average of approximately 8.4 acres per mile. The acquisition would consist of strips of land parallel to I-75 on the east. Only four displacements, three residences (one duplex and two single family) and one business, are anticipated. **Exhibit 3-7** summarizes the impacts of the Preferred Alternative on conversion of land uses to transportation use within the Land Use Local Study Area (see **Appendix F-1, Section 3.2.2**).

EXHIBIT 3-7: LAND USES CONVERTED TO TRANSPORTATION USE WITHIN THE LAND USE LOCAL STUDY AREA IN ACRES (PERCENTAGE OF LAND USE WITHIN THE LOCAL STUDY AREA)*

LAND USE	ALL COUNTIES (ACRES)	MONROE	LAMAR	BUTTS	SPALDING	HENRY
Agriculture/ Forestry	240.9 (0.28%)	181.0 (0.21%)	15.8 (0.02%)	16.0 (0.02%)	16.4 (0.02%)	11.7 (0.01%)
Residential	36.4 (0.04%)	3.4 (<0.01%)	11.3 (0.01%)	4.5 (<0.01%)	-	17.2 (0.02%)
Industrial	10.3 (0.01%)	0.3 (<0.01%)	4.8 (<0.01%)	-	-	5.2 (<0.01%)
Public/ Institutional	10.0(0.01%)	-	-	10 (0.01%)	-	-
Commercial	38.3 (0.05%)	4.3 (<0.01%)	-	21.3 (0.03%)	-	12.7 (0.01%)
Park/ Recreation			-	-	-	-
Transportation/ Communication / Utilities	8.2 (0.01%)	8.0 (<0.01%)	-	-	-	0.2 (<0.01%)
Total	**344.1 (0.41%)**	**197.0 (0.23%)**	**32.0 (0.04%)**	**52.2 (0.06%)**	**16.5 (0.02%)**	**47.0 (0.06%)**

**Project Study Area (Local Study Area) is 84,826 acres.*

Agriculture/forestry is the largest land use type being converted to transportation at 70.0 percent of the total 344.1 acres being converted. Within the context of the Land Use Local Study Area, the largest type

of land converted to transportation use by the Preferred Alternative is agriculture/forestry at less than 1 percent (0.28%). The largest total amount of land, as well as the largest percentage of land converted to transportation use is in Monroe County (0.23 percent of Land Use Local Study Area). Most of the agriculture/forested land being converted to transportation is in Monroe County (75 percent). However, this conversion only constitutes 0.5 percent of the total 32,099 acres of agriculture/forested land within the Land Use Local Study Area in Monroe County.[37] By "percentage of land use converted" within the Local Study Area, the largest conversion of public/institutional land is 1.1 percent of 877 total acres[32] within Butts County, primarily due to proposed acquisition of vacant land from the Georgia State Diagnostic Prison property. The land being acquired is not in active use by the Georgia State Diagnostic Prison, and the acquisition will not impact the Prison. Land use conversions within each county generally are less than 1 percent of each land use type within the Land Use Local Study Area,[32] except for:

- 2.2 percent of industrial land within the Land Use Local Study Area in Lamar County, primarily from the Highway 36 site;[38] and
- 1.5 percent of commercial land within the Land Use Local Study Area in Butts County.

Within the entire Local Study Area, less than 0.5 percent of land would be converted to transportation use. When viewed by each land use type, with the exception of agriculture/forestry land uses (0.21 percent), less than 0.1 percent of any given land use would be converted to transportation by the Preferred Alternative.

On a broader regional context, the land being converted to transportation use by the Preferred Alternative makes even less of an impact. Less than 0.05% of the land uses in the regional study area would be converted to transportation. Monroe County still has the largest percentage of land being converted at 0.02 percent, but that remains a fraction of a percent of the overall regional study area.

The largest conversion by land use type is agricultural/forestry at 0.03 percent.[37] Land use conversions within each county are less than 0.03 percent of each land use type within the Land Use Regional Study Area.

Exhibit 3-42 in Appendix F-1, Community Impacts summarizes the impacts of the Preferred Alternative on conversion of land uses to transportation use within the Land Use Regional Study Area. Within the entire Local Regional Study Area, less than 0.1 percent of land would be converted to transportation use. When viewed by each land use type, with the exception of agriculture/forestry land uses (0.02 percent), less than 0.01 percent of any given land use would be converted to transportation by the Preferred Alternative.

The local land use policies reviewed in **Section 3.1.2.3** generally indicate the desires of the counties and municipalities to encourage commercial and industrial growth in the areas along the I-75 corridor, especially the interchange areas. Given the extent of commercial and industrial development planned in the interchange areas, and the fact that the Project may facilitate that growth (see **Section 3.1.3.3**), the Preferred Alternative does not have a substantial effect on land use.

[37] See Appendix F-1, Exhibit 3-41
[38] Regions Industrial Park

3.1.4 Potential Avoidance, Minimization, and Mitigation Measures

Georgia DOT and FHWA are committed to avoidance and minimization, as well as mitigation for unavoidable impacts. Potential impacts to land use are consistent with current development trends along the I-75 corridor and are compatible with future land use plans of the counties and cities through which the Project passes. As part of the standard plan development process, Georgia DOT requires that the design team review proposed design plans in coordination with environmental specialists for ecological, archaeological, and historic resources to determine potential avoidance, minimization and mitigation measures that can be implemented as part of the project. This meeting, formally known as the A3M, was held in August of 2020. Avoidance and minimization measures were considered and incorporated into plans to reduce land use conversion including, but not limited to, adding guardrails, steepening of slopes, and constructing the CVLs on retaining wall in feasible locations.

In accordance with the Uniform Relocation Assistance and Real Property Acquisitions Policies Act of 1970, as amended (42 USC Section 4601, *et. seq.*), and 49 Code of Regulations (CFR) Part 24, *Uniform Relocation Assistance and Real Property Acquisition for Federal and Federally Assisted Programs*, mitigation in the form of federal relocation assistance would be provided for property acquisitions and displacements. These regulations assure owners of property to be acquired and persons displaced as a result of federal or federally assisted projects are treated fairly, consistently, and equitably.[39]

3.2 COMMUNITY FACILITIES, NEIGHBORHOODS, AND CITIES

This subsection presents the study methodology and analyses of the affected environment and environmental consequences on community facilities, neighborhoods, and cities. Discussions on No-Build and Preferred Alternative potential impacts to community facilities, neighborhoods, and cities are presented.

Community facilities are public places where community members can gather for educational, recreational, artistic, social, or cultural activities. This includes parks, schools and education facilities, day cares, libraries, health care facilities, places of worship, senior centers, government centers, and other similar type facilities. They can also include facilities that provide community services such as police and fire protection.

Additionally, this section will describe neighborhoods adjacent to the Preferred Alternative and if community cohesion is present. Potential effects from the acquisition of ROW and easements, and displacements/relocations related to the Preferred Alternative are discussed. Also provided are any avoidance, minimization, and mitigation measures that were or will be implemented as a result of potential impacts by the Preferred Alternative.

3.2.1 Methodology

The Community Facilities Study Area is defined as a 0.5-mile buffer around the Project Area limits. This Community Facilities Study Area was used to better evaluate community facilities that could potentially be impacted by the Preferred Alternative. Existing community facilities within the Community Facilities

[39]FHWA. (1999). *Part 24 - Uniform Relocation Assistance and Real Property Acquisition for Federal and Federally Assisted Programs.* Accessed on March 28, 2020.

Study Area were determined through geographic information system (GIS)-available data, web-based research, and local knowledge (United States Geological Survey [USGS], HERE Maps, National Park Service [NPS], U.S. Census, and GeoBase).

The Neighborhoods Study Area is 1.5 miles from the centerline of the Project Area. Existing neighborhoods within the Neighborhood Study Area were determined by using GIS-available data, web-based research, local knowledge of the area, and field reconnaissance to verify conditions on the ground. Details on neighborhoods are discussed in **Section 3.3, Communities**. Population and housing data were obtained from U.S. Census Bureau 2017-2021 American Community Survey 5-Year Estimates.

The Community Facilities Study Area and Neighborhoods Study Area were used to consider community facilities and neighborhoods with potential impacts from the Preferred Alternative, through ROW acquisition, disruption in community cohesion, construction period, noise, visual, and air quality impacts. The effects of the Preferred Alternative on community facilities and neighborhoods were considered against the No-Build Alternative.

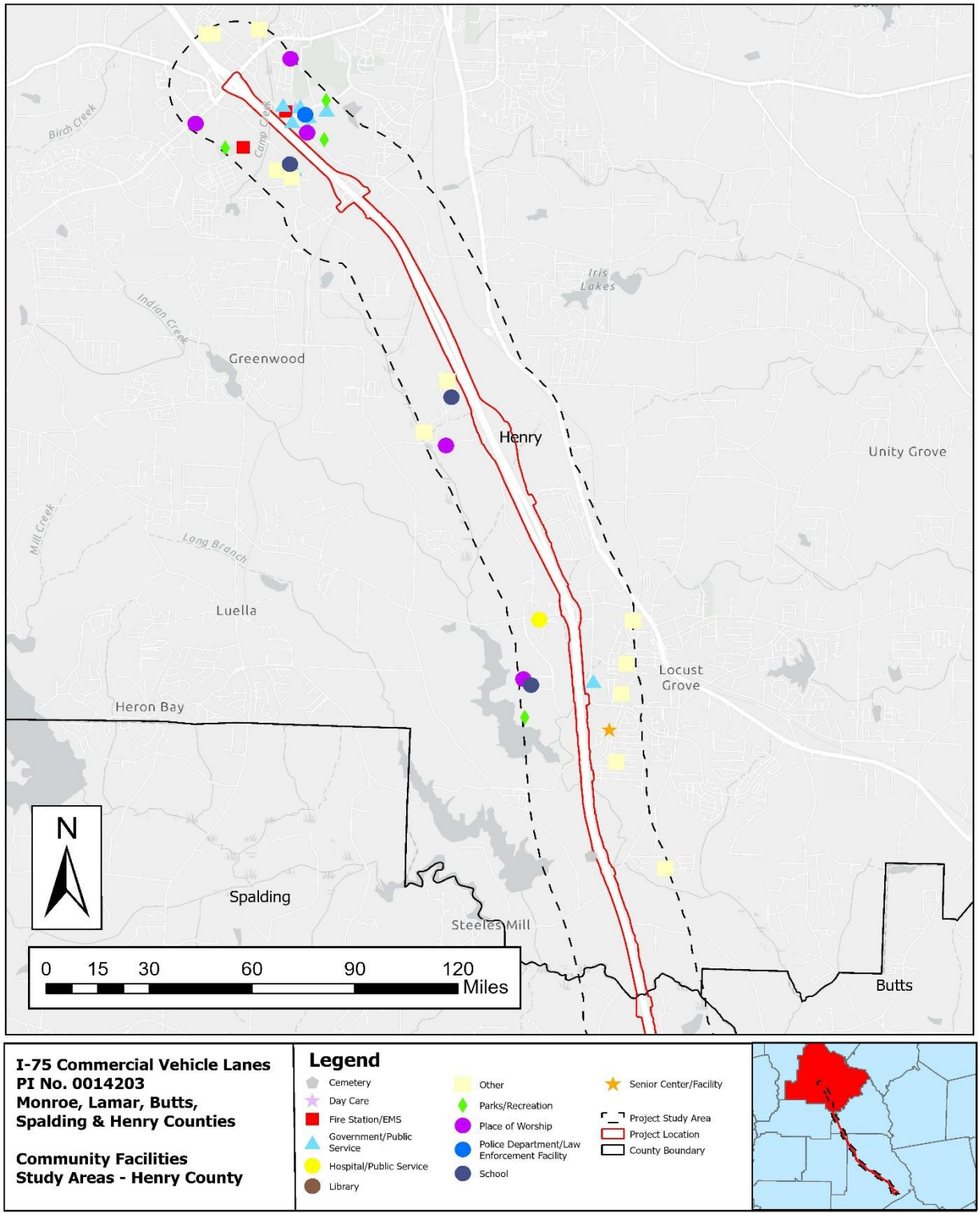
3.2.2 Affected Environment

Existing conditions for community facilities, neighborhoods, and cities, are discussed in the subsections that follow.

3.2.2.1 COMMUNITY FACILITIES

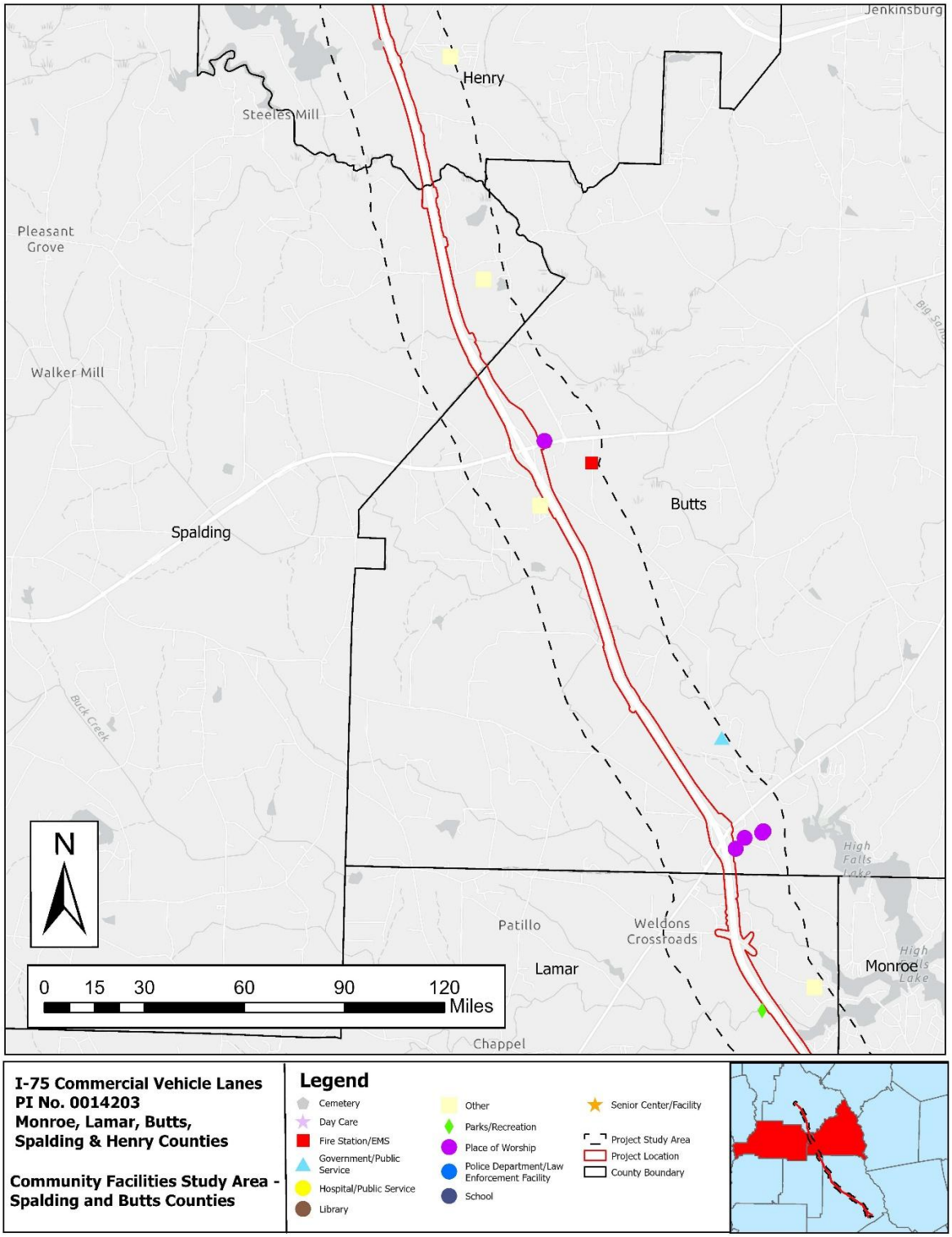
There are 91 community facilities in the Community Facilities Study Area within the five counties of Monroe, Lamar, Butts, Spalding, and Henry. These community facilities consist of seven schools and education centers, two day cares, seven police stations, six fire stations, one library, five healthcare facilities, 26 places of worship, 23 government offices, one senior center, four parks, six cemeteries, and three other community facilities (hunting club, gun club/shooting school, convention center) (see **Exhibit 3-8** and **3-9**). Chapter 6 of **Appendix F-1** contains a discussion of methodology for identifying community facilities and further detail regarding identified facilities in the immediate, Local, and Regional Study Areas.

954 ## EXHIBIT 3-8.1: COMMUNITY FACILITIES IN THE COMMUNITY FACILITIES STUDY AREA



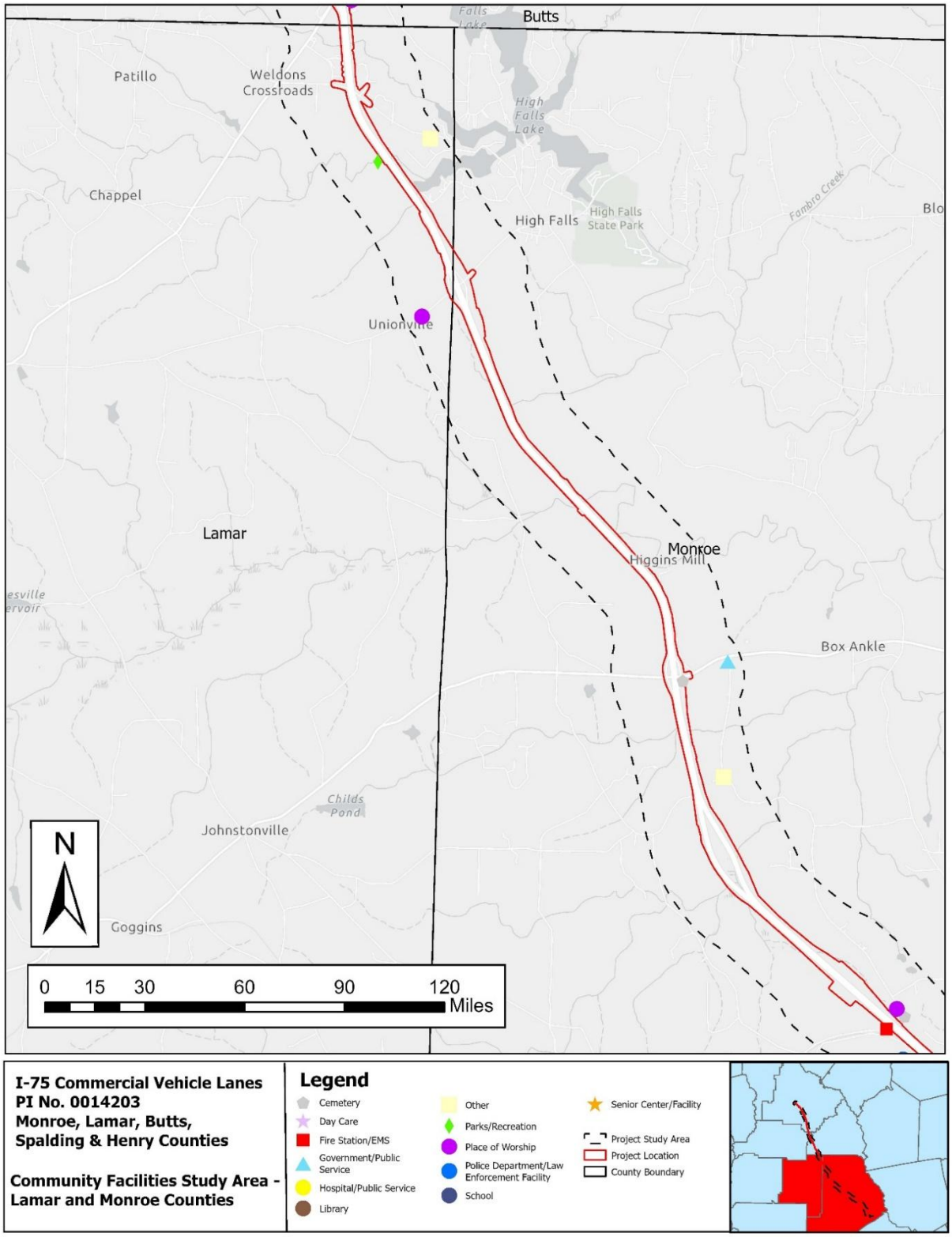
955
956 *Source: Google Earth, Georgia DOT, ESRI, USGS, HERE, NPS*
957

EXHIBIT 3-8.2: COMMUNITY FACILITIES IN THE COMMUNITY FACILITIES STUDY AREA



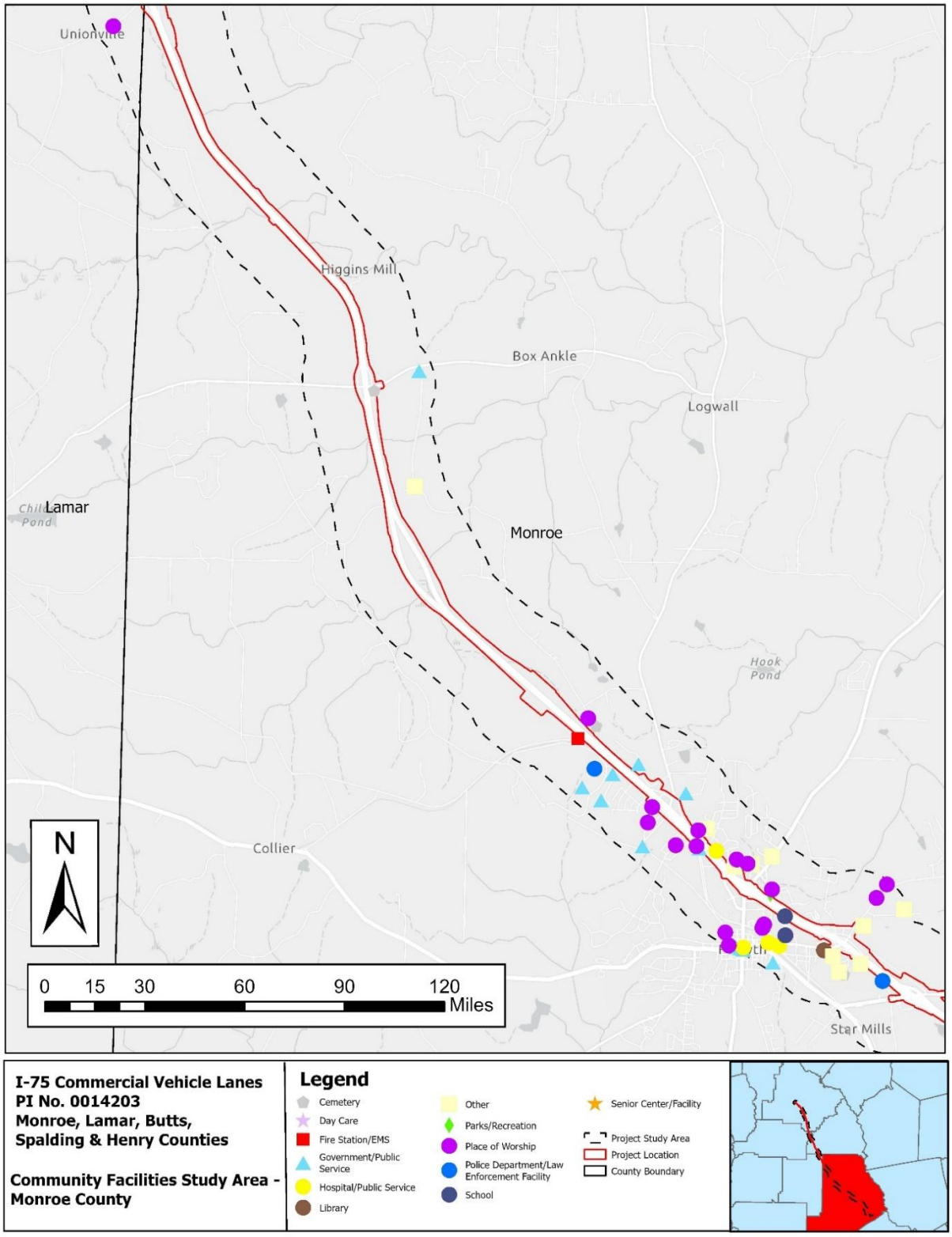
Source: Google Earth, Georgia DOT, ESRI, USGS, HERE, NPS

962 EXHIBIT 3-8.3: COMMUNITY FACILITIES IN THE COMMUNITY FACILITIES STUDY AREA



963
964 *Source: Google Earth, Georgia DOT, ESRI, USGS, HERE, NPS*

965 EXHIBIT 3-8.4: COMMUNITY FACILITIES IN THE COMMUNITY FACILITIES STUDY AREA



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967 *Source: Google Earth, Georgia DOT, ESRI, USGS, HERE, NPS*

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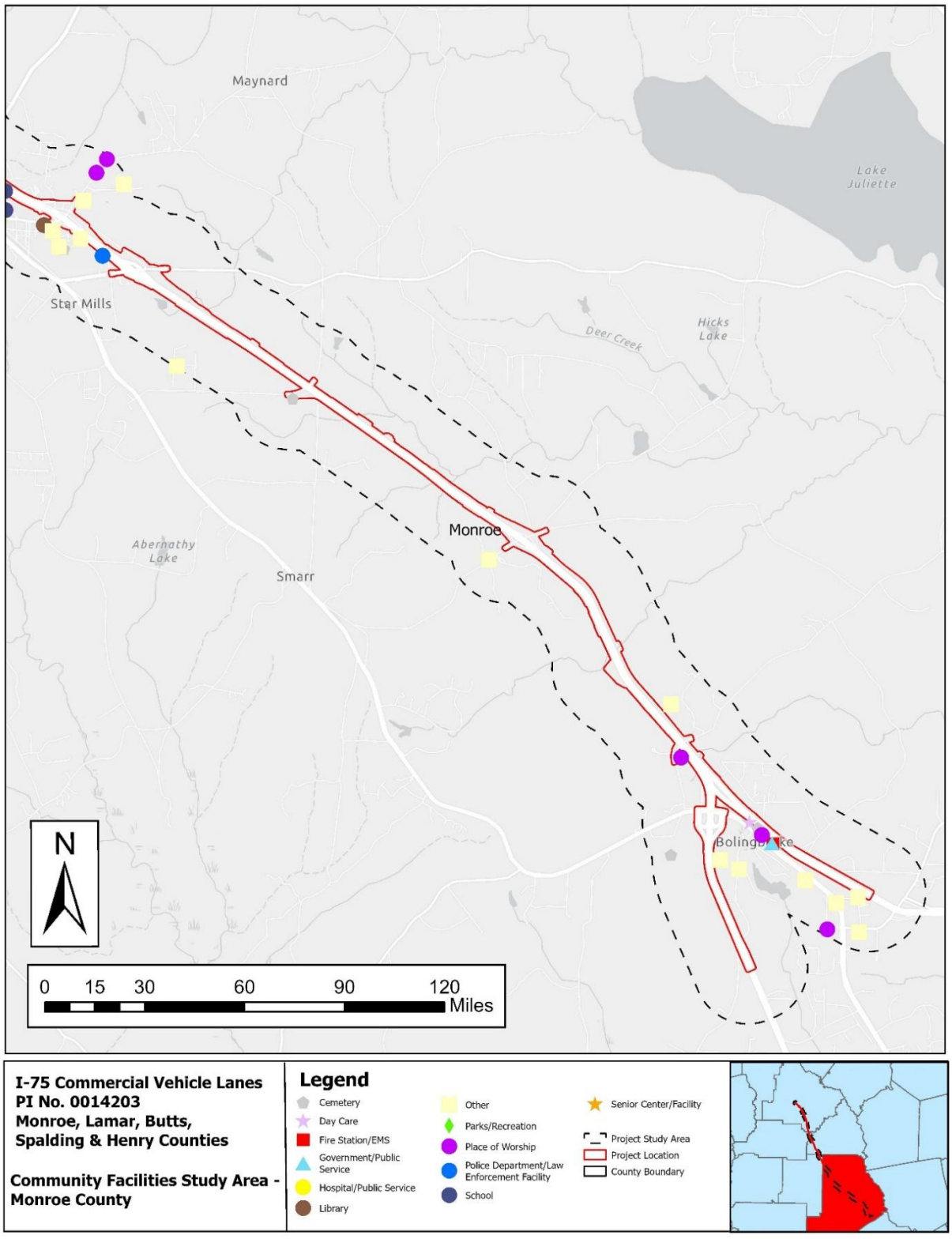
969 EXHIBIT 3-8.5: COMMUNITY FACILITIES IN THE COMMUNITY FACILITIES STUDY AREA



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971 *Source: Google Earth, Georgia DOT, ESRI, USGS, HERE, NPS*

EXHIBIT 3-9: IDENTIFIED COMMUNITY FACILITIES WITHIN COMMUNITY FACILITY STUDY AREA

Name	Type	Address
Henry County		
University of Phoenix – McDonough Learning Center	School/Education	2030 Avalon Pkwy #100
Atlanta Bible College	School/Education	2020 Avalon Pkwy
A Friends House Inc	Day Care	111 Henry Pkwy
Henry County Sheriff	Police	120 Henry Pkwy
Henry County Fire Dept	Fire/EMS	110 S Zack-Hinton Pkwy
Henry County Fire Station #1	Fire/EMS	664 Industrial Blvd
McDonough Fire Station #2	Fire/EMS	1063 Industrial Blvd
Redeemed Biker Church	Place of Worship	500 Industrial Blvd
Retro Church	Place of Worship	831 Pavilion Ct
Southside Christian Fellowship	Place of Worship	500 Industrial Blvd
Henry County Bonding Department	Gov-Public Service	120 Henry Pkwy
Henry County Communication	Gov-Public Service	100 Henry Pkwy
Henry County Developmental Disability	Gov-Public Service	672 Industrial Blvd
Henry County Division of Family and Children Services	Gov-Public Service	125 Henry Pkwy
Henry County Emergency Communications	Gov-Public Service	526 Industrial Pkwy
Henry County Jail	Gov-Public Service	120 Henry Pkwy
Henry County Tax Commissioner Office	Gov-Public Service	140 Henry Pkwy
Red Hawk Baseball Complex	Parks	143 Henry Pkwy
Cotton Fields Golf Club	Parks	400 Industrial Blvd
Bethlehem Elementary School	School/Education	1000 Academic Pkwy
Strong Rock Christian School	School/Education	4200 Strong Rock Pkwy
Locust Grove Police Department	Police	3640 GA-42
Lindsey Orthodontics	Healthcare	4600 Bill Gardner Pkwy Suite 100
Bethlehem Baptist Church	Place of Worship	643 100 Academic Pkwy

Highway to Heaven Ministry	Place of Worship	105 Pine Grove Rd
Relevant Church	Place of Worship	4770 GA-42
Georgia Department of Driver Services	Gov-Public Service	619 Tanger Dr
Havenwood Grove Senior	Senior	550 Indian Creek Rd
Indian Creek Baptist Church Cemetery	Cemetery	
Butts County		
Butts County Fire Station 7	Fire/EMS	144 Colwell Rd
CrossOver Ministries	Place of Worship	2702 GA-16
Georgia Diagnostic and Classification State Prison	Gov-Public Service	2978 GA-36
Towaliga County Line Baptist	Place of Worship	153 Short Rd
Truckers Chapel	Place of Worship	122 Truck Stop Way
Truckstop Ministries, Inc.	Place of Worship	131 Truck Stop Way
Lamar County		
Unionville Church	Place of Worship	944 Highfalls Park Rd
221 High Falls State Park	Parks	76 High Falls Park Dr
Monroe County		
Little Angel's Learning and Daycare	Day Care	Rivoli Rd
Wadley Cemetery	Cemetery	n/a
Bolingbroke Methodist Church	Place of Worship	5969 US-41
United States Postal Service	Gov-Public Service	8043 Rivoli Rd
Gray Cemetery	Cemetery	n/a
Georgia Public Safety Training Center	Police	1000 Indian Springs Dr
Georgia State Patrol – Post 44	Police	887 Patrol Rd
Police Academy	Police	1000 Indian Springs Dr
Sheriff's Department	Police	145 L Cary Bittick Dr
State Patrol Office	Police	887 Patrol Rd
Ten 8 Fire & Safety Equipment	Fire/EMS	1591 Collier Rd
Hardin Library	Library	300 Patrol Rd

Forsyth Dental Center	Healthcare	94 N Bennett St
Langford Allergy, LLC	Healthcare	201 Tift College Dr
Pregnancy Center	Healthcare	13 N Lee St # 2000
Southern Smiles	Healthcare	275 N Frontage Rd
Cathedral of Faith Praise Center	Place of Worship	150 Powerhouse Rd
Christ United Methodist Church	Place of Worship	417 N Frontage Rd
Fairview Church	Place of Worship	198 Fairview Church Rd
First Baptist Church of Forsyth	Place of Worship	95 W Morse St
Forsyth Apostolic Church	Place of Worship	71 Ensign Rd
Garden Hill Baptist Church	Place of Worship	88 Vining St
Holy Church of God	Place of Worship	n/a
Maynard Baptist Church	Place of Worship	1195 Juliette Rd
Redemption Church	Place of Worship	858 Indian Springs Dr
Rock Springs Church	Place of Worship	526 Indian Springs Dr
St James Baptist Church	Place of Worship	110 James St
St Luke Ame Church	Place of Worship	143 James St
The House of God Holiness Church	Place of Worship	25 College St
State Offices South at Tift College	Gov-Public Service	300 Patrol Rd
Tift College	Gov-Public Service	300 Patrol Rd
Tift College Dept of Corrections	Gov-Public Service	Patrol Rd
Forsyth Public Defender's Office	Gov-Public Service	560 N Lee St
Georgia Corrections Corporation	Gov-Public Service	7 N Lee St
Georgia Department of Corrections	Gov-Public Service	Hardin Library, 300 Patrol Rd, 2nd Floor
Georgia DJJ Office of Training	Gov-Public Service	1000 Indian Springs Dr
Georgia Forestry Association	Gov-Public Service	551 N Frontage Rd
Interceptor Communications	Gov-Public Service	1110 Indian Springs Dr
Monroe County Animal Control	Gov-Public Service	157 L Cary Bittick Dr
Monroe County Board Education	Gov-Public Service	25 Brooklyn Ave
Monroe County Jail	Gov-Public Service	145 L Cary Bittick Dr

Monroe County Probate Court	Gov-Public Service	1 Courthouse Square
Monroe County Recreation Department	Gov-Public Service	1080 GA-42
Monroe County Recycling Center	Gov-Public Service	2228 English Rd
Monroe Sheriff-Care Cottage	Gov-Public Service	40 Rumble Rd
Park with basketball hoops and playground	Parks	North Frontage Road at Milledge Circle
Fairview Cemetery	Cemetery	198 Fairview Church Rd
Little Cemetery	Cemetery	Gose Rd
Mickleberry Merritt Cemetery	Cemetery	2919 Johnstonville Rd
Johnstonville Rd Hunting Club	Other	n/a
Meadows Gun Club and Shooting School	Other	1064 Rumble Rd
Monroe County Convention Center	Other	475 Holiday Circle
Bolingbroke Fire Station 4	Fire/EMS	8037 Rivoli Rd
Bethany Baptist Church	Place of Worship	365 Pea Ridge Rd

3.2.2.2 NEIGHBORHOODS AND CITIES

This subsection describes the existing neighborhoods and cities located within and adjacent to the Neighborhoods Study Area as described in **Section 3.2.1, Methodology**; it qualitatively notes the presence or absence of current community cohesion. *Community cohesion* is the degree to which residents have a sense of belonging to their neighborhood, their level of commitment to the community, or a strong attachment to neighbors, groups, or institutions, usually as a result of continued association over time.[40]

Neighborhoods are a subset of the geographic community and are based on personal interactions among residents. The boundaries of neighborhoods can often be delineated by physical barriers, activity centers, home values, selected demographic characteristics, and residents' perceptions. They may be areas that are predominantly residential in character, or mixed-use areas. A sense of community may or may not exist, depending on factors such as how long residents have lived in the area, whether friends and family live nearby, and the extent of shared activities within the neighborhood. Neighborhood cohesion exists in areas where residents have engaged in the neighborhood planning process, organized a neighborhood association, and/or have a well-known or long-established identity with the area. Connections through a community feature or facility, such as a place of worship or school, may also contribute to neighborhood cohesion.

[40] California Department of Transportation. 2011. Community Impact Assessment. Accessed June 8, 2020 from https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/ser/f0008751-vol4-entire-a11y.pdf

Within the Neighborhoods Study Area, there are 124 neighborhoods. These neighborhoods are further described by county in Chapter 5, Population and Housing of the **Community Impacts Assessment** in **Appendix F-1**. Additional details about neighborhoods are discussed in **Section 3.3, Communities**.

3.2.3 Environmental Consequences

The effects of the Preferred Alternative and No-Build Alternative on neighborhoods and community facilities within their respective study areas were considered.

The No-Build Alternative would maintain the existing configuration of I-75 and would not result in changes to existing conditions of the corridor. No temporary construction impacts would occur to the neighborhoods, facilities or services in the Community Facilities and Neighborhoods Study Area. No permanent changes to, removals of, or relocations of existing neighborhoods or community facilities would occur. However, the No-Build Alternative would not address the existing and projected growth in the area. The impacts to neighborhood and community facilities associated with the Preferred Alternative are described in the below sections.

3.2.3.1 IMPACTS TO COMMUNITY FACILITIES

In general, the Preferred Alternative is not anticipated to alter existing community facilities or the services they provide. The Preferred Alternative would not create any new barriers that would permanently disrupt community cohesion or interrupt public access or transportation circulation. Changes to existing community facilities include short duration closures to one isolated area of a park during construction and permanent minor parking impacts to one church. Construction activities might change the way that employees, patrons, and visitors access individual community facilities. It is anticipated that temporary detours and modified access to community facilities would be required throughout the Preferred Alternative construction process. The contractor would coordinate with community facilities through a public involvement plan to avoid or minimize inconveniences from construction activities. Avoidance, minimization, and mitigation measures are discussed in **Section 3.2.4**.

Exhibit 3-10 and **Exhibit 3-11** summarize community facilities that are directly impacted by the Preferred Alternative. Community facilities listed in green are within unincorporated areas and not within their defined city boundaries. Additional details of impacts to these community facilities are discussed in Chapter 6, *Community Facilities and Services* of the ***Community Impacts Assessment*** in **Appendix F-1**.

EXHIBIT 3-10: IMPACTED COMMUNITY FACILITIES WITHIN THE COMMUNITY FACILITIES STUDY AREA

MAP ID	TYPE	NAME	CITY	IMPACT
6	Place of Worship	Christ United Methodist Church	Forsyth	Frontage
50	Government	Georgia Diagnostic and Classification State Prison	Jackson	Frontage
137	Other	Johnstonville Road Hunting Club	Forsyth	Frontage
104	Place of Worship	Truckers Chapel- Truck Stop	Jackson	Frontage, Loss of Small Portion of Parking Lot
221	Park	High Falls State Park	Jackson	Frontage, Temporary Access

3.2.3.2 IMPACTS TO NEIGHBORHOODS, AND CITIES

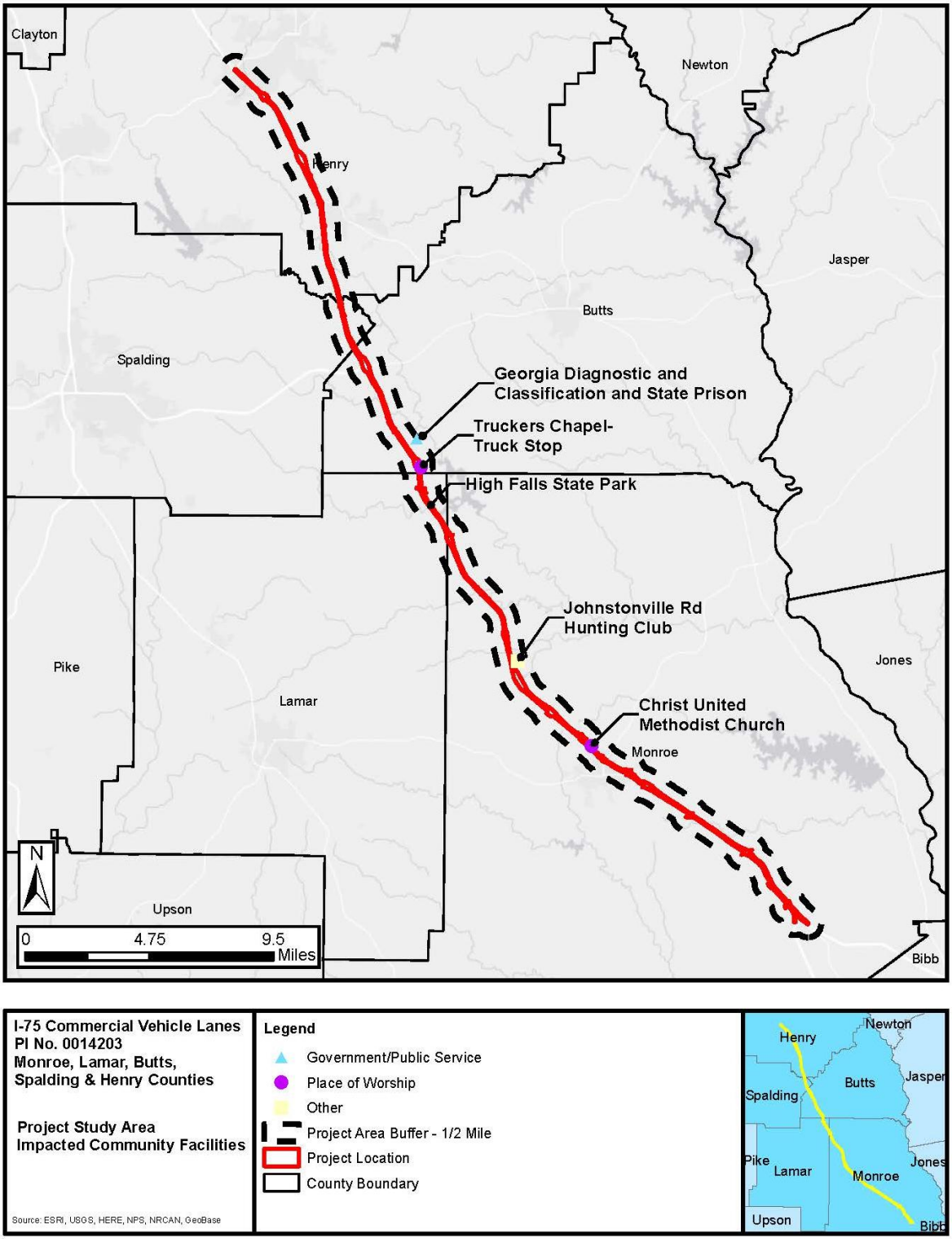
There are no displacements associated with the No-Build Alternative and therefore no displacement impacts. Due to the presence of natural and community resources along both sides of existing I-75 infrastructure, the Preferred Alternative would have unavoidable impacts. Limited land is available for development, as the Preferred Alternative is within densely developed urban areas in some locations. Residential displacements by the Preferred Alternative would consist of three residences (approximately 0.81 acres, all three in Monroe County). Federal relocation assistance would be provided. The residences that will be impacted include:

- A partially-occupied duplex in unincorporated Monroe County. This property has one tenant living in the right side of the duplex. This impact will consist of 0.32 acres.
- An occupied single-family home in unincorporated Monroe County. This impact will consist of 0.02 acres.
- A tenant-occupied single-family home in the City of Forsyth. This impact will consist of 0.47 acres.

Additionally, the Preferred Alternative will require frontage from 13 residences (approximately 8.38 acres) within the High Falls Community neighborhood. Approximately 1.07 acres of frontage will be required from the Indian Creek Mobile Home Community.

Displacements are not expected to substantially disrupt existing neighborhood character or community cohesion. Minor frontage impacts would occur on the edges of the existing neighborhoods; but, would not result in substantial changes or disruptions to neighborhood cohesion or community facilities. Temporary effects to community cohesion could occur due to traffic shifts during the construction period depending on established detour routes. The construction of an overpass at the Pea Ridge Road corridor, a mostly rural residential area, would potentially require short-term detours. Any necessary traffic shifts during construction would be temporary.. Additional details of construction period impacts are discussed further in this document in **Section 3.11, Construction Impacts** and in Chapter 5, Population and Housing of the **Community Impacts Assessment** in **Appendix F-1**. Avoidance, minimization, and mitigation measures are discussed in **Section 3.2.5**. **Exhibit 3-12** depicts the locations of these residential buildings and neighborhoods.

EXHIBIT 3-11: IMPACTED COMMUNITY FACILITIES



Source: Google Earth, Georgia DOT, ESRI, USGS, HERE, NPS

3.2.3.3 VISUAL IMPACTS

There may be potential for visual impacts to community facilities, neighborhoods, and cities due to the addition of a noise barrier or new CVLs, as described in further detail below. Proposed mitigation will aid in reducing these impacts.

Visual Impacts on Community Facilities

The only community facility expected to experience an adverse visual effect from the Project is the Christ United Methodist Church in the City of Forsyth. Changes to the visual environment at this location would consist of the elevated CVLs in the median, using a retaining wall, the addition of a bridge carrying the CVLs over I-75, the reconstruction and realignment to the east of the North Frontage Road, and the addition of noise barriers. These changes would occur in the foreground of the view from the church and would be a focal point for church attendees.

Visual Impacts on Neighborhoods

Visual impacts on a neighborhood in the City of Forsyth along the North Frontage Road south of SR 83, the Higgins Mill Road neighborhood, the High Falls Community, and the Indian Creek neighborhood were evaluated. The visual environment at these neighborhoods would not be adversely affected by the Project.

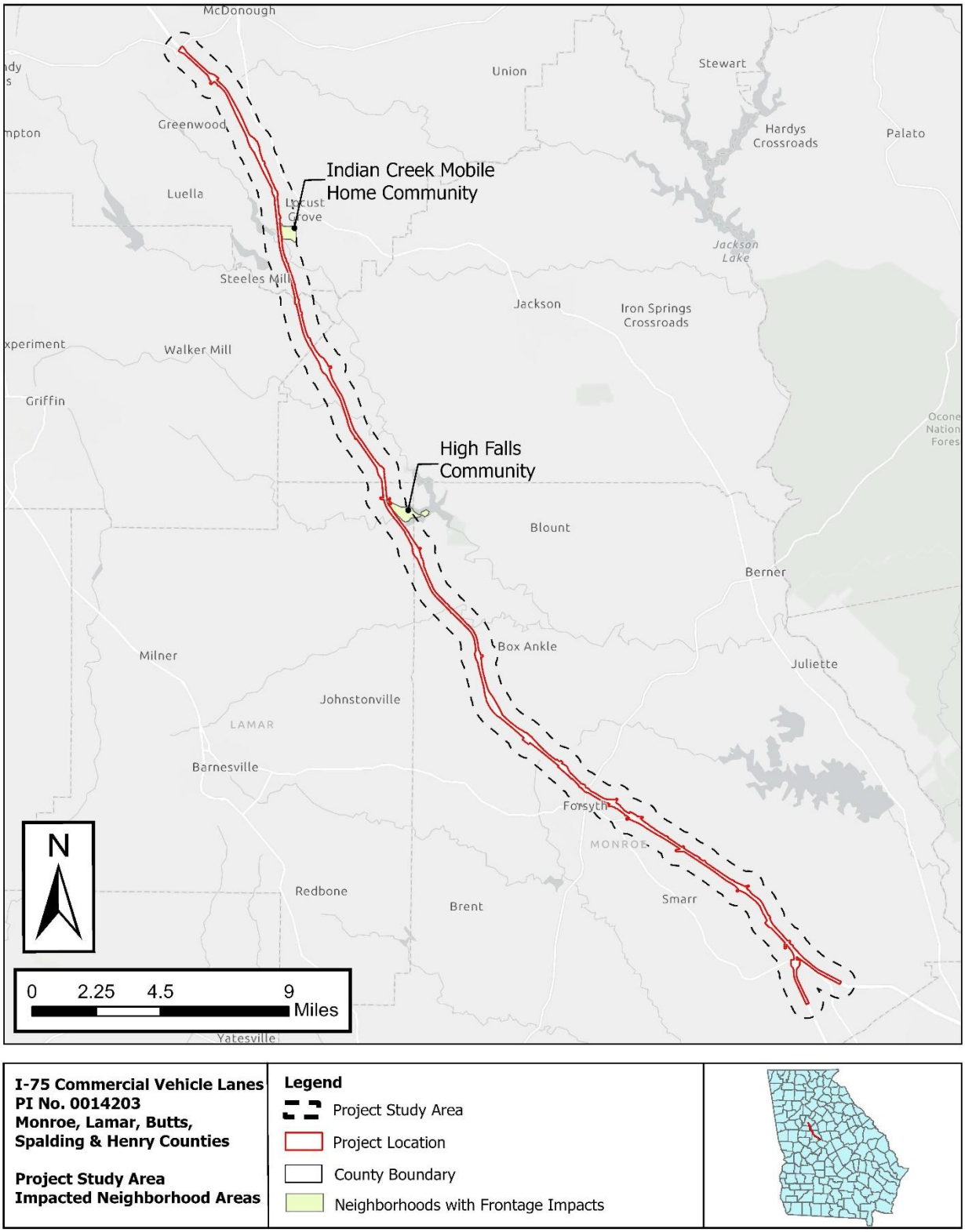
Visual Impacts on Cities

The visual environment within the City of Forsyth, from the SR 83 interchange to the SR 42 interchange along the North Frontage Road, would be adversely affected by the Project. The changes to the visual environment in this area are discussed above in reference to the Christ United Methodist Church.

The visual impact of the Project on the Tanger Outlets in the City of Locust Grove was determined to be moderate. The visual quality at the Tanger Outlets is currently low. Although the parking lots face I-75, viewers are not likely to spend an extended amount of time in the parking lots. The Project would change the view from the Tanger Outlets parking lot by bringing the CVL alignment up to 50 feet closer to the Outlets than the existing northbound GP lanes and adding two bridges and associated retaining walls.

The Project would not have an adverse effect on the visual environment along Industrial Boulevard in the City of McDonough.

EXHIBIT 3-12: NEIGHBORHOODS WITH DISPLACEMENTS AND FRONTAGE IMPACTS



Source: Google Earth, Georgia DOT, ESRI, USGS, HERE, NPS

3.2.4 Potential Avoidance, Minimization, and Mitigation Measures

The Preferred Alternative is complex and large in terms of both the limits and the public investment; therefore, Georgia DOT and FHWA are committed to implementing avoidance, minimization, and mitigation measures for unavoidable impacts as part of the Preferred Alternative. These will be based on potential impacts to households, neighborhoods, community facilities, and cities, and to reduce impacts on travel patterns and community cohesion.

In accordance with the Uniform Relocation Assistance and Real Property Acquisitions Policies Act of 1970, as amended (42 USC Section 4601, *et. seq.*), and 49 CFR Part 24, *Uniform Relocation Assistance and Real Property Acquisition for Federal and Federally Assisted Programs*, mitigation in the form of federal relocation assistance would be provided for property acquisitions and displacements. These regulations assure owners of property to be acquired and persons displaced as a result of federal or federally assisted projects are treated fairly, consistently, and equitably.[42]

To prevent vibration-related damage and to help address public concerns related to construction-related vibration, the contractor would evaluate the potential for vibration impacts and develop and implement a vibration control plan. To reduce impacts from increased light glare from construction activities, the contractor would implement mitigation measures, as appropriate, such as the use of directional lighting and shielding. The contractor would implement the necessary best management practices to provide dust control. Mitigation measures might include temporary mulches, spray-on adhesives, mechanical manipulation of existing soil surfaces, irrigation, and barriers. Finishes, treatments, and landscaping would be considered during final design to minimize visual changes and effects within the Preferred Alternative corridor.

To reduce noise impacts to community facilities, neighborhoods, and cities, in accordance with Georgia DOT Noise Abatement Policy, noise abatement that has been considered include alteration to the horizontal or vertical alignment of the roadway, traffic control measures, acquisition of land to create buffer zones, and noise barriers. As outlined by the Georgia DOT Noise Abatement Policy, outreach methods to determine the viewpoints of benefited receptors may consist of a first class mailed letter and survey provided to property owners and tenants, public meetings, phone conversations, or any other method based on the project circumstances. If there are no or minimal responses (less than 25 percent) then the outreach method utilized will be reviewed to determine if another method would result in increased participation. A noise barrier will only be constructed if a minimum 50 percent plus one of the respondents vote in favor of noise abatement. Both property owners and dwellers get a vote and their vote must be returned within 30 calendar days to receive consideration. Property owners will receive one vote per unit owned and an additional vote if they reside in the unit, and tenants will receive one vote for the benefited receptor unit that they occupy. For some projects, individual meetings, community meetings, or other outreach efforts may also be utilized to determine a majority consensus.

Noise barriers with potential visual impacts will be treated appropriately to reduce visual impacts. Such treatments could include but are not limited to consistent use of materials and color and possible use of landscaping with vegetation.

[42] FHWA. (1999). 49 CFR Part 24 - Uniform Relocation Assistance and Real Property Acquisition for Federal and Federally-Assisted Programs. Accessed on March 28, 2020.

To reduce impacts, fugitive light from portable construction sources will be minimized adjacent to residences. Staging areas will be located away from neighborhoods, parks, and historic sites, and restored following construction. The removal of trees, shrubs, and pruning will be minimized. Landscaping, fencing, privacy walls, and other similar features for private properties will be replaced to the degree possible. Roadside landscaping will be implemented. Additionally, walls and barriers will be constructed with low-sheet and non-reflective surface materials, and minimum lighting standards will be applied.

Most construction activities would occur during daylight hours. The contractor might opt to construct some portions of the Preferred Alternative during nighttime hours in areas where daytime construction activities would pose a significant inconvenience to commercial/municipal operations (e.g., near schools) or in areas where daytime implementation would cause severe disruption to traffic operations (e.g., in areas requiring lane closures).

To minimize and mitigate disruptions to visual impacts, aesthetics enhancements are focused on the locations with the highest impact. **Exhibit 3-13** below summarizes the visual mitigation measures under consideration.

EXHIBIT 3-13: SUMMARY OF VISUAL MITIGATION MEASURES

MITIGATION MEASURE NUMBER	MITIGATION MEASURE DESCRIPTION	MITIGATION MEASURE TYPE
1	Minimize fugitive light from portable sources used for construction adjacent to residences	Construction
2	Restore staging areas once decommissioned	Construction
3	Minimize the removal of trees and shrubs and pruning needed to accommodate new or reconstructed barriers	Design
4	Replace landscaping, fencing, privacy walls, and other similar features for private properties to the degree possible	Design
5	Implement roadside landscaping	Design
6	Construct walls and barriers with low-sheet and non-reflective surface materials	Design
7	Apply minimum lighting standards	Design
8	Apply architectural themes from nearby historic resources in the City of Forsyth	Design

To minimize disruptions to emergency services (including those servicing hospitals in the Project Area), Georgia DOT would require the contractor to provide local emergency service providers at least two weeks advance notice for lane/shoulder closures and traffic stage changes planned to be in effect longer than 24 hours. Additionally, the contractor would provide at least 24 hours advance notice for lane/shoulder closures planned to be in effect less than 24 hours.

To mitigate potential impacts to neighborhood access due to short-term detours during construction of the Pea Ridge Rd. overpass, and traffic volumes temporarily increasing on some neighborhood roads when

drivers attempt to bypass construction-related traffic delays by driving through residential neighborhoods, the contractor would implement signage detailing detour routes and prohibiting through-traffic in neighborhoods. Contractor activities would be planned to minimize access and utility disruptions, advanced notification to the public would be provided regarding disruptions, and a public information program would advise area residents of traffic detours. Additional details of potential avoidance, minimization, and mitigation measures are discussed further in this document in **Section 3.11, Construction/Utilities** and in Chapter 5, Population and Housing of the ***Community Impacts Assessment*** in **Appendix F-1**.

3.3 COMMUNITIES

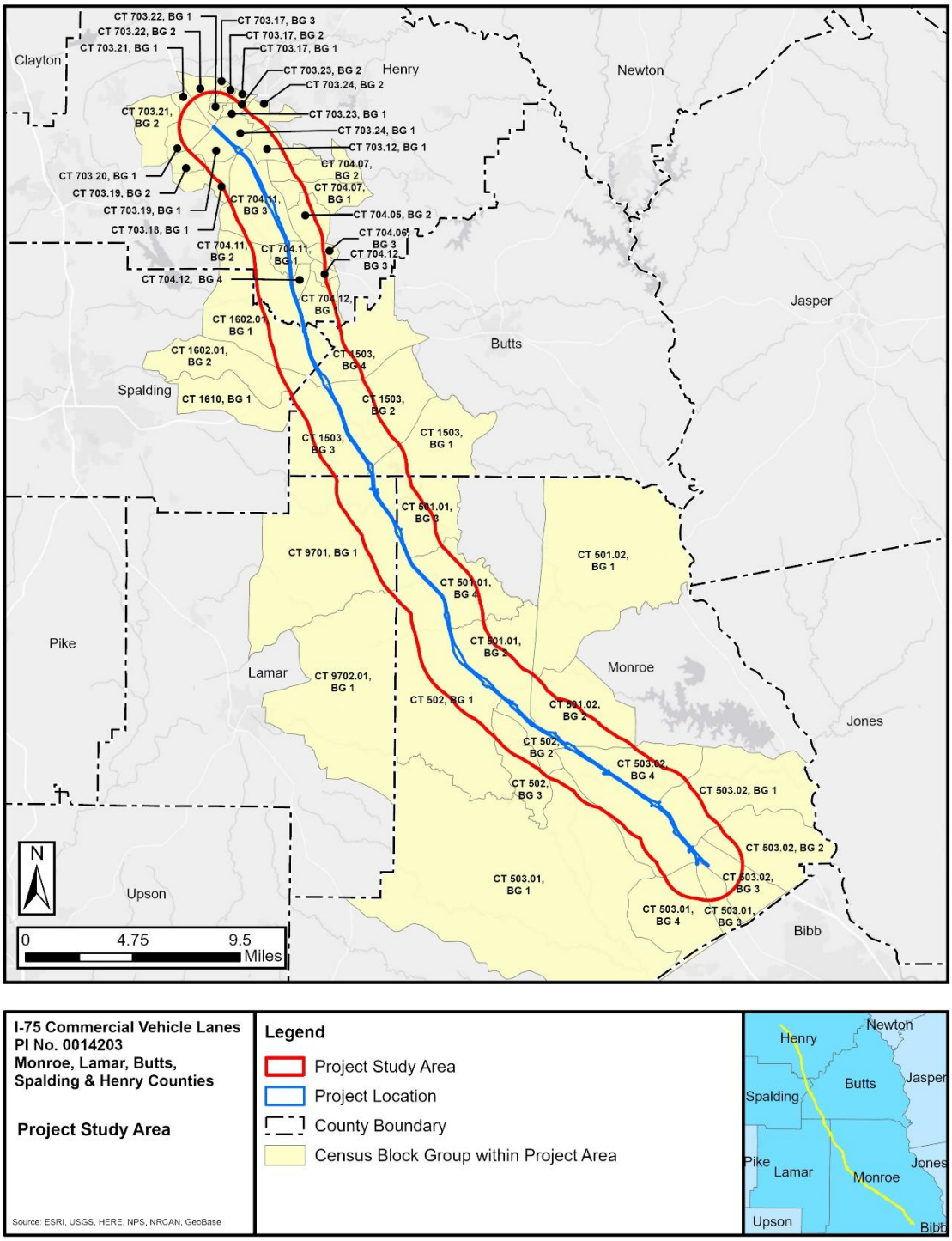
This section presents discussion and analyses of the affected environment and environmental impacts on communities of concern. This includes minority, limited English proficiency (LEP) individuals, disabled and elderly populations, and children. The laws and regulations focused on protecting communities are presented in **Appendix A, Applicable Laws and Regulations**.

3.3.1 Methodology

The **Community Impacts Assessment** presented in **Appendix F-1** is the basis for the analysis presented in this section. Georgia DOT employs a multifaceted approach and detailed methodology to identify communities of concern, as well as assess the affected environment and environmental impacts within a project's study area. US Census Data was utilized to help focus outreach efforts in conjunction with consulting local planning authorities, and a field survey in order to identify, potential language barriers, accessible meeting locations, and any areas with a lack of broadband access to effectively engage with the public and provide opportunities for their active involvement. Efforts to identify communities focused on "readily identifiable" communities, defined as groups of persons living in close geographic proximity, typically neighborhoods, subdivisions, apartments, and mobile home parks, or communities that make their presence known by providing feedback at public involvement events. Dispersed residents are deemed communities only if they would incur common adverse effects from the project (e.g., experience increased traffic or a similar loss of access due to a median) or if they raise common concerns during project development.

Addressing impacts to communities of concern requires identification of an appropriate study area specific to communities, which in this case was established as the 50 Census block groups adjacent to the Preferred Alternative, known as the Environmental Study Area (**Exhibit 3-14**). This wider Environmental Study Area was evaluated because it targets the area affected by the Preferred Alternative's potential adverse impacts, particularly related to construction, land use, and noise. In conjunction with the Environmental Study Area, a Local Study Area and Regional Study Area were also evaluated. The Local Study Area includes the cities of Forsyth, Barnesville, Jackson, Jenkinsburg, Griffin, Hampton, Locust Grove, and McDonough. The five-county area (inclusive of Monroe, Lamar, Butts, Spalding, and Henry

EXHIBIT 3-14: CENSUS BLOCK GROUPS IN THE ENVIRONMENTAL STUDY AREA



Source: US Census Bureau, Georgia DOT, ESRI, USGS, HERE, NPS

Counties) was selected as the Regional Study Area, which is more thoroughly evaluated in the **Community Impacts Assessment, Appendix F-1.**

3.3.1.1 CENSUS ANALYSIS AND REVIEW OF DATA SOURCES

Census data was analyzed for the Environmental (i.e., 50 block groups adjacent to the Preferred Alternative), Local (i.e., eight adjacent cities) and Regional (i.e., five-county region) Study Areas to identify communities of concern. Due to the age of data from the 2010 Census, the 2017 – 2021 American Community Survey (ACS) 5-Year Estimates were considered the best available data to establish the presence of potential communities of concern. These estimates include data on race, age, ethnicity, and language.

To assess impacts to children and the elderly, facilities likely to be used by children and elderly populations near the Preferred Alternative were identified within a 0.5-mile buffer of the Project Area. This 0.5-mile buffer was selected for these facilities instead of the broader 1.5-mile buffer in order to identify facilities more likely to be directly impacted by the Preferred Alternative.

3.3.1.2 CONSULTATION WITH LOCAL AUTHORITIES

The county and city governments within the Local Study Area were identified as key stakeholders and were involved in early meetings with Georgia DOT from the fall of 2018 through the fall of 2020. Contact was made with elected officials and local governments, including the cities of Griffin, Jackson, Forsyth, Locust Grove, and McDonough and the counties of Spalding, Henry, Butts, Lamar, and Monroe.

Local leaders in each of these geographies were asked to provide local knowledge on the presence of communities of concern within their jurisdictions and to assist the Project team with outreach. A full discussion of public involvement/outreach for the Project is found in **Chapter 5, Consultation and Coordination.**

3.3.1.3 FIELD SURVEY

Field visits were conducted throughout the summer of 2020 along the entire Project corridor to confirm and identify communities. More targeted windshield surveys were conducted on October 20, 2020, April 26, 2021, and March 1, 2023, throughout the Environmental Study Area to confirm locations of communities of concern. Windshield surveys included multiple teams going to the potential communities to observe the activities of residents at each location.

3.3.1.4 PUBLIC INVOLVEMENT

A Project hotline and email address were established in December 2019 to receive ongoing public input, social media postings, and pre-recorded virtual meetings were used to share information. Public outreach, to date, has largely been conducted virtually; however, FHWA has employed targeted methods to supplement the virtual platforms and expand reach into communities. While previous restrictions put limitations on in-person outreach techniques typically effective for communities, it is anticipated that future public involvement efforts would include in-person meetings to supplement virtual outreach techniques.

Georgia DOT held a project status update virtual meeting on July 15, 2020 on the Georgia DOT YouTube channel and posted on the Project website. Georgia DOT also sent out media alerts and email announcements to stakeholders regarding the updated source of information. A Public Information and Detour Open House (PIOH/PDOH) was held in November-December 2020 to present project information and solicit input. The event provided a safe, no-contact avenue for engagement and included an on-demand virtual format which removed a number of barriers for participation, including work conflicts with physical meeting times and locations, lack of transportation or dependent care, or travel to meeting sites for those with physical mobility limitations. The PIOH/PDOH meeting materials will remain available to the public online throughout the project construction (https://0014203-gdot.hub.arcgis.com/).

In support of the PIOH/PDOH, specific outreach techniques were employed in efforts to increase awareness of the project and encourage involvement of communities along the corridor. For those without the technological capabilities necessary for virtual meeting participation, promotional materials developed for advertising the upcoming PIOH/PDOH included options for participating without internet access. These options included the availability of the project hotline and a call-in number for the live, Virtual Presentation and Question and Answer Session. The promotional materials listed two locations (Georgia DOT District 3, Area 4 Office in Macon and Henry County Administration Building) where paper copies of the project concept displays were available for public viewing. The Forsyth Main Street Welcome Center was added as a third viewing location after the promotional materials were completed.

Following the PIOH/PDOH, efforts to further broaden awareness of the project and solicit input from the surrounding community have continued and are on-going. Community resources and contacts were identified and continue to be documented through additional research. For a complete list of engagement efforts, reference **Appendix F-1, Community Impacts Assessment**.

3.3.1.5 ENVIRONMENTAL CONSEQUENCES METHODOLOGY

The environmental consequences analysis considered minority populations, LEP households, children, elderly, and disabled populations. It evaluated the potential for adverse impacts to the economic stability and social functioning of these communities and neighborhoods. Minor ROW takes on a scale common with transportation projects are not regarded as adverse unless unusual circumstances exist or unless the impacts provoke substantial public controversy.

3.3.2 Affected Environment

This section describes the race and ethnicity, linguistic isolation,[43] age, and disability characteristics of the population within the Environmental, Local, and Regional Study Areas. Minority and LEP populations are groups that typically live near to one another and were considered as part of this analysis. Communities

Exhibit 3-15 presents the breakdown of White, non-Hispanic individuals versus minority individuals within the seven cities, five counties, and the state of Georgia. **Exhibits 3-16** graphically shows the percent minority population in each of the 50 block groups.

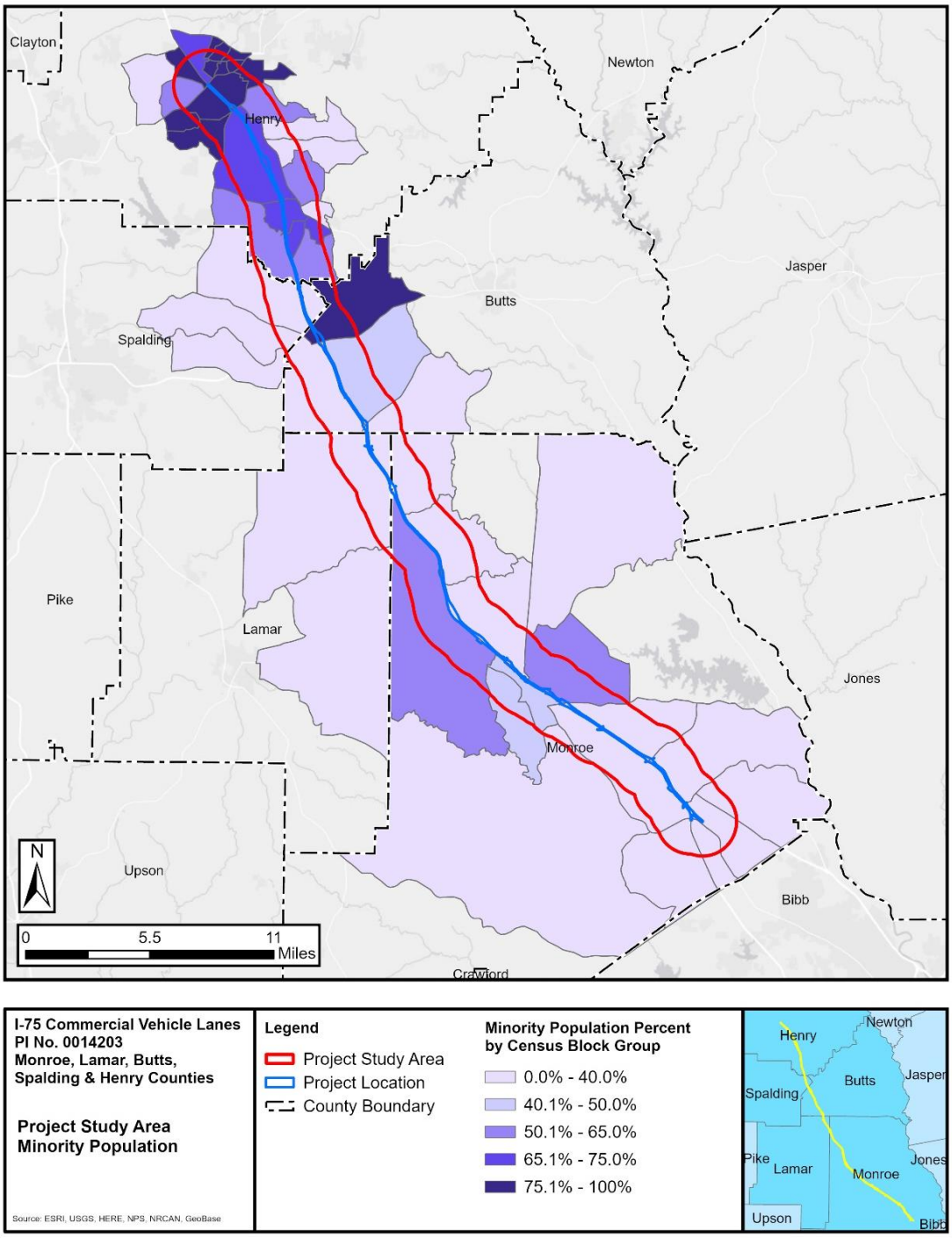
[43] Linguistic isolation refers to individuals living in a household in which all members speak English less than "very well."

EXHIBIT 3-15: MINORITY POPULATION IN THE LOCAL STUDY AREA

GEOGRAPHIC AREA	WHITE, NON-HISPANIC		TOTAL MINORITY	
	Total	**Percentage**	**Total**	**Percentage**
5-County (Regional Study Area)	179,567	47.9%	195,027	52.1%
Monroe County	20,193	72.6%	7,632	27.4%
Forsyth	1,792	41.0%	2,578	59.0%
Lamar County	12,045	65.2%	6,437	34.8%
Barnesville	3,029	47.8%	3,306	52.2%
Butts County	16,335	65.5%	8,615	34.5%
Jackson	2,699	49.7%	2,736	50.3%
Jenkinsburg	258	72.5%	98	27.5%
Spalding County	37,889	56.8%	28,833	43.2%
Griffin	8,669	37.2%	14,631	62.8%
Henry County	93,105	39.3%	143,510	60.7%
Hampton	2,893	35.4%	5,273	64.6%
Locust Grove	4,206	47.7%	4,610	52.3%
McDonough	4,081	14.3%	24,493	85.7%

Source: US Census Bureau. 2017-2021 American Community Survey 5-Year Estimates, Table DP05, accessed January 17, 2023 2791 from https://data.census.gov/.
Note: The total minority population includes Hispanics of any race and non-Hispanics of any race except the non-Hispanic White population.

EXHIBIT 3-16: MINORITY POPULATIONS IN THE ENVIRONMENTAL STUDY AREA



Source: US Census Bureau, Georgia DOT, ESRI, USGS, HERE, NPS

Seventeen of the 34 block groups were identified as block groups that have a majority of individuals that are a minority. In total, 31 neighborhoods were identified within the Environmental Study Area as being a majority a minority: seven in McDonough, 17 in Locust Grove, three in Forsyth, and one in Juliette. **Appendix F-1, Community Impacts and Environmental Assessment** includes a more detailed breakdown of these block groups.

3.3.2.1 LIMITED ENGLISH PROFICIENCY COMMUNITIES

Sixteen of the 50 block groups have a percentage LEP population of 2 percent or more. Five block groups have an LEP population of 6 percent or greater. **Appendix F-1, Community Impacts Assessment** includes a more detailed breakdown of these block groups.

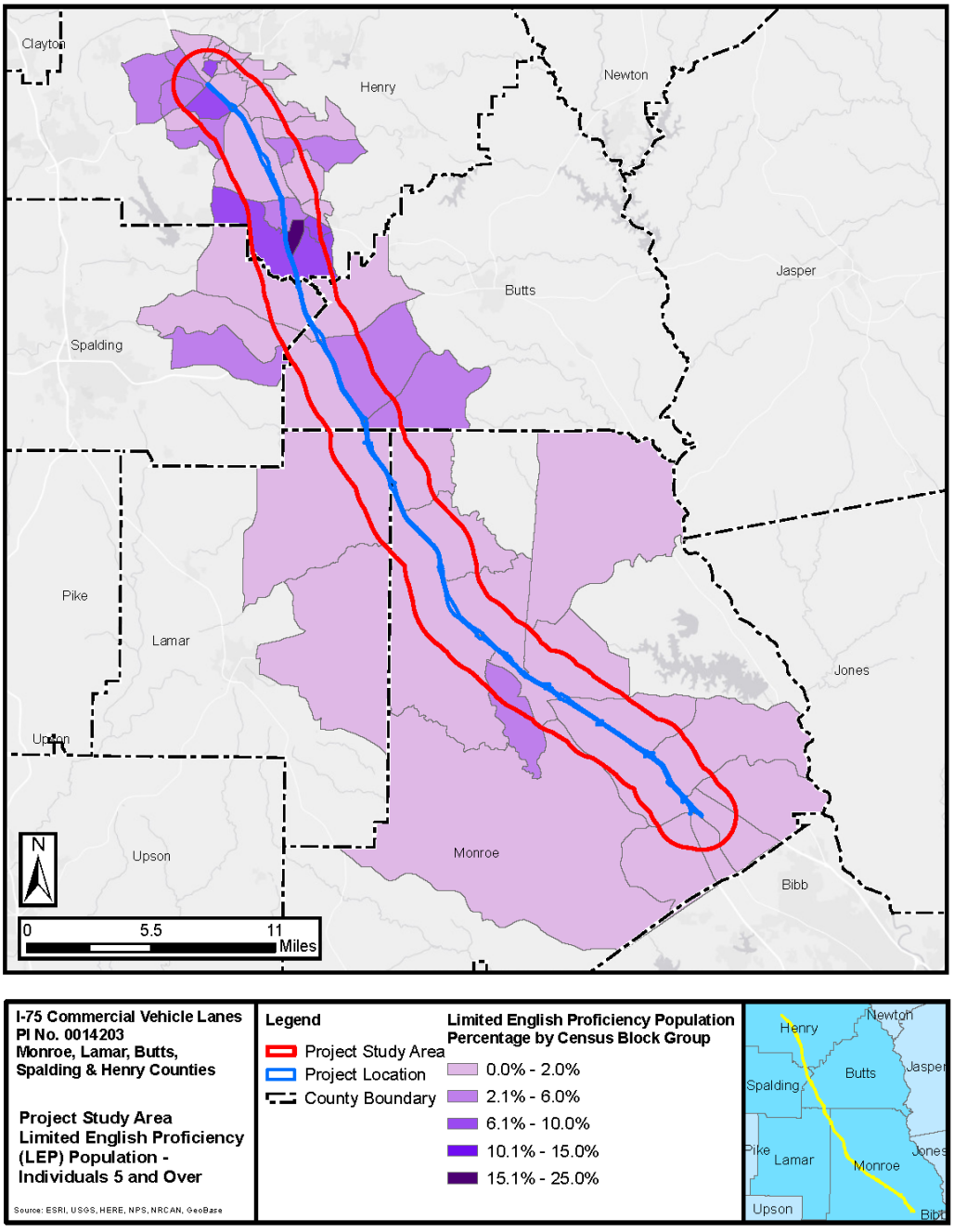
Exhibit 3-17 presents data for the five-county Study Area for LEP individuals. In the five-county Study Area, 7.4 percent of individuals are considered LEP. **Exhibit 3-18** shows the percent LEP population in each of the 50 block groups comprising the Environmental Study Area.

EXHIBIT 3-17: LIMITED ENGLISH PROFICIENT INDIVIDUALS IN THE REGIONAL STUDY AREA

LEP STATUS	MONROE COUNTY	LAMAR COUNTY	BUTTS COUNTY	SPALDING COUNTY	HENRY COUNTY
Not LEP	99.4%	99.3%	98.4%	98.9%	96.6%
LEP	0.6%	0.7%	1.6%	1.1%	3.4%
Spanish Language	0.5%	0.3%	1.4%	0.8%	1.9%
Asian Languages	0.0%	0.1%	0.1%	0.1%	1.0%
Other Languages	0.1%	0.2%	0.1%	0.2%	0.5%
TOTAL	**100%**	**100%**	**100%**	**100%**	**100%**

Source: U.S. Census Bureau. 2017-2021 American Community Survey 5-Year Estimates, B16004, accessed January 31, 2023 https://data.census.gov.

EXHIBIT 3-18: LIMITED ENGLISH PROFICIENCY HOUSEHOLDS IN THE ENVIRONMENTAL STUDY AREA



Source: US Census Bureau, Georgia DOT, ESRI, USGS, HERE, NPS

3.3.2.2 DISABLED AND ELDERLY POPULATIONS

Individuals living with disabilities within the eight cities represent 19.8 percent of the population. Of these individuals, 3,202 people (19.4 percent) are also part of the 65 and older population. **Exhibit 3-19**

provides a breakdown of the estimated number of non-institutionalized individuals with disabilities in each city and **Exhibit 3-20** presents the data on the over 65 population for the Local and Regional Study Areas. Facilities likely used by seniors - which include heath care facilities, libraries, golf courses, and senior centers - within a 0.5-mile of the Preferred Alternative are listed in **Exhibit 3-21** and **Exhibit 3-24** shows the location of these facilities graphically.

EXHIBIT 3-19: INDIVIDUALS WITH DISABILITIES WITHIN CITIES IN LOCAL STUDY AREA

CITY	NON-INSTITUTIONALIZED INDIVIDUALS WITH DISABILITIES						
	Hearing	Vision	Cognitive	Ambulatory	Self-Care	Independence	**Total**
Barnesville (pop. 6,127)	152	171	279	399	148	197	1,346
Forsyth (pop. 4,219)	92	132	125	515	40	167	1,071
Griffin (pop. 23,110)	451	581	1,285	1,715	504	1,103	5,639
Hampton (pop. 8,166)	299	157	240	229	124	226	1,275
Jackson (pop. 5,030)	25	28	454	259	22	83	871
Jenkinsburg (pop. 356)	4	8	13	24	6	10	65
Locust Grove (pop. 8,816)	222	284	469	327	178	540	2,020
McDonough (pop. 27,503)	313	496	970	947	396	1,067	4,189
Total (pop. 83,327)	**1,558**	**1,857**	**3,835**	**4,415**	**1,418**	**3,393**	**16,476**
Percent of Total (83,327)	**1.9%**	**2.2%**	**4.6%**	**5.3%**	**1.7%**	**4.1%**	**19.8%**

Source: U.S. Census Bureau. 2017-2021 American Community Survey 5-Year Estimates, S1810, DP05, accessed January 31, 2023 from http://data.census.gov/.

EXHIBIT 3-20: 65 YEARS OLD AND OLDER POPULATION

GEOGRAPHIC AREA	NUMBER OF PERSONS	PERCENT TOTAL
Five-County Area	52,196	13.9%
Butts County	3,973	15.9%
Jackson	682	12.5%
Jenkinsburg	68	19.1%
Henry County	27,757	11.7%
Hampton	551	6.7%
Locust Grove	700	7.9%
McDonough	2032	7.1%

GEOGRAPHIC AREA	NUMBER OF PERSONS	PERCENT TOTAL
Lamar County	3207	17.4%
Barnesville	921	14.5%
Monroe County	5,121	18.4%
Forsyth	877	20.1%
Spalding County	12,138	18.2%
Griffin	3,022	13.0%

Source: US Census Bureau. 2017-2021 American Community Survey 5-Year Estimates, S0101, accessed January 31, 2023 from https://data.census.gov/.

EXHIBIT 3-21: FACILITIES LIKELY USED BY ELDERLY POPULATIONS NEAR THE PROJECT

MAP ID	TYPE	NAME	ADDRESS
Henry County			
110	Golf Course	Cotton Fields Golf Club	400 Industrial Blvd, McDonough, GA 30253
174	Senior Center	Havenwood Grove Senior	550 Indian Creek Rd, Locust Grove, GA 30248
Monroe County			
193	Healthcare	Forsyth Dental Center	94 N Bennett St, Forsyth, GA 31029
179	Healthcare	Langford Allergy, LLC	201 Tift College Dr, Forsyth, GA 31029
141	Healthcare	Southern Smiles	275 N Frontage Rd, Forsyth, GA 31029
195	Library	Hardin Library	300, Patrol Rd, Forsyth, GA 31029

3.3.2.3 CHILDREN

Exhibit 3-22 presents the data on the population under 18 for the Local and Regional Study Areas. **Exhibit 3-23** presents a list of facilities likely used by children within a 0.5-mile of the Preferred Alternative and **Exhibit 3-24** shows a map of community facilities within a 0.5-mile of the Preferred Alternative.

EXHIBIT 3-22: POPULATION UNDER 18 YEARS

GEOGRAPHIC AREA	NUMBER OF PERSONS	PERCENT TOTAL
Five-County Area	91,079	24.3%
Butts County	5,066	20.3%
Jackson	1,611	29.6%
Jenkinsburg	53	14.9%
Henry County	60,543	25.6%
Hampton	2,335	28.6%
Locust Grove	2,179	24.7%
McDonough	7,706	27.0%
Lamar County	3,854	20.9%
Barnesville	1,215	19.2%
Monroe County	5,816	20.9%
Forsyth	1,157	26.5%
Spalding County	15,800	23.7%
Griffin	6,231	26.7%

Source: U.S. Census Bureau. 2017-2021 American Community Survey 5-Year Estimates, S0101, accessed January 31, 2023 from https://data.census.gov/.

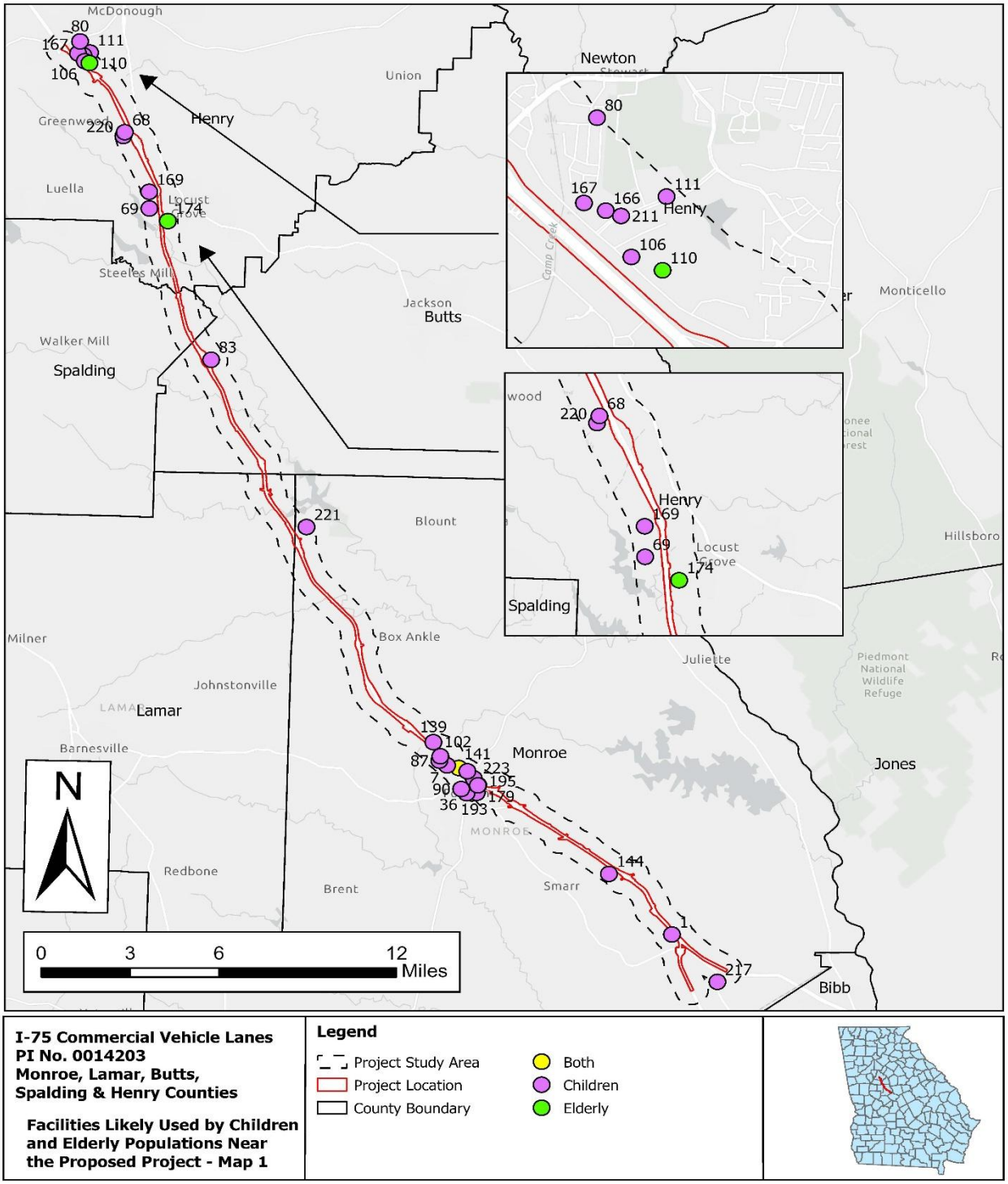
EXHIBIT 3-23: FACILITIES LIKELY USED BY CHILDREN NEAR THE PROJECT

MAP ID	TYPE	NAME	ADDRESS
Butts County			
83	Place of Worship	CrossOver Ministries	2702 GA-16, Jackson, GA 30233
Henry County			
220	Other	Residential Common Area-Vacant Lot at Laurel Creek at Eagle's Brooke	Fresh Laurel Lane and Academic Parkway, Locust Grove, GA 30248
111	Park	Red Hawk Baseball Complex	143 Henry Pkwy, McDonough, GA 30253
166	Daycare	A Friends House Inc	111 Henry Pkwy, McDonough, GA 30253
169	Healthcare	Lindsey Orthodontics	4600 Bill Gardner Pkwy Suite 100, Locust Grove, GA 30248
68	School	Bethlehem Elementary School	1000 Academic Pkwy, Locust Grove, GA 30248
69	School	Strong Rock Christian School	4200 Strong Rock Pkwy, Locust Grove, GA 30248
211	Government and Public Service	Henry County Division of Family and Children Services	125 Henry Pkwy, McDonough, GA 30253
167	Government and Public Service	Henry County Developmental Disability	672 Industrial Blvd, McDonough, GA 30253
13	Place of Worship	Relevant Church	4770 GA-42, Locust Grove, GA 30248
80	Place of Worship	Retro Church	831 Pavilion Ct, McDonough, GA 30253
106	Place of Worship	Southside Christian Fellowship	500 Industrial Blvd, McDonough, GA 30253
Lamar County			
221	Park	High Falls State Park	76 High Falls Park Dr, Jackson, GA 30233
Monroe County			
217	Daycare	Little Angel's Learning and Daycare	Rivoli Rd, Macon, GA
193	Healthcare	Forsyth Dental Center	94 N Bennett St, Forsyth, GA 31029
179	Healthcare	Langford Allergy, LLC	201 Tift College Dr, Forsyth, GA 31029
36	Healthcare	Pregnancy Center	13 N Lee St # 2000, Forsyth, GA 31029
141	Healthcare	Southern Smiles	275 N Frontage Rd, Forsyth, GA 31029
195	Library	Hardin Library	300, Patrol Rd, Forsyth, GA 31029
144	Other	Meadows Gun Club and Shooting School	1064 Rumble Rd, Forsyth, GA 31029
139	Park (and Government and Public Service)	Monroe County Recreation Department	1080 GA-42, Forsyth, GA 31029
223	Park	Unnamed Park (basketball court and playground)	North Frontage Road at Milledge Circle, Forsyth, GA 31029
1	Place of Worship	Bethany Baptist Church	365 Pea Ridge Rd, Juliette, GA 31046

MAP ID	TYPE	NAME	ADDRESS
214	Place of Worship	Cathedral of Faith Praise Center	150 Powerhouse Rd, Forsyth, GA, 31029
90	Place of Worship	First Baptist Church of Forsyth	95 W Morse St, Forsyth, GA 31029
7	Place of Worship	Forsyth Apostolic Church	71 Ensign Rd, Forsyth, GA 31029
87	Place of Worship	Garden Hill Baptist Church	88 Vining St, Forsyth, GA 31029
102	Place of Worship	Redemption Church	858 Indian Springs Dr, Forsyth, GA 31029
89	Place of Worship	St Luke AME Church	143 James St, Forsyth, GA 31029

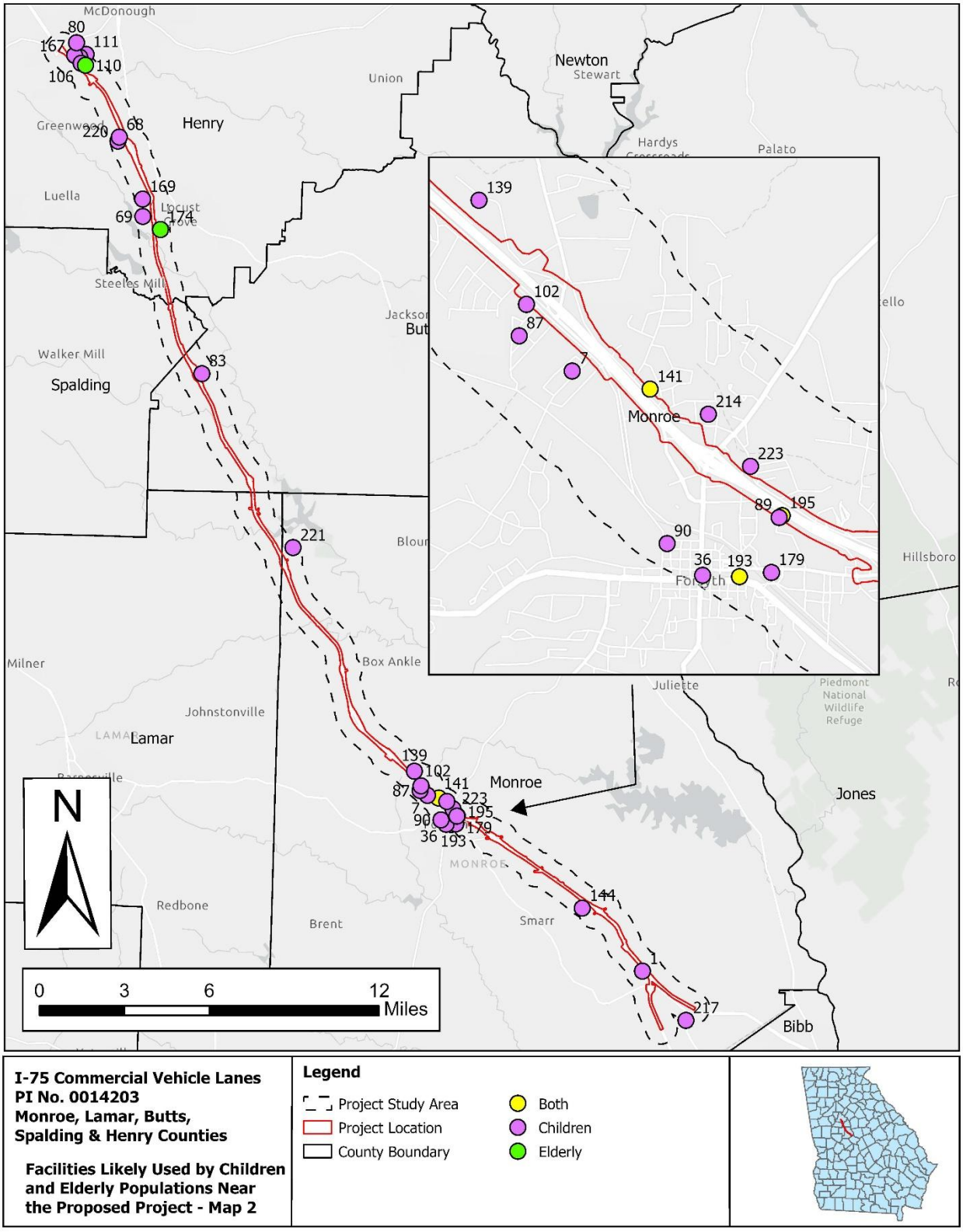
1312

EXHIBIT 3-24.1: FACILITIES LIKELY USED BY CHILDREN AND ELDERLY POPULATIONS NEAR THE PROJECT



Source: Google Earth, Georgia DOT , ESRI, USGS, HERE, NPS
*Note: The Map ID numbers in **Exhibit 3-34** and **Exhibit 3-36** correspond to those shown in this exhibit.*

EXHIBIT 3-24.2: FACILITIES LIKELY USED BY CHILDREN AND ELDERLY POPULATIONS NEAR THE PROJECT



3.3.3 Environmental Consequences

This section discusses the analysis and addresses impacts from the No-Build Alternative and Preferred Alternative on communities of concern. The No-Build Alternative would have no significant impacts on communities of concern since the Project would not be built. There would be no ROW acquisition and no displacements along the I-75 corridor associated with the No-Build Alternative; no communities of concern would be impacted. Additionally, the No-Build Alternative would not provide any safety improvements and would not make travel more reliable. Over time, the No-Build Alternative would result in a degradation of the transportation resources which would negatively affect communities using the highway system. No-Build Alternative noise levels would range from 50.7 to 78.4 decibels A-weighted (dBA), which is similar to existing conditions.

The Preferred Alternative would affect persons adjacent to the Project Area, including minority, LEP, elderly persons, and children.

3.3.3.1 ROW ACQUISITION AND DISPLACEMENT

The Preferred Alternative would require ROW acquisitions and displacements. The Preferred Alternative would require ROW of approximately 344.1 acres spread across 174 properties. These takings all consist of narrow slivers of land along the existing I-75 ROW and would not disrupt the properties' functions or disrupt neighborhood cohesion.

There would also be four displacements under the Preferred Alternative. These properties include one residential duplex; two residential one-story single-family homes; and one commercial parcel with a hotel property (Americas Best Value Inn & Suites Forsyth) and cabinet door making business. During a field visit, the owner of Americas Best Value Inn & Suites Forsyth confirmed that they do not have any long-term tenants; however, they indicated there were 50 extended stay tenants. All four of the displacements are located in minority or low-income block groups as presented in **Exhibit 3-25** below.

EXHIBIT 3-25: DISPLACEMENTS

COUNTY	CITY	PROPERTY TAX ID	AVAILABLE ADDRESS	DESCRIPTION	BLOCK GROUP
Monroe	Forsyth	F44 022	Frontage Road	Partially vacant, residential property	CT 501.02, BG 1
Monroe	Forsyth	F34 038	James Street (Milledge Circle)	Residential property with one-story single-family house (728 square feet)	CT 501.02, BG 2
Monroe	Forsyth	F24 059	130 North Frontage Road	Americas Best Value Inn & Suites Forsyth and cabinet/door manufacturer	CT 501.01, BG 2
Monroe	Forsyth	053 030	825 Benson Ham Road	One tenant-occupied single-family home (1,788	CT 501.02, BG 2

COUNTY	CITY	PROPERTY TAX ID	AVAILABLE ADDRESS	DESCRIPTION	BLOCK GROUP
				square feet) (Parcel 38)	

Sources: Monroe County Tax Assessors Office. Accessed October 5, 2020 from https://www.qpublic.net/ga/monroe/ and https://qpublic.schneidercorp.com/Application.aspx?App=MonroeCountyGA&Layer=Parcels&PageType=Search

The project has been designed to minimize the number of property acquisitions and displacements by incorporating walls near protected resources as well as shifting the alignment and elevating it into the median through the City of Forsyth to minimize the amount of ROW needed. In addition, the project is not expected to substantially disrupt existing neighborhood character or community cohesion. In accordance with the Uniform Relocation Assistance and Real Property Acquisitions Policies Act of 1970 as amended (42 USC 3336 4601, et. seq.), and 49 CFR 24, *Uniform Relocation Assistance and Real Property Acquisition for Federal and Federally-Assisted Programs*, mitigation in the form of federal relocation assistance would be provided for property acquisitions and displacements. As noted in **Appendix F-1, Community Impacts Assessment**, the US Census Bureau 5-Year Community Survey data estimates that City of Forsyth has approximately 178 available housing units[44].

3.3.3.2 TRANSPORTATION

The Preferred Alternative would have a beneficial effect on regional congestion, mobility, and travel time. The Build Alternative would also have a beneficial effect on corridor safety and travel time reliability.

3.3.3.3 VISUAL IMPACTS

There may be potential for visual impacts to communities of concern due to the addition of a noise barrier or new CVLs. Proposed mitigation will aid in reducing these impacts. Refer to **Exhibit 3-13** for potential visual mitigation measures under consideration.

The visual environment within the City of Forsyth, from the SR 83 interchange to the SR 42 interchange along the North Frontage Road, would be adversely affected by the Project. The only community facility expected to experience an adverse visual effect from the Project is the Christ United Methodist Church in Forsyth. Changes to the visual environment at this location would consist of the elevated CVLs in the median, using a retaining wall, the addition of a bridge carrying the CVLs over I-75, the reconstruction and realignment to the east of the North Frontage Road, and the addition of noise barriers. These changes would occur in the foreground of the view from the church and would be a focal point for church attendees.

The Project would have a moderate visual impact on the Tanger Outlets in the City of Locust Grove. The visual quality at the Tanger Outlets is currently low. Although the parking lots face I-75, viewers are not likely to spend an extended amount of time in the parking lots. The Project would change the view from the Tanger Outlets parking lot by bringing the CVL alignment up to 50 feet closer to the Outlets than the existing northbound GP lanes and adding two bridges and associated retaining walls.

[44] U.S. Census Bureau. 2017-2021 American Community Survey 5-Year Estimates. Table DP04, accessed January 17, 2023 from https://www.data.census.gov/.

3.3.3.4 AIR QUALITY

Communities of concern would not experience significant adverse effects from air quality as a result of the Preferred Alternative. The Preferred Alternative is consistent with the State Implementation Plan (SIP) for the attainment of clean air quality in Georgia and complies with both state and federal air quality standards. Air quality benefits would be experienced across the I-75 corridor in all communities alike.

The air quality analysis assessed for mobile source air toxics (MSAT) using established methodology from FHWA for the No-Build Alternative and the Preferred Alternative. The air quality studies indicate that MSAT emissions in the Project Area will be substantially lower in the future than they are today, regardless of the alternative selected, due to cleaner engine standards coupled with fleet turnover. Emissions of the majority of MSAT pollutants will be higher in the Preferred Alternative compared to the No-Build Alternative but would be much less than present-day conditions; compared to 2018 conditions, MSAT emissions would be 92.6 percent less in 2052 under the Preferred Alternative, slightly less than the reduction estimated for the No Build scenario.

3.3.3.5 NOISE

Adverse impacts would occur to minority and low-income communities or communities of concern from noise associated with the Preferred Alternative; however, these impacts would not be considered significant. Noise impacts would be experienced throughout the Project corridor. Prior to noise abatement, design-year Preferred Alternative noise levels would approach or exceed the NAC at a total of 763 dwelling units/receptors along the Project corridor, which is a reduction compared to the No-Build Alternative and existing conditions. The Preferred Alternative would result in up to a 6.5-dBA increase in traffic generated noise, with noise levels ranging from 50.4 to 80.2 dBA. Where reasonable and feasible (dependent on factors such as the safety, acoustical effectiveness, and cost effectiveness of the barrier), noise barriers decrease the impact of highway noise on adjacent residences to an acceptable level. Any communities of concern impacted by noise levels that approach or exceed the FHWA NAC from the Preferred Alternative would be considered for a noise barrier.

A preliminary evaluation was conducted for a total of 31 noise barriers. Based on the preliminary evaluation, it has been determined that noise abatement is likely, but not guaranteed, at eight locations where noise barriers would be feasible and reasonable for the Preferred Alternative. See **Appendix F-1, Community Impacts Assessment**, Chapter 7 for data on the noise impact area (NIA), noise impacts, and the status of potential noise barriers associated with the NIA's located within communities of concern.

3.3.3.6 CHILDREN'S HEALTH AND SAFETY, ELDERLY, AND PERSONS WITH DISABILITIES

No environmental health and safety risks have been identified that would significantly affect children, elderly, and persons with disabilities. No significant and adverse impacts would occur to minority communities related to children's health and safety, elderly, and persons with disabilities.

In general, the Preferred Alternative is not anticipated to alter existing community facilities or the services they provide or create any new barriers that would permanently disrupt community cohesion or interrupt public access or transportation circulation, other than temporary, short duration closures to parks during construction. Information on mitigation measures during construction is included in **Section 3.2**

Community Facilities, Neighborhoods, and Cities and **Section 3.11, Construction/Utilities**. Following construction, improved access to some of these facilities is anticipated, which would be experienced by all communities alike.

3.3.4 Potential Avoidance, Minimization, and Mitigation Measures

Impacts to communities were avoided to the greatest extent possible. Based on the impacts disclosed above, mitigation measures will be implemented for the following:

- Acquisition and Displacement – Compensation to eligible recipients for full and partial property acquisitions will be provided in accordance with the federal Uniform Relocation Assistance and Property Acquisition Act of 1970 (defined in **Appendix F-1, Section 1.4, Regulatory Setting**).
- Noise – Noise barriers will be included where design-year noise levels approach or exceed the FHWA noise abatement criteria. The feasibility of these barriers depends on factors such as the safety, acoustical effectiveness, and cost effectiveness.

The Preferred Alternative is complex and large in terms of both the limits and the public investment; therefore, Georgia DOT and FHWA are committed to implementing avoidance, minimization, and mitigation measures for unavoidable impacts as part of the Preferred Alternative. In accordance with the Uniform Relocation Assistance and Real Property Acquisitions Policies Act of 1970, as amended (42 USC Section 4601, *et. seq.*), and 49 CFR 24, *Uniform Relocation Assistance and Real Property Acquisition for Federal and Federally-Assisted Programs*, mitigation in the form of federal relocation assistance would be provided for property acquisitions and displacements. These regulations assure owners of property to be acquired and persons displaced as a result of Federal or federally-assisted projects are treated fairly, consistently, and equitably.[45]

[45] FHWA. (1999). Part 24 - Uniform Relocation Assistance and Real Property Acquisition for Federal and Federally-Assisted Programs. Accessed on March 28, 2020.

3.4 ECONOMIC IMPACTS

This subsection presents the study methodology and analyses of the affected environment and environmental consequences for economics. Discussions are presented on the potential impacts of the No-Build and Preferred Alternative on economics and employment on the regional and/or local economy.Additional information is also included in the Economics section of **Appendix F-1, Community Impacts Assessment.**

3.4.1 Methodology

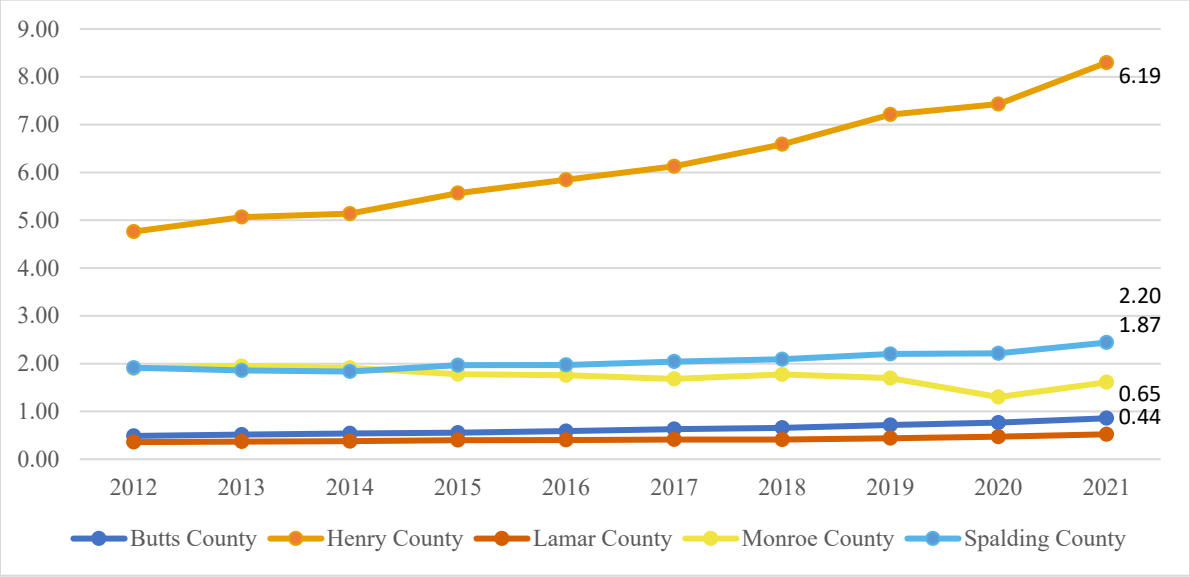
The effects of the Preferred Alternative on the regional economy and employment were considered against the No-Build Alternative. Potential environmental consequences were determined based on a desktop review of the data and regional economic development activities from regional planning agencies, the U.S. Census, and other government sources. A high-level qualitative analysis was conducted by comparing anticipated impacts of the No-Build and Preferred Alternative and incorporating expected economic trends.

3.4.2 Affected Environment

3.4.2.1 GROSS DOMESTIC PRODUCT

In 2021, the Economics Study Area counties' gross domestic products (GDP) ranged from $0.52 billion in Lamar County to $8.30 billion in Henry County (**Exhibit 3-26**). These counties' GDP have all grown since 2012, except Monroe County which has fluctuated and was higher in 2012 than in 2021.

EXHIBIT 3-26: ECONOMICS STUDY AREA COUNTIES CURRENT-DOLLAR GDP 2012-2021 (BILLIONS OF CURRENT DOLLARS)



Source: Bureau of Economic Analysis (BEA). 2021. CAGDP1 County and MSA gross domestic product (GDP) summary. Accessed January 17, 2023 from https://apps.bea.gov/itable.

3.4.2.2 HOUSING AND PER CAPITA INCOME

Exhibit 3-27 below includes housing and per capita income data for the five counties in the Economics Study Area. In these counties, median home values for owner-occupied units are lower than in Georgia as a whole. However, Henry County has values that are relatively equivalent to (slightly lower than) statewide values. Median rents in these counties vary with a high of $1,255 in Henry County and a low of $738 in Lamar County, compared to $1,110 in Georgia as a whole. In all counties, other than Monroe ($37,296), per capita income is lower than per capita income in Georgia ($34,516). Further information can be found in **Section 3.2, Community Facilities, Neighborhoods and Cities** and **Section 3.3, Communities**, as well as **Appendix F-1, Community Impacts Assessment.**

EXHIBIT 3-27: HOUSING AND PER CAPITA INCOME

GEOGRAPHY	MEDIAN HOME VALUE (OWNER-OCCUPIED UNITS)	MEDIAN RENT	PER CAPITA INCOME IN THE PAST 12 MONTHS (IN 2021 INFLATION-ADJUSTED DOLLARS)
Georgia	$206,700	$1,110	$34,516
Butts County	$168,600	$884	$25,902
Henry County	$202,300	$1,255	$32,238
Lamar County	$156,800	$738	$27,696
Monroe County	$178,800	$789	$37,296
Spalding County	$149,600	$925	$32,796

Source: U.S. Census Bureau. 2017-2021 American Community Survey 5-Year Estimates. Tables DP04 and B19301, accessed March 22, 2023 from https://data.census.gov/cedsci/.

3.4.2.3 EMPLOYMENT AND INDUSTRIES

Exhibit 3-28 presents employment figures for the five Economics Study Area counties for 2011 and 2021. Unemployment rates in all counties have declined since 2011.

Workers are divided across different employment sectors,[50] as presented in **Exhibit 3-29** below. Worker distribution in the Economics Study Area counties generally reflects the statewide worker distribution. In all counties, the largest employer by percentage is the educational services, and health care and social assistance sector, employing between 18 and 26 percent of workers in each county.

EXHIBIT 3-28: EMPLOYMENT

GEOGRAPHY	NUMBER OF PERSONS IN LABOR FORCE		NUMBER OF PERSONS EMPLOYED CIVILIAN LABOR FORCE		UNEMPLOYMENT RATE[A]	
	2011	2021	2011	2021	2011	2021
Georgia	4,813,601	5,329,864	4,288,924	4,983,753	9.9%	5.5%
Butts County	11,014	10,121	9,680	9,636	11.7%	4.8%
Henry County	103,233	123,507	92,540	115,328	9.6%	6.3%
Lamar County	8,730	8,272	7,032	7,532	19.1%	8.4%
Monroe County	12,801	13,162	11,658	12,614	8.8%	4.1%
Spalding County	29,697	29,501	25,500	28,033	13.9%	4.7%

Source: U.S. Census Bureau. 2007-2011 and 2017-2021 American Community Survey 5-Year Estimates. Tables DP03, accessed January 17, 2023 from https://data.census.gov/.

[A] This parameter was referred to as "percent unemployed" in the 2011 American Community Survey.

[50] Note: Sectors names and punctuations are taken directly from U.S. Census categories.

EXHIBIT 3-29: ECONOMICS STUDY AREA COUNTIES EMPLOYMENT SECTOR PERCENTAGES

Source: U.S. Census Bureau. 2017-2021 American Community Survey 5-Year Estimates. Table DP03, accessed January 17, 2023 from https://data.census.gov/.

As of 2021, the average weekly wages were lower in each county in the Economics Study Area than in Georgia as a whole. This difference was more pronounced in the service-producing, unclassified, and government sectors than in the goods-producing sectors (**Exhibit 3-30**).[54]

EXHIBIT 3-30: AVERAGE WEEKLY WAGES IN THE ECONOMICS STUDY AREA COUNTIES AND STATEWIDE (2021)

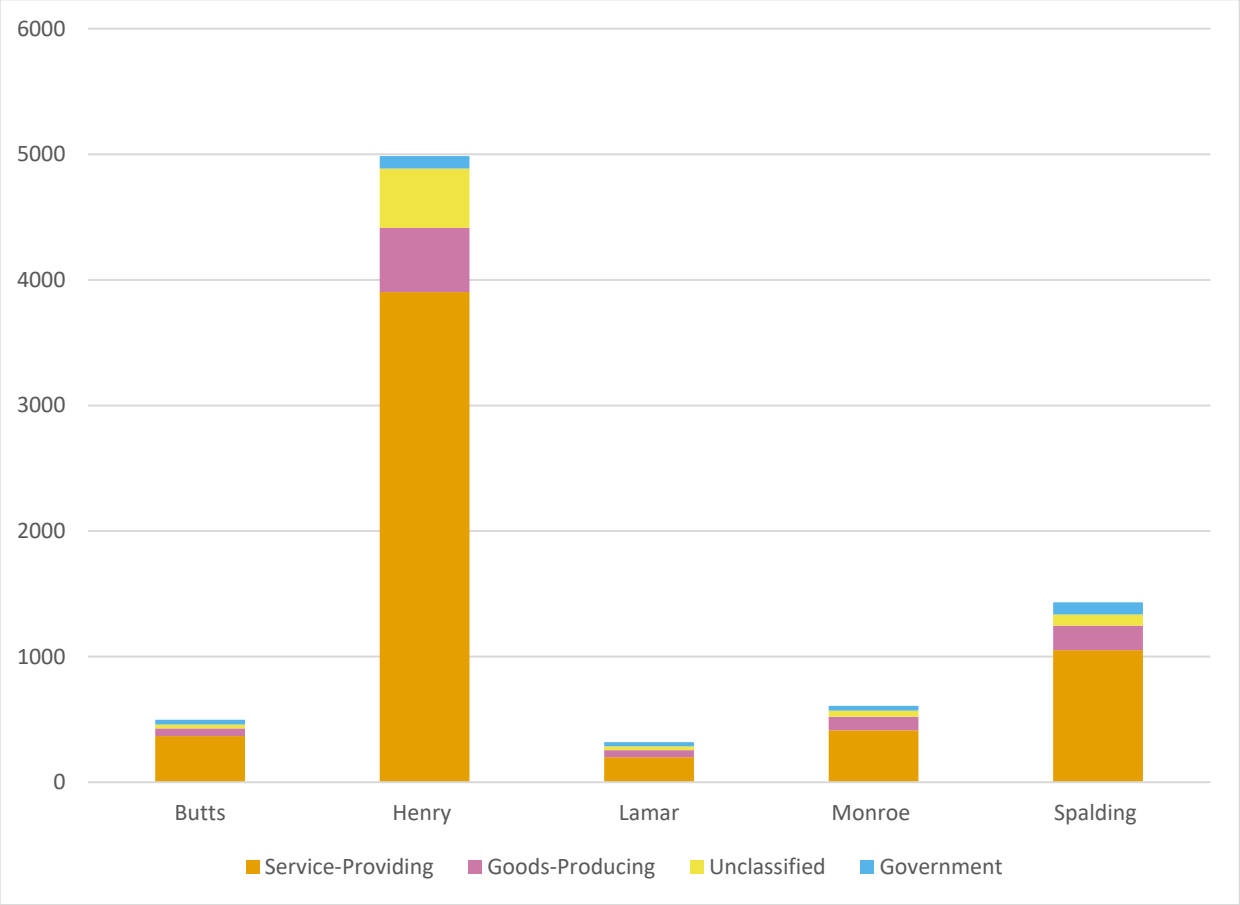
GEOGRAPHY	TOTAL	GOODS-PRODUCING SECTORS	SERVICE-PROVIDING SECTORS	UNCLASSIFIED SECTORS	GOVERNMENT SECTORS
Georgia	$1,197	$1,239	$1,208	$1,617	$1,085
Butts County	$853	$866	$857	$1,232	$820
Henry County	$877	$1,171	$807	$955	$1,113
Lamar County	$863	$1,063	$772	$873	$835
Monroe County	$883	$927	$863	$877	$896
Spalding County	$813	$1,110	$737	$951	$842

Source: Georgia Department of Labor. 2021. Georgia Employment and Wages 2021 Averages.

[54] Georgia Department of Labor. 2021. *Georgia Employment and Wages 2021 Averages.*

In total, there were 7,843 employment establishments in the five-county Economics Study Area in 2021, with a total average monthly employment of 111,187. Roughly three-quarters (5,933) of these establishments were "service-providing," with the remaining one-quarter spilt between "goods-producing" establishments (933) and unclassified (670) and government categories (307).[55] Among the five counties, Henry had the largest number of employment establishments (4,986), representing approximately 64 percent of the five-county totals.

EXHIBIT 3-31: NUMBER OF EMPLOYMENT ESTABLISHMENTS BY SECTOR IN ECONOMICS STUDY AREA COUNTIES



Source: Georgia Department of Labor. 2021. Georgia Employment and Wages 2021 Averages.

3.4.2.4 I-75 CORRIDOR AND PROJECTIONS

Along the I-75 corridor itself within and adjacent to the Project Area, there are pockets of concentrated economic activity, especially clustered around some of the I-75 exits. Several of these areas are related to warehousing and logistics, as well as commercial facilities and shopping centers and concentrations of automotive and truck-based industries, with businesses such as rest stops, truck dealers, manufacturing plants, and warehouse facilities.

[55] Georgia Department of Labor. 2021. *Georgia Employment and Wages 2021 Averages.*

Reflecting the presence of these economic activities, over the last 30 years, warehousing and distribution space in Henry County has grown from 2 million square feet to over 25 million square feet, with expansion planned. The broader region has experienced growth in the last 25-30 years, especially since the construction of I-75 in the 1960s and the growth in e-commerce more recently[56] (see **Appendix B, Need and Purpose Memo**). This growth in warehousing and distribution, responding to increasing freight movement in the I-75 corridor, is expected to continue along with the increasing freight, leading to potential additional (i.e., separate) transportation projects.[57, 58]

Recent studies have projected increased growth along I-75, especially in Forsyth, Locust Grove, and McDonough. The 2013 *I-75 South Corridor and Subarea Master Planning Study Existing and Future Conditions Assessment* projected a 68 percent growth in employment by 2040 for a slightly larger area than this Economics Study Area, covering Clayton, Henry, Spalding, Pike, Butts, Lamar, Monroe, and northern Jones Counties.The study also presented that, in the wider I-75 corridor, truck freight is projected to grow from approximately 27 million tons and $43 billion of goods in 2013. As a result of projected growth reflected in the employment data above, the study notes the importance of construction and manufacturing for truck traffic. The growth is especially relevant in the context of the ongoing and projected growth in the Port of Savannah and associated trucking, as described in **Section 1.2, Need and Purpose.**

Based on local jurisdictions' planning documents (see below), commercial and industrial growth is anticipated along I-75 in the future, especially in the sectors described above and related to commuters and freight (e.g., warehousing and logistics).This recent and projected growth is further exemplified by the many DRIs, along with future development sites, in the corridor.More specifics, including additional information on DRIs and development, are included in **Exhibit 3-32** and in the Economics section of **Appendix F-1, Community Impacts Assessment; and Section 3.1, Land Use.**

EXHIBIT 3-32: ECONOMIC DETAILS FROM LOCAL JURISDICTIONS PLANNING DOCUMENTS [59, 60]

JURISDICTION	DEVELOPMENT PLANS
Butts County	• Has sought to concentrate economic growth around I-75's already developing areas, especially in the context of suburban development pressures • Future Development Map in the Comprehensive Plan includes designations for Highway Activity Center around SR-16, Rural Activity Center, Suburban Residential, Institutional Campus and Industrial/ Commercial • Highway Activity Centers are around SR-16 and intended to have commercial nodes serving multiple neighborhoods and the wider region

[56] Georgia Department of Transportation. 2021. Effects: Land Use Packet. Project: I-75 Commercial Vehicle Lanes, Georgia DOT PI No.0014203.
[57] Georgia Department of Transportation. 2020. I-75 Commercial Vehicle Lanes Project Status Updates. Video Accessed October 2, 2020 from https://majormobilityga.com/projects/i75cvl/.
[58] Henry County. 2018. Interchange Justification Report. I-75 at Bethlehem Road Henry County. Accessed January 14, 2021 from https://www.locustgrove-ga.gov/home/showpublisheddocument?id=1412.
[59] Georgia Department of Transportation. 2013. *I-75 South Corridor and Subarea Master Planning Study Existing and Future Conditions Assessment*
[60] Georgia Department of Transportation. 2021. *Effects: Land Use Packet.* Project: I-75 Commercial Vehicle Lanes, Georgia DOT PI No.0014203.

JURISDICTION	DEVELOPMENT PLANS
	• Rural Activity Center designations are around I-75 with smaller scale commercial, civic and public nodes, located between Butt's County's two I-75 interchanges
Henry County	• Planning for mixed-use Regional Activity Centers along most of the major I-75 interchanges (i.e., Hudson Bridge Road, Jodeco Road, Jonesboro Road,* SR-20, and Bill Gardner Parkway) • Joint Comprehensive Plan (2018) highlights future rapid industrial development along the I-75 corridor
Lamar County	• Planning for commercial and industrial development along I-75, especially in the I-75 Corridor Development Area designation on its Future Development Map • The area near Exit 198 at High Falls Road has developed as a commercial node serving tourists, with business, such as gas stations, restaurants, and lodging
Monroe County	• Has experienced high growth around I-75, shifting from agriculture to residential development, especially with commuters to Macon and Atlanta • Joint Comprehensive Plan Update (2007) designates I-75 areas as Highway Corridor for commercial development
Spalding County	• Does not have much industrial or commercial development currently in the Economics Study Area • Planning for a Regional Commercial Center around proposed new interchange in Jenkinsburg
Forsyth	• Areas along I-75 have been targeted for commercial and industrial development
Griffin	• Has targeted areas of economic development, including the Central Business District, Commuter Rail Station area, Alternative Commuter Rail Station area, the North Hill Street area, The Medical Center, the Ellis Crossing and Oxford Village Commercial Redevelopment areas, the Meriwether Street Redevelopment area, and the Griffin-Spalding County Airport
Jackson	• Promotes economic development around areas adjacent to SR-16
Jenkinsburg	• Commercial development and some light industrial warehousing concentrated along US-23/SR-42 • Does not have large development but encourages redevelopment and new development
Locust Grove	• Identified commercial strip development as an issue along I-75 and is seeking to prevent further expansion of such development
Atlanta Regional Commission	• Identifies potential expansion of the logistics sector in Henry County (and Clayton County), including "supply chain management, transportation services, warehousing/storage and wholesale trade" • Also notes that there are interstate highway connections and opportunities with Clayton State University, which has a supply chain management program, Hartsfield-Jackson International Airport, Port of Savannah, and Brunswick, but that highway congestion is an economic threat

JURISDICTION	DEVELOPMENT PLANS
Three Rivers Regional Commission	• Butts County: There are economic development opportunities along I-75, such as the Travel Center Site at the I-75, SR-16 interchange, but infrastructure challenges, such as unpaved roads and needed water upgrades, present limitations • Lamar County: Economic opportunities are identified in the medical field related to Upson Regional Medical Center and Gordon State College's nursing program. There are also new industrial development prospects, despite a distribution center closing • Spalding: Opportunities for economic growth include recent roadway projects, the Lakes at Green Valley mixed-use development, Griffin-Spalding County Airport, and Spalding Regional Medical Center. There are challenges such as low home ownership rates, child poverty, high rates of teen pregnancy, and absentee landlords in Griffin
Middle Georgia Regional Commission	• Regional (Jones, Monroe, and Bibb Counties) strengths include cheap land and an available workforce • Regional weaknesses include low education levels, especially among remaining potential workers (i.e., "brain drain") and economic and employment reliance on Robins Air Force Base • Rumble Road industrial park and other industrial development (Monroe County), along with improved water and wastewater infrastructure, have been identified as key economic growth opportunities

[*] *Hudson Bridge Road, Jodeco Road and Jonesboro Road are immediately to the north of the Project Area*

3.4.3 Environmental Consequences

The No-Build Alternative would not change existing transportation or economic conditions within the Economics Study Area. Other planned development and transportation projects would be advanced.

The Preferred Alternative would have both beneficial and adverse economic impacts to the Economics Study Area but would not lead to wholesale economic consequences.

The Preferred Alternative is within one of the busiest transportation corridors in the state of Georgia.[61] The Preferred Alternative would not cause widespread changes in the existing land use (See **Section 3.1, Land Use**), transportation patterns, or character of this corridor, and would not make changes to regional land use or transportation patterns. As a result, the Preferred Alternative is not anticipated to substantially alter the regional economic conditions and trends.

Improved logistics, reduced crash rates, and travel time reliability for I-75 would improve the transfer of freight, people, and goods, leading to potential local economic benefits. The I-75 corridor is a critical transportation link, with related local economic activities that have developed around it, including logistics and warehousing establishments. Improved logistics associated with the Preferred Alternative would provide benefits for these entities, as well as the employees and businesses previously described in the Study Area. In the context of the broader economic details described in **Section 3.4.2, Affected**

[61] Georgia Department of Transportation. 2013. I-75 South Corridor and Subarea Master Planning Study Existing and Future Conditions Assessment.

Environment, especially related to trucking, warehousing, and other logistics, these beneficial impacts could extend to the wider I-75 area, including to the growing Port of Savannah (outside the Economics Study Area).

As described in **Chapter 1, Need and Purpose**, crashes have substantial economic impacts in terms of travel time delays and safety (i.e., medical costs and deaths), travel time and reliability, vehicle operating costs, and emissions costs. The safety improvements as a result of the Preferred Alternative would provide economic benefits associated with each of these issues.

There would be right-of-way takings at 174 properties, covering 344.1 acres, including properties with potential economic impacts (e.g., commercial and industrial land uses, residential properties). However, these right-of-way takings would all be narrow slivers of land along the existing I-75 ROW, so they would not impact economic activities or conditions on these properties or in the region. Additional details on residential displacements are included in **Section 3.3.3 Environmental Consequences.** There would be four displacements in Monroe County **(Exhibit 3-33)**.

EXHIBIT 3-33: ECONOMIC DETAILS OF ANTICIPATED DISPLACEMENT PROPERTIES

COUNTY	CITY	PROPERTY TAX ID	AVAILABLE ADDRESS	ASSESSED PROPERTY VALUE (2022)	LAND USE	DESCRIPTION
Monroe	Forsyth	F44 022	Frontage Road	$46,800	Residential	Duplex residential property with one tenant living in the right-side unit
Monroe	Forsyth	F34 038	James Street (Milledge Circle)	$7,700	Residential	Residential property with existing one-story single-family house (728 square feet)
Monroe	Forsyth	F24 059	130 North Frontage Road	$751,400	Commercial	Americas Best Value Inn & Suites Forsyth and cabinet door maker business and warehouse
Monroe	Forsyth	053 030	825 Benson Ham Road	$72,800	Residential	One tenant-occupied single-family home (1,788 square feet)

Sources: Monroe County Tax Assessors Office. Accessed October 5, 2020, February 25, 2021, and March 14, 2023 from https://www.qpublic.net/ga/monroe/ and https://qpublic.schneidercorp.com/Application.aspx?App=MonroeCountyGA&Layer=Parcels&PageType=Search

Together, these properties represent $878,700 in economic value, based on Monroe County Assessors Offices valuations.[62, 63] In the context of GDP numbers presented in **Exhibit 3-33** above, these displacements are not anticipated to impact local economic trends. In terms of particular economic activities, these displacements would not remove economic activities that are not widely present throughout Economics Study Area more broadly, as there are residential and commercial properties and activities throughout the Economics Study Area (see **Section 3.1 Land Use**). More specifically to the commercial property in **Exhibit 3-33**, there are at least three other hotels of similar or larger size located at the same interchange, serving travelers on I-75 and providing employment opportunities and other economic activities. That same hotel chain also has facilities in Griffin, McDonough, and Macon on or accessible to I-75. Therefore, the displacements are not anticipated to impact economic conditions in the Economics Study Area. Owners would be fairly compensated in compliance with the Uniform Relocation Assistance and Real Property Acquisition Act.

3.4.4 Potential Avoidance Minimization and Mitigation Measures

As indicated in the preceding sections, minimal adverse economic consequences are anticipated from the Preferred Alternative, such as localized impacts around the CVLs and CVL ramps, with associated avoidance, minimization, and mitigation measures presented below. The loss in economic value in Monroe and Lamar County (from the displacements in **Exhibit 3-33** presented above) may be temporary if the economic activities – especially the hotel – are able to relocate within the County and/or their economic activities absorbed by other facilities (e.g., other hotels); this loss would be offset by the transportation benefits of the Project, especially related to the other economic activities presented in this section (e.g., trucking, warehousing, logistics). As part of the design process, Georgia DOT reworked designs to avoid displacing a commercial establishment (Waffle House) located at 444 Tift College Drive and valued at $215,600, based on Monroe County Assessor's Office valuation.[64] To minimize impacts from property acquisitions and construction impacts to economic centers, Georgia DOT would implement the following:

- Acquisition and Displacement—To minimize adverse impacts from ROW acquisition, compensation and relocation assistance are provided to eligible recipients for full and partial property acquisitions, as required by the Uniform Act. The Uniform Act directs that when an agency acquires property for a federal-aid project, ROW requirements are in place to provide benefits, protection, and payment of just compensation. When a project displaces an individual, family, business, farm or nonprofit organization, additional services and payment are required. FHWA does not consider compensation to be a mitigation measure.

- Businesses and Employment—A Public Involvement and Communication Plan will be developed and implemented to inform the economic community about Preferred Alternative construction activities. A Transportation Management Plan (TMP) will also be developed and implemented to maintain access to and from the affected economic centers (signage, detours, flagmen, etc.).

[62] Lamar County Tax Assessors Office. Accessed October 5, 2020 from https://www.qpublic.net/ga/lamar/ and https://qpublic.schneidercorp.com/Application.aspx?App=LamarCountyGA&Layer=Parcels&PageType=Search

[63] Monroe County Tax Assessors Office. Accessed October 5, 2020, February 25, 2021, and March 14, 2023 from https://www.qpublic.net/ga/monroe/ and https://qpublic.schneidercorp.com/Application.aspx?App=MonroeCountyGA&Layer=Parcels&PageType=Search

[64] Monroe County Tax Assessors Office. Accessed February 26, 2021 from https://www.qpublic.net/ga/monroe/ and https://qpublic.schneidercorp.com/Application.aspx?App=MonroeCountyGA&Layer=Parcels&PageType

Georgia DOT would work with local authorities, key economic sectors, and development projects to minimize any local disruptions as much as possible. Specific minimization measures may include timing construction to avoid rush hours; sharing information on the Project website to inform local stakeholders about potential disruptions, so that they can plan accordingly; coordinating with local businesses and development plans and projects; and designing the Preferred Alternative components so as not to impede economic activities as much as possible.

3.5 HISTORIC AND ARCHAEOLOGICAL RESOURCES

This subsection presents the study methodology and analyses of the affected environment and environmental consequences for historic and archaeological resources. Discussions on the potential impacts of the No-Build and Preferred Alternatives on historic and archaeological resources are presented. Also provided are any avoidance, minimization, and mitigation measures that were or will be implemented as a result of potential impacts by the Preferred Alternative on historic and archaeological resources.

For the Project, the Section 106 requirements for public involvement will be satisfied by the public involvement activities conducted under the NEPA. The information and analysis presented in this section rely on the findings of technical reports and other Project documentation appended to the EA, **Appendix A, Applicable Laws and Regulations;** and **Appendix I, Agency Correspondence**.

3.5.1 Methodology

In compliance with Section 106 of the National Historic Preservation Act of 1966 and amendments thereto, the Preferred Alternative has been surveyed for archaeological and historic resources. The purpose of the surveys was to locate, identify, and evaluate the significance of any historic and archaeological resources within the affected environment and to determine if these resources were listed, or were eligible for listing, in the National Register of Historic Places (NRHP). The survey boundary and methodology were established using the Major Mobility Investment Program Memorandum of Understanding (MMIP MOU) between the Georgia DOT, FHWA, the Georgia SHPO, as well as guidance received during project development. These guidelines were established as a result of past interaction with the Georgia SHPO and staff and were agreed upon by FHWA and the SHPO[65]

3.5.2 Affected Environment and Area of Potential Effect

The Area of Potential Effects (APE) for historic resources was defined in accordance with the Memorandum of Understanding (MOU) between FHWA, Georgia DOT, and the Georgia SHPO for the MMIP. As per the specific criteria provided in the MOU for the MMIP, the APE for historic resources was defined as the areas with potential for visual impacts, audible impacts, or physical impacts consisting of impacts to manmade features or greater than 25 percent encroachment towards any manmade features. The APE for archaeological resources is defined as the geographic area or areas wherein implementation of the Project would involve ground-disturbing activities.

[65] Georgia DOT. September 1, 2020. "Georgia Department of Transportation Section 106 Cultural Resources Manual." Accessed from http://www.dot.ga.gov/InvestSmart/Environment/CulturalResources/Documents/Section106CulturalResourcesManual.pdf. Accessed on Sept 1, 2020.

The Department of Natural Resources (DNR) surveys for historic resources for Monroe County (2001), Lamar County (1980), Butts County (2015 FindIt survey), Spalding County (2015 FindIt survey), and Henry County (2007) were consulted to locate any previously identified historic resources. This background review also included National Register-listed properties, proposed National Register nominations, National Historic Landmarks, and the updated Georgia Historic Bridge Survey (GHBS). The state archaeological site files at the University of Georgia and existing survey reports were reviewed to locate previously identified cultural resources within the APE. Topographic maps, aerial photography, and tax assessor records were also assessed to identify areas with potential for cultural resources. Finally, field surveys for potentially eligible historic and archaeological resources were conducted within the APE.

3.5.1.1 CONSULTING PARTIES

In compliance with 36 CFR 800, potential consulting parties were identified (**Exhibit 3-34**) and invited to participate in the Section 106 of the National Historic Preservation Act (NHPA) process. The consulting parties also assisted in identifying cultural resources. The Section 106 Notification Letter was sent to the parties on May 22, 2019. Also, on behalf of FHWA, in keeping with a government-to-government relationship and in compliance with 36 CFR 800, applicable federally recognized tribal governments were invited to participate in the Section 106 process.

EXHIBIT 3-34: INVITED CONSULTING PARTIES

POTENTIAL CONSULTING PARTY	DATE OF NOTIFICATION LETTER	RESPONSE
Georgia SHPO	5/22/19	Yes, 6/12/19
Monroe County Board of Commissioners	5/22/19	No
Lamar County Board of Commissioners	5/22/19	No
Butts County Board of Commissioners	5/22/19	No
Spalding County Board of Commissioners	5/22/19	No
Henry County Board of Commissioners	5/22/19	No
City of Forsyth	5/22/19	No
City of Locust Grove	5/22/19	Yes, 7/9/19
City of McDonough	5/22/19	No
Middle Georgia Regional Commission	5/22/19	No
Three Rivers Regional Commission	5/22/19	No
Atlanta Regional Commission	5/22/19	No
Historic Macon	5/22/19	No
Monroe County Historical Society	5/22/19	No
Genealogical Society of Clayton and Henry Counties	5/22/19	No
Barnesville-Lamar County Historical Society	5/22/19	No

POTENTIAL CONSULTING PARTY	DATE OF NOTIFICATION LETTER	RESPONSE
Griffin Spalding Historical Society	5/22/19	No
Alabama-Coushatta Tribe of Texas	5/22/19	No
Alabama-Quassarte Tribal Town	5/22/19	No
Muscogee (Creek) Nation	5/22/19	Yes, 7/23/19
Muscogee (Creek) National Council	5/22/19	No
Poarch Band of Creek Indians	5/22/19	No
Seminole Nation of Oklahoma	5/22/19	No
Thlopthlocco Tribal Town	5/22/19	No

Copies of correspondence with consulting parties is located in **Appendix I, Agency Correspondence**.

3.5.1.2 HISTORIC RESOURCES

The results of the field surveys and background research for historic resources are summarized in the reports in **Exhibit 3-35**. As a result of these efforts, three historic resources determined eligible for listing in the NRHP were identified within the APE (**Exhibits 3-36 to 3-39**).

EXHIBIT 3-35: HISTORIC RESOURCE SURVEY REPORTS

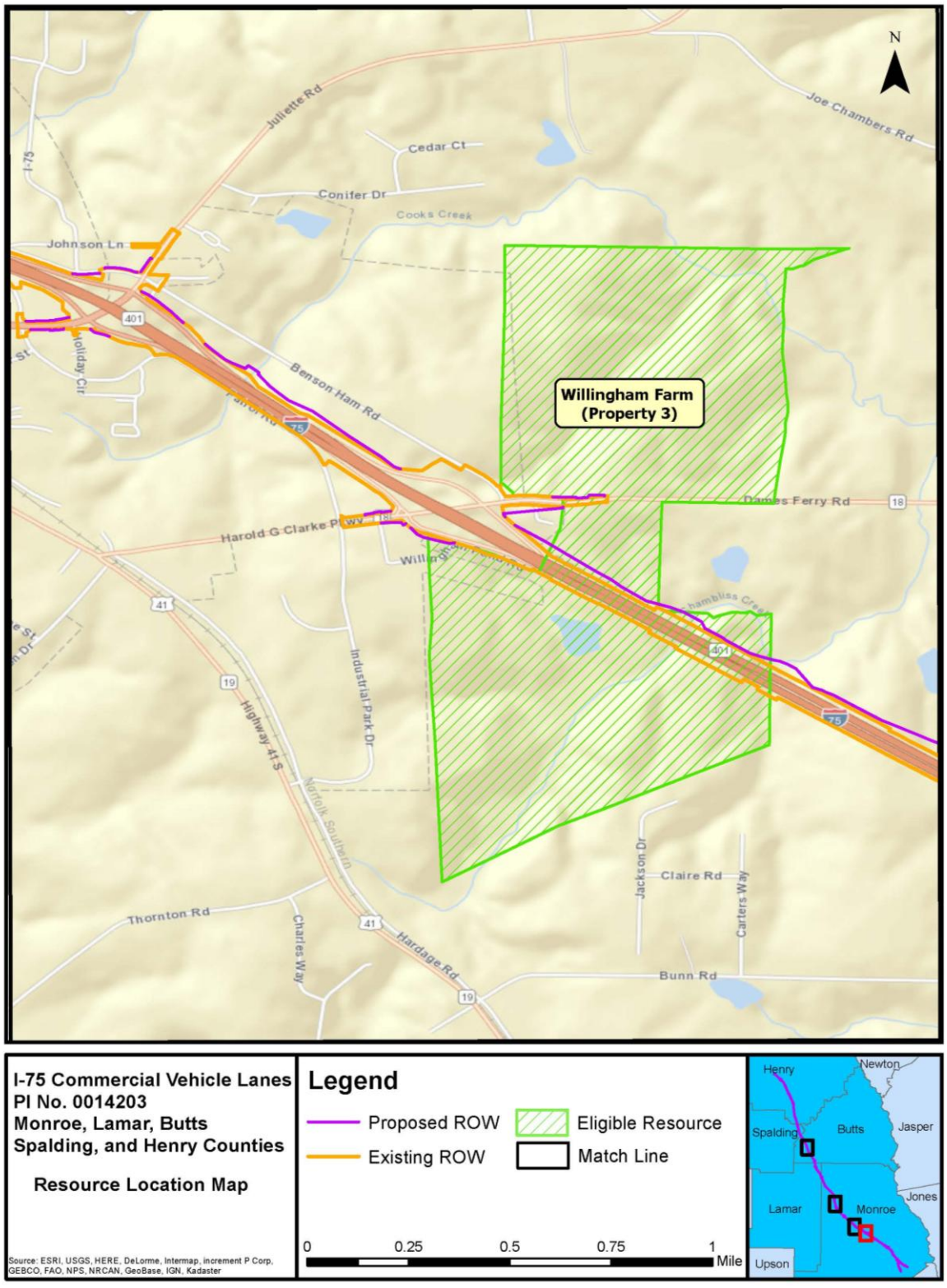
REPORT	ORIGINAL PROJECT	SHPO APPROVAL DATE
Historic Resource Survey Report	PI #0014203	4/20/20, 6/18/20
Historic Resource Survey Report Addendum 1	PI #0014203	10/27/20
Historic Resource Survey Report Addendum 2	PI #0014203	3/31/21
Historic Resource Survey Report Addendum 3	PI #0014203	8/24/21
Historic Resource Survey Report Addendum 4	PI #0014203	3/29/23
Reevaluation of Eligibility for the English Farm	PI #0014203	6/15/23

EXHIBIT 3-36: HISTORIC RESOURCES ELIGIBLE FOR LISTING IN THE NRHP

NAME OF RESOURCE	LOCATION	DATE OF CONSTRUCTION	TYPE/STYLE
Willingham Farm	670 and 590 Dames Ferry Road	Early 20th century	Farm/No Academic Style
New Forsyth Motel	130 North Frontage Road	Ca. 1966-1972	Motor Inn/Colonial Revival
Colwell Farm	346 Colwell Road	Early 20th century	New South Cottage/No Academic Style

More detailed information about these eligible properties and their areas of significance can be found in the Property Information Forms in the Cultural Resources Assessment of Effects Report and in the Historic Resource Survey Report and Historic Resources Survey Report Addenda on file at the Georgia DOT.

EXHIBIT 3-37: CULTURAL RESOURCES MAP 1 OF 3

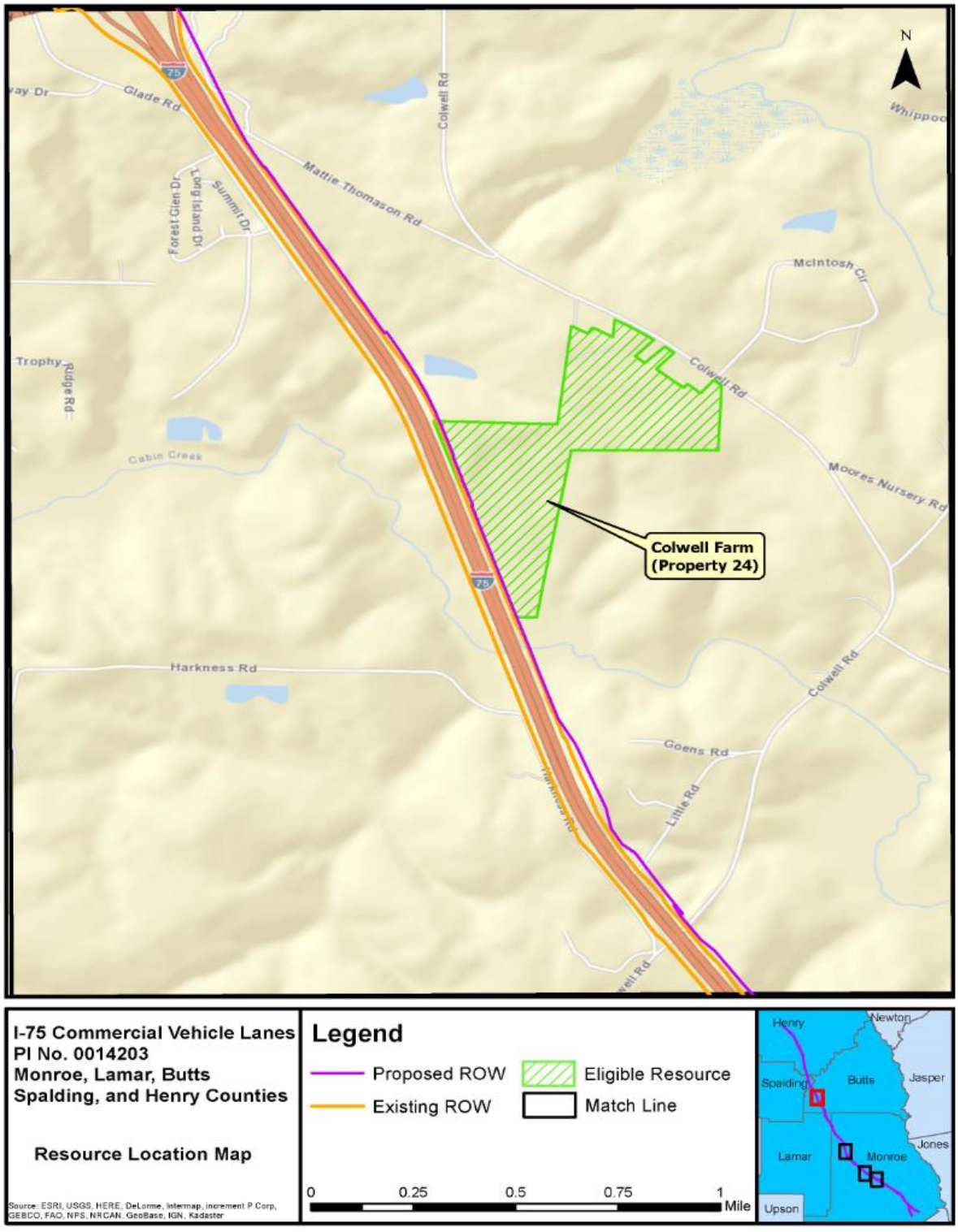


Source: Cultural Resources Assessment of Effects Report

EXHIBIT 3-38: CULTURAL RESOURCES MAP 2 OF 3

Source: Cultural Resources Assessment of Effects Report

1682 ## EXHIBIT 3-39: CULTURAL RESOURCES MAP 3 OF 3



1683
1684 *Source: Cultural Resources Assessment of Effects Report*

3.5.1.3 ARCHAEOLOGICAL RESOURCES

The Project was surveyed for archaeological resources in accordance with guidelines established by the Georgia Council of Professional Archaeologists, Georgia SHPO, and the Georgia DOT Environmental Procedures Manual. These guidelines provide general survey expectations and methodological approaches to archaeological surveys based on the type/scope of proposed highway projects and were followed during the initial identification of archaeological resources. The results of these survey efforts were described in *Phase I Archaeological Survey and Phase II Investigations of the Interstate 75 Commercial Vehicle Lanes at Interstate 475 to State Route 155*. The Georgia SHPO concurred with the findings of this report on January 4, 2021. Due to minor design changes, two Addendum Archaeological Reports were prepared and submitted to the Georgia SHPO and FHWA. The First Addendum was submitted on June 30, 2021 and the Georgia SHPO concurred with the findings of this report on July 16, 2021; the Second Addendum was submitted on January 6, 2023 and the Georgia SHPO concurred with the findings of this report on January 25, 2023 (see **Appendix I, Agency Correspondence**).

Forty-two sites were identified as having unknown National Register eligibility because their boundaries may extend outside of the survey area; however, the portion of these sites within the survey area has been determined to lack significant data potential under Criterion D. Four cemeteries were also identified within the project survey area. The cemeteries also have unknown eligibility under Criterion D as no subsurface excavations were completed, and no information is available regarding their data potential. Sites with unknown eligibility will be labeled as Environmentally Sensitive Areas (ESAs) on the plans and protected during construction. No further evaluation of these sites was conducted.

As a result of the Phase I and Phase II investigations, a total of four eligible sites were identified in the project APE, and the effects of the Project on these sites were evaluated.

More detailed information about the eligible archaeological sites and their areas of significance can be found in the Determination of Eligibility Forms in the Cultural Resources Assessment of Effects Report. More detailed information about the archaeological sites with unknown eligibility can be found in the *Phase I Archaeological Survey and Phase II Investigations of the Interstate 75 Commercial Vehicle Lanes at Interstate 475 to State Route* on file at the Georgia DOT.

3.5.3 Environmental Consequences and Effects Assessment

Avoiding all impacts to the identified historic resources would be possible only through the No-Build Alternative. The No-Build Alternative would avoid impacts to cultural resources, such as ROW acquisition or the addition of visual features. However, as stated in **Chapter 1, Need and Purpose**, the projected growth in freight traffic along this corridor due to the enlargement of the Port of Savannah will need long-term transportation solutions including the implementation of CVLs to help manage the increasingly congested conditions. The No-Build Alternative would not address the region's freight transportation mobility and safety needs.

The Preferred Alternative would have minor impacts on most of the cultural resources within the APE. One property would be partially demolished as a result of the project, which would result in a finding of Adverse Effect. These effects are summarized in **Exhibit 3-40**. The Cultural Resources Assessment of Effects Report, contains additional information on these impacts. The Georgia SHPO concurred with the findings of this report on October 25, 2023 (see **Appendix I, Agency Correspondence**).

1725 EXHIBIT 3-40: HISTORIC RESOURCES IMPACTS

NAME OF RESOURCE	PHYSICAL	USE	SETTING	AUDIBLE	VISUAL
Willingham Farm	No Adverse Effect	No Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect
New Forsyth Motel	Adverse Effect	Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect
9MO580	No Effect	No Effect	No Effect	No Effect	No Effect
Colwell Farm	No Adverse Effect	No Effect	No Adverse Effect	No Adverse Effect	No Effect
9MO585	No Adverse Effect	No Effect	No Effect	No Effect	No Effect
9LR70	No Effect	No Effect	No Effect	No Effect	No Effect
9LR72	No Adverse Effect	No Effect	No Effect	No Effect	No Effect

1726 Implementation of the Preferred Alternative would require small strips of ROW from multiple historic
1727 properties within which physical alteration of the property would occur; however, these effects would not
1728 be adverse. No ROW acquisition would occur within the boundaries of any of the archaeological
1729 resources; however, some of these resources are already partially located within the existing I-75 ROW.
1730 The archaeological resources would be protected during and after construction by being labeled as ESAs,
1731 and further archaeological assessment would be required prior to any maintenance activity within the
1732 ESA boundaries, such as fence replacement.

1733 The Preferred Alternative would not alter the use of the Willingham Farm, or Colwell Farm, both of
1734 which function in a combination residential, agricultural, and/or commercial capacity. The acquisition of
1735 small strips of ROW from these two historic resources would not change the use of the historic resources.
1736 Similarly, the data potential of the significant archaeological deposits would not be altered. The use of the
1737 New Forsyth Motel is expected to be adversely affected by its partial demolition.

1738 Implementation of the Preferred Alternative would have minor impacts on the setting of cultural
1739 resources. One resource, the New Forsyth Motel, would suffer the loss of three contributing buildings,
1740 which would result in an adverse effect to the resource, as well as the resource's physical features within
1741 the setting that contribute to its historic significance. Visual impacts to the properties would not be
1742 adverse. None of the properties would be adversely affected audibly.

1743 The resources have been previously impacted by the construction of I-75. Several of the archaeological
1744 sites are located within the I-75 ROW and were impacted by grading, clearing, and fence construction
1745 associated with I-75. The Willingham Farm and Colwell Farm were bisected by the construction of I-75
1746 in the mid-20th century. In each case, small portions of the property were left disconnected on the west
1747 side of I-75, while the main portion remained on the east side of the roadway. In the area of Colwell

Farm, the ROW and edge-of-pavement seems to have largely remained the same in the area of the resource, with widening occurring into the existing median. In addition, interchanges have been altered in some locations, and some bridges have been widened. The New Forsyth Motel was previously affected with a large amount of ROW being taken from the resource along the roadway. As described in **Chapter 2, Alternatives**, and **Section 3.1, Land Use**, the I-75 corridor is expected to largely maintain its existing land use patterns following project construction. Despite minor ROW acquisition for the construction and maintenance of the roadway as part of the present project, the historic properties would largely retain spacious acreage. The archaeological sites would not experience any ROW acquisition. All except one property retain the physical and setting characteristics that make them eligible for listing in the NRHP. Similarly, all except one property would remain viable for their current uses. The noise levels at the properties have risen over time as traffic volumes have increased; however, the present project would reduce noise levels due to the construction of new noise barriers. These noise barriers are expected to keep noise levels below abatement levels (see **Exhibit 3-45: FHWA Noise Abatement Criteria and Land Uses**) through the future traffic volumes as identified in the design year. The impact of the current project would result in an adverse effect to only one property, the New Forsyth Motel. No other cultural resources along the project corridor would be adversely affected by the Project.

The Georgia SHPO concurred with this assessment of the effects of the Preferred Alternative on October 25, 2023.

3.5.4 Potential Avoidance, Minimization, and Mitigation Measures

Extensive efforts have been undertaken to avoid impacts to historic and archaeological resources. Cultural resources have been avoided to the greatest extent possible by focusing design efforts on confining the improvements to the existing ROW.

As a result of these efforts, multiple historic resources that had been initially identified as within the APE were subsequently determined to be no longer in the APE, as documented in APE Memorandum Reevaluation #1 dated February 24, 2020, APE Memorandum Reevaluation #2 dated October 6, 2020, APE Memorandum Reevaluation #3 dated March 9, 2021, APE Memorandum Reevaluation #4 dated July 28, 2021, and APE Memorandum Reevaluation #5 dated October 4, 2022[66]. In addition, the plans would mark eligible historic resources as ESAs, and orange barrier fencing would protect them from the potential for construction impacts in addition to those marked on the plans.

Similarly, the design originally included impacts to identified cemeteries, eligible archaeological sites, and archaeological sites with unknown eligibility. However, these impacts have been avoided through design changes to shift away from eligible archaeological resources. No construction would occur within any portion of an archaeological site that contributes to its eligibility. Eligible archaeological sites, cemeteries, and sites with unknown eligibility will be labeled as ESAs on the plans and protected during construction.

Plans to minimize harm to the extent possible were considered during project development. Multiple strategies, as described below, were evaluated for their potential to reduce impacts to the historic properties. These minimization strategies were discussed in Avoidance and Minimization Measures meetings, as well as numerous internal and interim minimization meetings. As a result of these efforts, the

[66] The APE Memos are included as an appendix of the Project Cultural Resources Assessment of Effects Report, which is on file with GDOT.

activities associated with the proposed CVLs would be confined largely to the existing ROW. In addition, this coordination resulted in the minimization of ROW acquisition in the area of several properties, such as Site 9LR70 and Colwell Farm. In the area of Site 9LR70 and Willingham Farm, designers incorporated a wall into the design to avoid ROW acquisition. In the area of 9M0585 and 9LR72, no alterations would occur to the existing fence along the ROW line within the sites.

In addition, Project designers considered opportunities to shift the CVLs to the center of I-75 to reduce impacts to historic properties. In certain locations, placing the CVLs within the center of I-75 allowed for a reduction of ROW due to the width of the existing central median and/or roadway geometry. This design strategy was implemented in the area of the Willingham Farm in order to reduce physical impacts and minimize harm. This design strategy was implemented in the area of the New Forsyth Motel; however, due to the close proximity of the historic property to existing I-75, demolitions of buildings within the property are still required.

As the Project contractor would be responsible for future maintenance within the I-75 ROW, a post-construction commitment would be made to avoid future harm to archaeological sites (9MO580, 9MO585, 9LR70, 9LR72) within and/or immediately adjacent to the existing ROW. The contractor would be required to continue to treat these sites as ESAs during future maintenance activities. Any proposed ground disturbing maintenance activities within the sites, including clearing or fence replacement, would require further archaeological assessment. A contractual obligation would be created for the developer to designate the ESA as an area with Restricted Access in order to ensure that no unauthorized activities occur within these restricted areas.

The minor impacts to two historic resources and four eligible archaeological sites would be considered No Adverse Effect. The proposed project would result in an Adverse Effect to one historic resource (New Forsyth Motel). The SHPO concurred with this finding on October 25, 2023 (see **Appendix I, Agency Correspondence**).

MITIGATION

I. Prior to the commencement of construction activities, Georgia DOT will ensure that digital photographic documentation of the New Forsyth Motel will be completed per the *Guidelines for Establishing a Photographic Permanent Archival Record* (PAR). The photography and accompanying documentation will be provided to the GA SHPO for acceptance and retention; copies will also be submitted to local historical societies and libraries in Monroe County.

II. Prior to project completion, Georgia DOT will conduct a windshield survey of businesses that were identified in "*The Negro Motorist Green Book*" located in Monroe and Bibb Counties. The windshield survey will record the places of business that remain extant and that are no longer extant, as well as provide general photography of the extant buildings. Georgia DOT will also develop a GIS database to record the locations of the identified resources in Monroe and Bibb Counties, both extant and non-extant, which will be made available on Georgia DOT's Cultural Resources external website.

III. Prior to project completion, Georgia DOT will prepare a narrative describing the area along I-75 in the city of Forsyth known as "Motel City" and how the New Forsyth Motel and other area motels are associated. The contents of the narrative may include, but not be limited to, oral history interviews, historic maps, aerial photography, historic photographs and other ephemera, and other relevant graphics and illustrations. The narrative will provide a contextual history of the "Motel City" development and how that history fits within the development of the City of

Forsyth and the development of roadside architecture along interstate highways. The narrative will be provided to the GA SHPO for acceptance. Upon approval, final digital and hard copies of the document will be provided to the GA SHPO for retention, as well as to area historical societies, historical collections, and schools located along the project corridor.

3.6 HAZARDOUS WASTE AND MATERIALS

This subsection presents the study methodology and analyses of the affected environment and environmental consequences for hazardous waste and materials. Discussions on the potential impacts of the No-Build and Preferred Alternatives on hazardous waste and materials are presented. Also provided are any avoidance, minimization, and mitigation measures that were or will be implemented as a result of potentially hazardous waste and materials impacts by the Preferred Alternative.

3.6.1 Phase I Methodology

The Hazardous Waste and Materials Study Area encompassed the approximately 41 linear miles along I-75 in Henry, Spalding, Butts, Lamar, and Monroe Counties.

The hazardous waste and materials assessment was completed with consideration of the American Society for Testing Materials International (ASTM) E 1527-13, *Standard Practice for Environmental Project Area Assessments: Phase I Environmental Project Area Assessment Process* (the "Standard"); however, is not considered a complete Phase I Environmental Site Assessment (ESA).

The assessment identifies to the extent feasible recognized environmental conditions (RECs) in connection with the Study Area. A REC is a term that is used to identify a particular, potential environmental impairment on a property related to a hazardous material. The assessment was completed using the Standard as guidance.

Environmental database reports were prepared by Environmental Data Resources, Inc. (EDR); these reports provide database listings at search distances specified in the Standard, which roughly correspond to the potential for contamination migration and/or impact based on the type of environmental listing.

A project area reconnaissance was conducted to assess the current condition of database listings and other properties along the corridor. The field surveys assessed exterior and ground surfaces for storage tanks, monitoring wells, sources of polychlorinated biphenyls, and general housekeeping practices for improper storage of Oil and Hazardous Materials (OHM), staining and other reasonably identifiable signs of RECs.

State environmental files were reviewed for spills and database records of note. Files reviewed included underground storage tank, leaking underground storage tank, and hazardous site inventory sites. Each site and observation was then evaluated based on known conditions, potential for migration of contamination and position relative to the Hazardous Waste and Materials Study Area.

3.6.2 Affected Environment

Phase II subsurface investigation was authorized on March 9, 2021. The investigation, dated June 15, 2021, was based on the recommendations of the March 2020 Phase I ESA and January 2021 update. Field work completed in October 2022 studied expanded construction easements, proposed ROW, and driveway easements resulting from design changes.

A total of 36 RECs were identified within the Project Area during the Phase I ESA; seven were within the Project ROW or construction easements, the remaining 29 were abutting or adjacent to the Project with the potential to impact the Project through subsurface migration. An additional 16 findings were considered outside of the probable area of influence of the Project. De minimis findings, minor conditions that would ordinarily not be regulated or pose a serious risk to the public or construction, were identified at 23 properties.

Environmental soil sampling and screening was performed from April 12 to April 27, 2021. A total of 145 direct push borings were performed to a depth of 25 feet below land surface (BLS) or refusal, whichever occurred first. Groundwater was encountered at approximately half of these locations. Photo Ionization Detection (PID) field screening indicated minimal or no presence of organic vapors at most of the tested locations. One location at an active Chevron gas station located at 445 Tift College Drive, (aka Chevron #43780), recorded a PID reading of 425 ppm at 20 to 25 BLS. In general, soil samples were collected at the depth of the highest vapor reading and delivered to an analytical laboratory for testing or at a depth of 0 to 5 feet if no organic vapors were detected. Laboratory analyses were selected in general accordance with Georgia DOT ESA: Phase II Guidelines (10.3.2, revised August 15, 2018).

At the above noted location the quantity of Naphthalene detected in the groundwater (0.009mg/L) exceeds the GA EPD Hazardous Site Response Act (HSRA) notification criteria of 0.0061mg/L as defined in rule 391-3-19, Appendix III. Groundwater for this site was encountered at 22.5 ft. BLS. Analytes detected in the soil were all below notification criteria.

With exception to the above location, all other analytes detected were below the GA EPD Underground Storage Management Tank Program's (USMTP) soil threshold levels and the GA EPD HSRA notification criteria for regulated substances.

The Phase I Environmental Site Assessment and Phase I Environmental Site Assessment Update Memo and Phase II Environmental Site Assessment are on file at the Georgia DOT.

3.6.3 Environmental Consequences

Subsurface investigation (Phase II Environmental Site Assessment) has confirmed the presence of subsurface hazardous materials at one location within or adjacent to proposed and existing ROW and work limits. While the potential to encounter hazardous materials at this location does exist, the existing groundwater level (22 ft. BLS) would suggest that potential to be low, given the limited scope of construction planned in the vicinity of the site. Avoidance, remediation, or implementation of other engineering controls needed to protect workers and public safety may be considered, and applicable laws and regulations concerning the removal of toxic or hazardous material will be followed and the removal coordinated with the GA EPD. Implementation of the Preferred Alternative will not preclude any necessary site remediation to be performed by others.

Findings of the subsurface investigation would inform the preparation of a Soil Management Plan. The plan would establish measures for the proper handling, transport and disposal of hazardous materials. The presence of hazardous materials would have direct impacts on the Project and environment due to excavation and removal of solid waste and hazardous waste generation and use of construction equipment on RECs potentially contaminated with hazardous materials.

The proposed project would require the demolition of existing structures including residential and commercial buildings, storm pipes, and other common roadway facilities. Structures proposed for demolition would be evaluated by a qualified environmental professional to determine whether testing of materials is required to assess the presence of hazardous materials such as lead, or asbestos. Testing would also be used to classify demolition waste to determine if the disposal can be completed at a standard Construction and Demolition Landfill, or if the waste is classified as a hazardous material and required to be disposed of a landfill that is permitted to dispose of these types of materials.

Other impacts from hazardous materials assessment and cleanup may include an increase in solid waste generation and disposal including off-site transport of hazardous materials, and increased greenhouse gases from transport vehicles, possible spread of contaminated soil during transport to waste facilities, and the release of dust particles into the air during excavation.

3.6.4 Potential Avoidance, Minimization, and Mitigation Measures

Potential encounters with hazardous materials would not be avoided, though existing facilities and structures not associated with contamination releases would be avoided as practicable, including but not limited to underground storage tanks (USTs), monitoring wells, and aboveground storage tanks (ASTs). Mitigation measures, including removal and disposal of contaminated materials, in-situ remediation of media, and worker protections would be further informed by subsurface investigation of identified RECs.

3.7 AIR QUALITY

This subsection presents the study methodology and analyses of the affected environment and environmental consequences for air quality. Discussions on the potential impacts of the No-Build and Preferred Alternatives on air quality are presented. Also provided are any avoidance, minimization, and mitigation measures that were or will be implemented as a result of potential impacts to air quality by the Preferred Alternative.

3.7.1 Methodology

The affected environment is defined by determining the attainment status of criteria pollutants at the Preferred Alternative location, defining the Air Quality Study Area for the quantitative air toxics analysis, and reviewing local meteorology. The Air Quality Study Area was established by identifying all roadway segments associated with the Preferred Alternative as well as segments expecting meaningful changes in emissions as described in **Section 3.7.2.2**. The Air Quality Study Area is primarily composed of the I-75 Project corridor with a few local roadways in McDonough, Locust Grove, Forsyth, and Macon, as shown in **Exhibit 3-43.** These components of the affected environment are developed using established resources and guidelines that are referenced in each respective section. Local meteorology is defined using historical climate data from weather stations near the Air Quality Study Area. Given the size of the Air Quality Study Area, historical weather data was reviewed from Griffin-Spalding County Airport and Thomaston-Upson County Airport.

The air quality impacts of the Preferred and No-Build Alternatives were assessed using data regarding the attainment status for the criteria pollutants, local meteorological data, and travel demand modeling. The environmental consequences of the Preferred Alternative were quantitatively assessed for MSAT using established methodology from the FHWA and Georgia DOT. Based on the Preferred Alternative's effect on diesel truck traffic, the Preferred Alternative is considered to have higher potential MSAT effects per

FHWA guidance and requires a quantitative MSAT analysis. The air quality study used emissions modeling to evaluate the amount of MSAT emitted for the Preferred and No-Build Alternatives. The potential for the Preferred Alternative to affect criteria pollutant emissions is addressed in **Section 3.7.2.1**. Further information about the methodology used to assess environmental consequences is presented in **Appendix F-2**, **Air Assessment Report**.

3.7.2 Affected Environment

3.7.2.1 CRITERIA POLLUTANT ATTAINMENT STATUS

The 1990 Clean Air Act (CAA) amendments and guidelines, issued by the Environmental Protection Agency (EPA), set forth guidelines to be followed by agencies responsible for compliance with the National Ambient Air Quality Standards (NAAQS). The NAAQS have been established for air pollutants that have been identified by the EPA as being of concern nationwide. These air pollutants, referred to as criteria pollutants, are carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO_2), particulate matter 2.5 micrometers or less ($PM_{2.5}$) and 10 micrometers or less (PM_{10}), ozone (O_3), and sulfur dioxide (SO_2). The EPA assesses an area's compliance with the NAAQS by classifying the area under four designations for each criteria pollutant (**Exhibit 3-41**). The Project is in Attainment for all current standards with the exception of the portion of the Project in Henry County, which is a Maintenance area for Ozone as of November 2022. The Project is included in the ARC's 2050 Metropolitan Transportation Plan and FY 2024-2027 Transportation Improvement Program, which are conforming plans for this area.

EXHIBIT 3-41: NAAQS ATTAINMENT DEFINITIONS FOR CRITERIA POLLUTANTS

STATUS	DESCRIPTION
Attainment	Occurs when an area's ambient air concentrations are below the respective NAAQS
Nonattainment	Occurs when ambient air concentrations of criteria pollutants are greater than the NAAQS for one or more criteria pollutants
Maintenance	An area that has recently achieved Attainment after having a previous designation of Nonattainment
Unclassifiable	An area where insufficient data exists to decide as to Attainment or Nonattainment. Generally treated as Attainment areas
Transportation Conformity	Federal air quality standards (Clean Air Act Amendments (CAAA) section 176[c]) requires federal transportation projects to be consistent with SIP, meaning transportation activities do not cause new violations of the NAAQS, worsen existing violations of the standards, or delay attainment of the relevant standard

The Attainment statuses and required assessments for the Preferred Alternative were reviewed and are summarized in **Exhibit 3-42**. Further information on these pollutants and analysis requirements is presented in **Appendix F-2**, **Air Assessment Report.**

EXHIBIT 3-42: CRITERIA POLLUTANT ATTAINMENT STATUSES AND ASSESSMENT REQUIREMENTS

POLLUTANT(S)	ATTAINMENT STATUS AND ASSESSMENT REQUIREMENTS
Pb, NO_2, PM_{10}, SO_2	• The State of Georgia is currently in attainment for Pb, NO_2, PM_{10}, and SO_2 with respect to the NAAQS and no independent state-level air quality controls are currently established; therefore, no air quality analysis is required for these pollutants.[67]
CO	• EPA first set air quality standards for CO in 1971. Nationally and, particularly in urban areas, the majority of CO emissions to ambient air come from mobile sources. For the protection of both public health and welfare, EPA set an eight-hour primary standard at nine parts per million (ppm) and a one-hour primary standard at 35 ppm. • As of May 1, 2020, no regional or project-level CO conformity requirements are in effect for the State of Georgia. In accordance with 40 CFR 93.102(b), transportation conformity determinations only apply in nonattainment and maintenance areas, but Georgia is in attainment for CO as no counties in Georgia are currently categorized as being in nonattainment or maintenance for CO. As such regional and project-level transportation conformity requirements do not apply for CO in Georgia. • Georgia DOT has determined that quantitative CO project-level analyses are not required in any CO attainment areas within the state and effective May 1, 2020, project-level CO analysis is considered unnecessary for NEPA purposes as outlined by the *FHWA – Georgia DOT April 2020 Agreement: Qualitative Project-Level Analyses for GA Areas in Attainment for Carbon Monoxide* (please refer to this agreement for further details). [68]
$PM_{2.5}$	• Transportation conformity is required for federal transportation projects in areas that have been designated by the EPA as not meeting the NAAQS. These areas are called nonattainment areas if they currently do not meet air quality standards or maintenance areas if they have previously violated air quality standards, but currently meet them and have an approved maintenance plan. On August 24, 2016, the EPA revoked the 1997 Primary Annual $PM_{2.5}$ NAAQS that designated 24 counties and three partial counties in Georgia as non-attainment areas for $PM_{2.5}$. As a result, effective October 24, 2016, Transportation Conformity for the $PM_{2.5}$ standards in the State of Georgia is no longer required, the State of Georgia is considered to be in attainment for $PM_{2.5}$, and no further analysis of $PM_{2.5}$ emissions is warranted.
O_3	• The Preferred Alternative area in Henry County is in a Maintenance area for ozone (O_3) and is in an area where the SIP contains transportation control measures. The CAA requires Transportation Plans and Transportation Improvement Programs (TIP) in areas not meeting the NAAQS to achieve conformity to the SIP for air quality. The FY 2024-2027 TIP is the currently adopted plan for the Atlanta area (including Henry County) showing the region's highest transportation priorities. • The ARC received the most recent conformity determination from the USDOT on February 27, 2025.

[67] EPA. December 31, 2024. "Nonattainment Areas for Criteria Pollutants (Green Book)." Accessed from https://www.epa.gov/green-book. Accessed on January 13, 2025.

[68] FHWA – Georgia DOT. April 13, 2020. 2020 Agreement: Qualitative Project-Level Analyses for GA Areas in Attainment for Carbon Monoxide. Technical Approach for GDOT Air Assessments following May 1, 2020.

POLLUTANT(S)	ATTAINMENT STATUS AND ASSESSMENT REQUIREMENTS
	• The Preferred Alternative is identified in the ARC's 2050 Metropolitan Transportation Plan and FY 2024-2027 Transportation Improvement Program by reference number AR-318 and is included in the region's air quality conformity analysis. The Preferred Alternative is also listed on the Georgia DOT State TIP by reference number 0014203. • Inclusion in a conforming plan demonstrates that the Project meets conformity requirements, therefore no further analysis of O_3 emissions is warranted (see **Appendix F-2, Air Assessment Report**). • All other counties in the Air Quality Study Area are in Attainment of the current ozone standard.

3.7.2.2 MOBILE SOURCE AIR TOXICS METHODOLOGY AND STUDY AREA

In addition to the criteria air pollutants for which there are NAAQS, the EPA also regulates MSAT. MSAT are hazardous air pollutants which primarily originate from human-made sources, including on-road mobile sources, non-road mobile sources (e.g., airplanes), area sources (e.g., dry cleaners), and stationary sources (e.g., factories or refineries). Controlling air toxic emissions became a national priority with the passage of the CAAA of 1990, whereby Congress mandated that the EPA regulate 188 air toxics, also known as hazardous air pollutants. The EPA has assessed this expansive list in their latest rule on the Control of Hazardous Air Pollutants from Mobile Sources (Federal Register, Vol. 72, No. 37, page 8430, February 26, 2007), and identified a group of 93 compounds emitted from mobile sources that are listed in their Integrated Risk Information System (IRIS) (https://www.epa.gov/iris). In addition, the EPA identified nine compounds with significant contributions from mobile sources that are among the national and regional-scale cancer risk drivers from their 2011 National Air Toxics Assessment (NATA) (https://www.epa.gov/national-air-toxics-assessment). The nine identified compounds are 1,3-butadiene, acetaldehyde, acrolein, benzene, diesel particulate matter (diesel PM), ethylbenzene, formaldehyde, naphthalene, and polycyclic organic matter. While the FHWA considers these the priority MSAT, the list is subject to change and may be adjusted in consideration of future EPA rules.

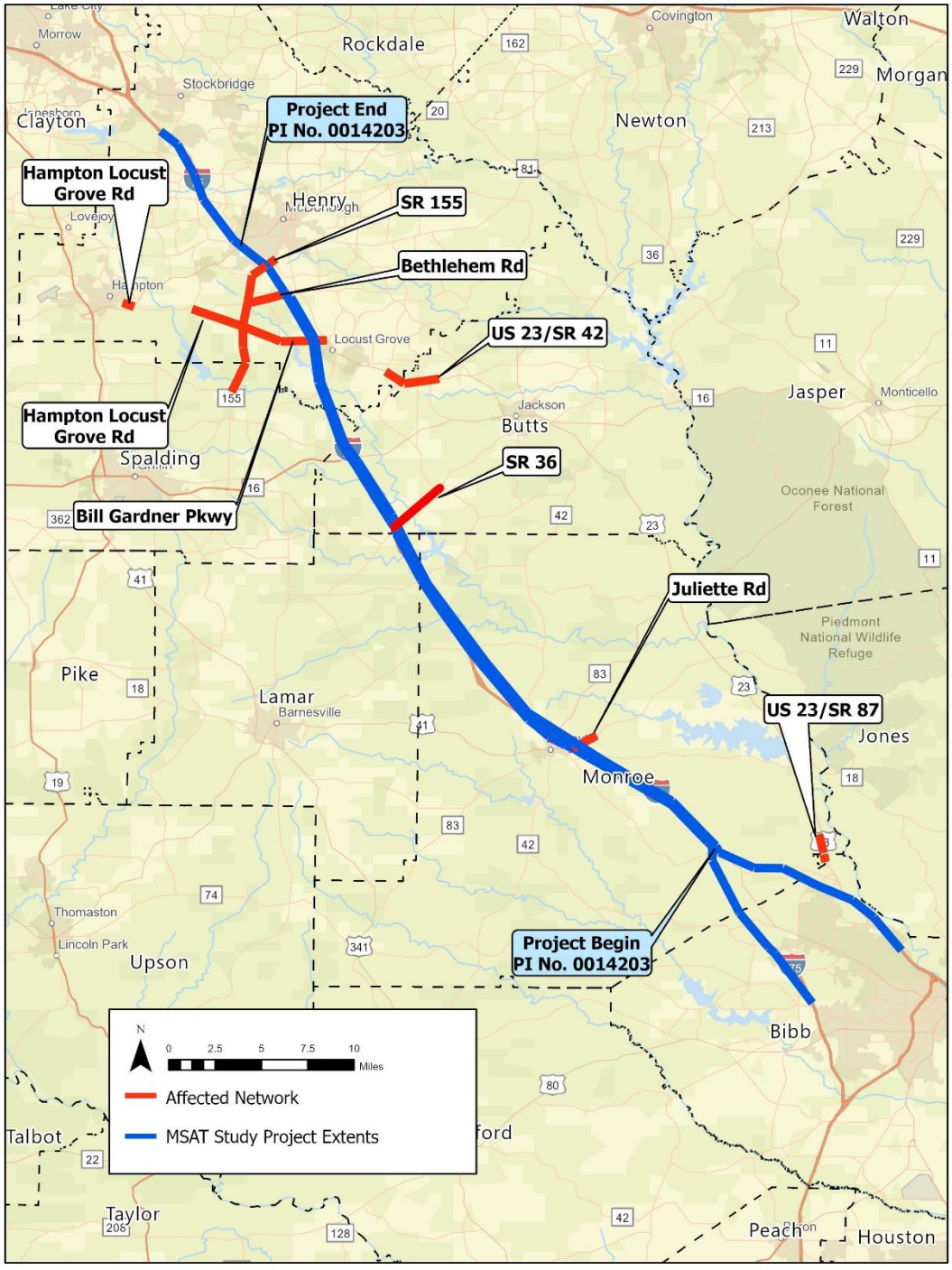
MSAT analyses for NEPA highway projects are conducted following FHWA's *Updated Interim Guidance Update on Mobile Source Air Toxic Analysis in National Environmental Policy Act (NEPA) Documents*. The most recent version of this guidance was issued January 18, 2023 (FHWA, 2023). Based upon the Preferred Alternative's effect on diesel truck traffic, the Preferred Alternative is considered to have higher potential MSAT effects per FHWA guidance [69] and requires a quantitative MSAT analysis.

The air quality study used EPA's Motor Vehicle Emissions Simulator (MOVES)[70] to model the amount of MSAT emitted for the No-Build Alternative and the Preferred Alternative in the existing year (2018) and the design year (2052). For the purposes of the MSAT analysis, the Study Area encompasses an entire region, known as the Regional Study Area. The Regional Study Area was established in accordance with the affected transportation network, which provides a framework for an objective quantitative assessment by identifying all roadway segments associated with the Preferred Alternative as well as segments expecting meaningful changes in emissions, in order to capture the anticipated changes in MSAT emissions which would directly result from implementation of the Preferred Alternative.

[69] FHWA. January 18, 2023. Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents.
[70] EPA. December 2018. MOVES4.

Appendix F-2, **Air Assessment Report**, further explains the primary data sources and technical criteria utilized to establish the affected transportation network. The resulting MSAT analysis Regional Study Area includes affected roadway links which span Bibb, Butts, Henry, Lamar, Monroe, and Spalding Counties as depicted in **Exhibit 3-43**.

EXHIBIT 3-43: MSAT ANALYSIS AIR QUALITY REGIONAL STUDY AREA



Source: ***Appendix F-2, Air Assessment Report***

3.7.2.3 LOCAL METEOROLOGY

The nature of the surrounding atmosphere is an important element in assessing the ambient air quality of an area as regional climate and meteorological conditions can substantially affect air quality across the region. Emission, transport, and dispersion of pollutants emitted from motor vehicles are dependent on wind speed, wind direction, air temperature, precipitation, humidity, and other meteorological factors. For example, CO concentrations are greatest when low-wind speeds occur. Generally, the Air Quality Study Area exhibits a humid subtropical climate. This climate category typically experiences hot and humid summers with moderate to heavy precipitation occurring throughout the year. A review of historical wind data from Griffin-Spalding County Airport indicates that the predominant wind direction for the Air Quality Study Area is from the northwest with an average annual windspeed of approximately 4 miles per hour.[71] These values align with historical data from Thomaston-Upson County Airport to the south, which also indicate the predominant wind direction is from the northwest with an average annual windspeed of 5.1 miles per hour.[72] Wind direction and wind speed influence the direction of pollutant travel and rate of pollutant dispersion which factor into pollutant concentrations.

3.7.3 Environmental Consequences

3.7.3.1 AIR QUALITY

The air quality analysis conducted for the No-Build and Preferred Alternative considered potential impacts related to MSAT emissions. Based on the criteria defined in the FHWA guidance, *Updated Interim Guidance Update on Mobile Source Air Toxic Analysis in NEPA Documents,* dated January 18, 2023, the Preferred Alternative would be classified as a project with higher potential MSAT effects. As such, a quantitative MSAT analysis was performed in accordance with FHWA and Georgia DOT guidance methodology. The results of the quantitative MSAT analysis are presented in **Exhibit 3-44**.

EXHIBIT 3-44: ANNUAL MSAT EMISSIONS BY YEAR AND SCENARIO (TONS/YEAR)

		DESIGN YEAR (2052)		
POLLUTANT	2018 EXISTING	NO BUILD	BUILD	DIFFERENCE FROM NO-BUILD TO BUILD (%)
Benzene	5.427	0.598	0.675	12.9%
1,3-Butadiene	0.717	0.000[1]	0.000[1]	0.00%
Formaldehyde	10.77	1.17	1.41	20.5%
Acrolein	0.791	0.042	0.055	31.0%
Naphthalene	1.156	0.026	0.031	19.2%
Polycyclic Organic Material (POM)	0.447	0.013	0.015	15.4%
Ethyl Benzene	3.002	0.653	0.737	12.9%

[71] Historical Windrose Data for Griffin-Spalding County Airport. "Iowa Environmental Mesonet" *Iowa State University*. https://mesonet.agron.iastate.edu/sites/windrose.phtml?station=6A2&network=GA_ASOS. Generated January 13, 2025.
[72] Historical Windrose Data for Thomaston-Upson County Airport. "Iowa Environmental Mesonet" *Iowa State University*. https://mesonet.agron.iastate.edu/sites/windrose.phtml?network=GA_ASOS&station=OPN. Generated January 13, 2025.

POLLUTANT	2018 EXISTING	DESIGN YEAR (2052) NO BUILD	BUILD	DIFFERENCE FROM NO-BUILD TO BUILD (%)
Acetaldehyde	5.80	1.11	1.36	22.5%
Diesel PM	70.16	2.09	3.02	44.5%
Total MSAT	98.27	5.70	7.30	28.1%
VMT (million miles)	1,599	2,228	2,772	24.5%

1. *EPA studies show that emissions of 1,3-butadiene are negligible in newer model-year engines and that by 2052, all emissions will phase out of the fleet in the MOVES model. See* ***Appendix F-2, Air Assessment Report****.*

Under the No-Build Alternative, MSAT emissions are expected to be lower than what exists today, due to EPA's stringent vehicle emission and fuel regulations and fleet turnover. No air quality impacts are anticipated from the No-Build Alternative. The air quality analysis forecasts that the emissions of all MSAT pollutants will increase from the No-Build to the Build scenario in the design year (2052). However, when compared to existing conditions, the projected emissions of all MSAT pollutants under the 2052 Build scenario are lower than what exists today. EPA's stringent vehicle emission and fuel regulations, combined with fleet turnover, are the primary factors that cause this reduction with time and mitigate emissions from the Preferred Alternative. Further information on EPA's promulgated regulations can be found at (https://www.epa.gov/regulations-emissions-vehicles-and-engines/regulations-onroad-vehicles-and-engines). Overall, the best available information indicates that, nationwide, regional levels of MSAT are expected to decrease in the future due to fleet turnover and the continued implementation of more stringent emission and fuel quality regulations. Specifically, when compared to the existing year (2018) conditions, emissions of all pollutants in the Build scenarios show decreases of up to 100 percent in 2052. The magnitude of the EPA-projected reductions is such that, even after accounting for VMT growth, MSAT emissions in the Regional Study Area would be lower in the future than exists today regardless of the scenario (No-Build or Build) chosen. For a full presentation of the MSAT emissions analysis, please reference **Appendix F-2**, **Air Assessment Report**.

It is possible that some localized areas may show an increase in emissions and ambient levels of these pollutants due to locally increased traffic levels associated with the project. The additional CVLs contemplated as part of the Preferred Alternative will have the effect of moving some traffic closer to nearby receptors (such as homes, schools, and businesses); therefore, under the Preferred Alternative there may be localized areas where ambient concentrations of MSAT could be higher than the No-Build Alternative. The localized increases in MSAT concentrations would likely be most pronounced along the expanded roadway sections that would be built along I-75, where the CVLs would be constructed. However, the magnitude and the duration of these potential increases compared to the No-Build Alternative cannot be reliably quantified due to incomplete or unavailable information in forecasting project-specific MSAT impacts according to FHWA (further described in **Appendix F-2**, **Air Assessment Report**). In sum, when the CVLs are added, the localized level of MSAT emissions for the Preferred Alternative could be higher relative to the No-Build Alternative, but this could be offset due to increases in speeds and reductions in congestion (which are associated with lower MSAT emissions). As described previously, regional MSAT emissions under the Preferred Alternative are expected to be substantially lower than those that exist today due to implementation of more stringent emission and fuel quality regulations and fleet turnover.

The analysis shows that the Preferred Alternative is consistent with state and federal air quality goals, including those for CO, O_3, $PM_{2.5}$, and MSAT as part of the assessment. Results indicated that the Preferred Alternative is consistent with the SIP for the attainment of clean air quality in Georgia and complies with both state and federal air quality standards. As such, no air quality impacts are anticipated for the Preferred Alternative. Additionally, as the projected emissions of all MSAT pollutants under the 2052 Build scenario are lower than what exist today, the Preferred Alternative's air quality analysis has not identified any environmental health or safety risks that would significantly affect children, in compliance with EO 13045, as amended by EO 13229. Further information on children's health and safety and communities are presented in **Sections 3.2 and 3.3**.

3.7.4 Potential Avoidance, Minimization, and Mitigation Measures

As the Preferred Alternative does not anticipate causing or exacerbating any violation of the NAAQS and conforms to all air quality regulations, it requires no avoidance, minimization, or mitigation measures.

The air quality analysis forecasts that the emissions of all MSAT pollutants will increase from the No-Build to the Build scenario, but when compared to existing conditions, the projected emissions of all MSAT pollutants under the Build scenario are lower than what exists today. As such, consideration may be given to minimizing or mitigating MSAT emissions. The primary form of MSAT emissions mitigation is achieved through EPA's stringent vehicle emission and fuel regulations which results in the decrease in MSAT emissions predicted in the future years from the existing year despite an increase in vehicle activity. Other mitigation measures for MSAT emissions that can be employed are aimed at reducing vehicle activity or emissions on a regional basis. Such measures include implementing travel demand management strategies that reduce overall VMT, speed limit enforcement, and traffic operations improvements to reduce congestion. Potential measures that target reducing MSAT emissions from heavy-duty diesel truck activity include the installation of intelligent transportation systems, anti-idling strategies, and diesel retrofit technologies. Such measures may be considered by Georgia DOT for implementation to further reduce MSAT on a regional basis.

3.8 NOISE

This subsection presents the study methodology and analyses of the affected environment and environmental consequences for noise. Discussions on the potential impacts of the No-Build and Preferred Alternatives on noise are presented such as noise impacts and the potential for implementation of noise abatement, such as noise barriers. Also provided are any avoidance, minimization, and mitigation measures that were or will be implemented as a result of potential impacts by the Preferred Alternative on noise.

The noise analyses presented in this section have been conducted in accordance with the applicable FHWA's and Georgia DOT's standards for assessing noise impact and evaluating abatement of highway traffic noise. See **Appendix A, Applicable Laws and Regulations** for additional information.

3.8.1 Methodology

The Noise Study Area was divided into seven Common Noise Environments (CNEs) which are areas exposed to similar noise sources, have similar traffic volumes and speeds, and have similar topographic features. CNEs typically occur between cross-roads, intersections, or interchanges. CNEs, as presented here, include receptors of all Activity Categories (see **EXHIBIT 3-46**).

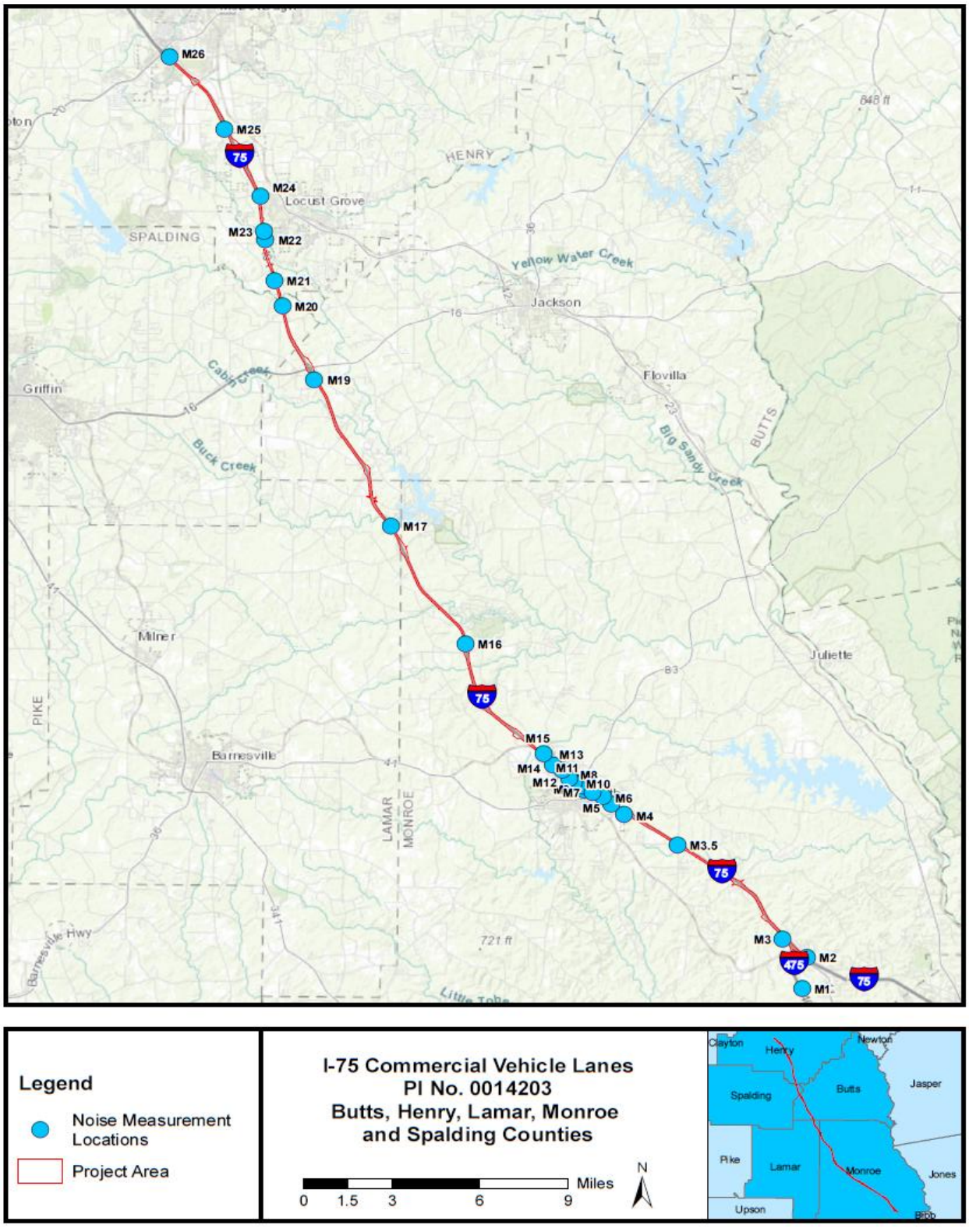
Per FHWA 23 CFR 772.11(d)(4) the Noise Study Area was identified (see **EXHIBIT 3-45**) and includes noise-sensitive receptors extending up to 1,000 feet away from I-75. Beyond 800 feet, highway traffic noise rarely approaches or exceeds the thresholds for noise impact.[73] The methodology to determine existing noise levels includes identifying noise-sensitive receptors in accordance with FHWA land use categories, conducting traffic noise measurements with simultaneous traffic counts, developing and validating a traffic noise model based on the measurement results, and then predicting the loudest-hour noise levels at all receptors in the Noise Study Area. Lane-by-lane traffic volume/vehicle classification data were not available, therefore, truck percentages by travel lane were not included. Model validation confirmed no significant difference in levels since most receptors were far enough away from the GP lanes.

Noise predictions were made using FHWA's Traffic Noise Model (TNM) version 2.5. TNM is a three-dimensional model that accounts for roadway geometries, terrain/topography, type of ground cover, buildings, roadway surface type, atmospheric conditions, and presence of noise barriers.

Noise measurements were conducted using Larson Davis Model LxT sound level meters which were calibrated in the field as well as by a laboratory traceable to the National Institute of Standards and Technology. All measurements were performed during acceptable weather and traffic conditions consistent with Georgia DOT policy guidelines. Measurements were taken for approximately 20 minutes at each location. Measurements were taken outside of peak traffic conditions (typically between 9:00 am and 3:30 pm) to ensure free flow traffic. Free flow traffic results in higher sound levels compared to congested traffic. Traffic counts were conducted by recording videos of the highway during the measurements and then subsequently counting vehicles by type.

[73]U.S. Department of Transportation, John A. Volpe National Transportation Systems Center. "Validation of FHWA's TNM: Phase 1". Published July 2004.

EXHIBIT 3-45: NOISE STUDY AREA



Source: ***Appendix F-3, Noise Impact Assessment Report***

Noise measurements were conducted at 29 locations throughout the Noise Study Area that are representative of receptors which are relatively close to I-75 and I-475. It is typically not possible, or necessary, to conduct noise monitoring at all receptor locations in a study area. FHWA and Georgia DOT have developed a process for validating the noise model to demonstrate that the TNM results are accurate. Measurement sites were chosen to capture a wide range of traffic and terrain. Simultaneous noise measurements and traffic counts were conducted including counts by vehicle type (i.e., cars, medium trucks, heavy trucks, motorcycles, and buses) and observations of vehicle speeds. If the measurement and modeling results are within 3 dBA, the model is validated. Three decibels is the threshold generally considered to be a perceptible change in noise level. If the measurements and modeling results are not within 3 dBA, the model is adjusted to improve the accuracy of the results.

Existing (2018) traffic data was incorporated into the validated TNM model and was used to calculate the existing noise levels for all receptor locations in the Noise Study Area. As discussed below in **Section 3.8.2.2,** each receptor was assigned a FHWA Activity Category (A-G) based on the applicable land use category (see **Exhibit 1** and **Section 2.4** in **Appendix F-3, Noise Impact Assessment Report**).

Loudest-hour existing traffic conditions were input into the noise model which were assumed to be the highest traffic volume (LOS C) that can operate at free flow speeds. LOS C volumes for freeways were determined based on a Highway Capacity Software version 7 freeway analysis. The ARC LOS C volumes were used for interstate entrance and exit ramps, principal and minor arterial roads, and major collectors assuming an exurban area type (AT6) for roadways within Henry County and a rural area type (AT7) for roadways within Monroe, Lamar, Butts, and Spalding Counties. Design-hourly volumes were used for minor collectors and local roadways based on the Traffic Data Report.[74] Vehicle speeds of 70 miles per hour were used for all interstates, and speeds between 20 and 55 miles per hour were used for all other roadways depending on their posted speed limit.

Similar to the existing noise levels, loudest-hour No-Build and Preferred Alternatives' traffic conditions were predicted using FHWA's TNM based on the highest traffic volume (LOS C) that can operate at free flow speeds according to the Highway Capacity Manual (HCM), ARC and design hourly volumes (DHV) traffic tables. Since LOS C traffic volumes would be similar for most roadways, loudest hour No-Build Alternative noise levels would generally be similar to existing conditions. The predominant cause of changes in the loudest-hour noise conditions with the No-Build Alternative would be the change in traffic volumes and truck percentages associated with traffic volume growth and other projects in the vicinity. Noise impacts were assessed based on whether design-year Preferred Alternative noise levels approach or exceed the NAC as presented in **Exhibit 3-46.**

[74] "Traffic Forecasting Memorandum – I-75 Commercial Vehicle Lanes Project," PI No. 0014203, prepared by Arcadis, November 30, 2022. Traffic Sensitivity Analysis Technical Memorandum I-75 Commercial Vehicle Lanes PI 0014203 by RSH 8/2/24

EXHIBIT 3-46: FHWA NOISE ABATEMENT CRITERIA AND LAND USES

ACTIVITY CATEGORY	LEQ(H)	DESCRIPTION OF ACTIVITY CATEGORY
A	57 (Exterior)	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.
B	67 (Exterior)	Residential, single, and multi-family residences.
C	67 (Exterior)	Institutional land uses. Active sport areas, amphitheaters, auditoriums, campgrounds, cemeteries, day care centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, recreation areas, Section 4(f) sites, schools, television studios, trails, and trail crossings.
D	52 (Interior)	Institutional land uses with no outdoor areas of frequent human use. Auditoriums, day care centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, schools, and television studios
E	72 (Exterior)	Hotels, motels, offices, restaurants/bars, and other developed lands, properties, or activities not included in A-D or F
F	-	Agriculture, airports, bus yards, emergency services, industrial, logging, maintenance facilities, manufacturing, mining, rail yards, retail facilities, shipyards, utilities (water resources, water treatment, electrical), and warehousing
G	-	Undeveloped lands that are not permitted

$L_{eq(h)}$: A single value that is equivalent in sound energy to the fluctuating levels over a period of one hour.

Source: FHWA, 23 CFR 772

3.8.2 Affected Environment

This section presents background on noise and its potential impact on the human environment including the methods used to measure and model existing traffic noise levels throughout the Study Area, the types of land uses that are considered to be sensitive to noise, the results of traffic noise measurements and the process to validate the traffic noise model, and the resulting loudest-hour existing noise levels at all receptors in the Noise Study Area.

3.8.2.1 NOISE-SENSITIVE LAND USE

Noise-sensitive land uses in the Noise Study Area were identified in accordance with FHWA Activity Categories (A through G). See **Exhibit 3-47**. Receptors were identified and the Activity Category was assigned based on regional tax assessor databases, aerial imagery, and field visits. Receptors are primarily located at ground-level outdoor areas of frequent human use. If a multi-family residence has upper floors with exterior areas such as balconies or roof decks, then receptors will be located at these upper elevations as well. Noise levels at Activity Category F facilities were evaluated for the purposes of disclosure, but these receptors are not eligible for noise abatement. Noise levels at Activity Category G lands were

evaluated to aid local officials when considering future development of change of land use, but these receptors are not eligible for noise abatement.

For each noise-sensitive land use, there exists a corresponding noise level at which the use of that land is assumed to be impacted and consideration of measures to reduce noise levels is therefore warranted (**Exhibit 3-47**). This level is referred to as the NAC. A noise level that is 1 dB(A) less than the NAC is considered to approach the NAC.

3.8.2.2 NOISE MEASUREMENT RESULTS

A detailed comparison of the measurements and modeling results is summarized in **Exhibit 3-66** of **Appendix F-3, Noise Impact Assessment Report**. Noise measurement results generally ranged between 65.0 and 78.9 dBA (Leq). The difference between the measurement and modeling results was less than 3 dBA at all 29 of the measurement locations. Each noise sensitive area contained at least one validated measurement and is therefore considered a validated model in accordance with Georgia DOT standards.

3.8.2.3 EXISTING CONDITIONS

The results of the model indicate that existing noise levels approach or exceed the NAC at approximately 283 out of 1,258 receivers (643 out of 4,296 receptors) throughout the Noise Study Area. Existing sound levels throughout the Noise Study Area range from 50.5 to 78.1 dBA (Leq) depending on distance to the highway, presence of intervening buildings or terrain, proximity to other major arterial roadways, and presence of existing noise barriers.

The dominant source of noise throughout the Noise Study Area is traffic on major interstates and freeways including I-75 and I-475. Sound waves dissipate over distance, meaning the farther away from the noise source a receptor is, the lower the sound level will be. For receptors near the highway, where there are no existing noise barriers and no other major arterial roadways, sound levels are generally in the low- to mid-70's within 100 feet, upper-60's to low-70's within 300 feet, and upper-50's to mid-60's within 700 feet. For reference, sound levels in the mid to upper-70's are similar to a vacuum cleaner at a distance of 10 feet. Sound levels in the 60's are similar to an air conditioner at a distance of 3 feet. Although the interstate/freeway is the dominant noise source, traffic on major arterial roads can contribute significantly to the overall noise environment and may cause traffic noise levels to approach or exceed the NAC at receptors that are near these major arterial roads.

The presence of intervening objects, such as buildings, terrain, or existing noise barriers between the receptor and a noise source, will reduce sound levels. There are no existing noise barriers within the Noise Study Area, however, there are several locations where intervening objects provide shielding to residential communities from highway traffic noise.

3.8.3 Environmental Consequences

This section presents the environmental consequences of noise for the No-Build and Preferred Alternatives. Traffic noise levels typically range from the low 50's to upper 70's for the No-Build Alternative, similar to the ranges for the Preferred Alternative (**Exhibit 3-47**).

EXHIBIT 3-47: TRAFFIC NOISE LEVEL SUMMARY

CNE	LOCATION	EXISTING (2018) (LEQ, DBA)	NO-BUILD (2052) (LEQ, DBA)	BUILD (2052) (PREFERRED) (LEQ, DBA)
A	I-75 NB/SB from North of L G Griffin Rd to SR 20	50.5 - 76.3	50.7 - 76.7	50.4 - 77.4
B	I-75 NB/SB from South of SR 16 to North of L G Griffin Rd	60.0 - 77.2	60.2 – 77.4	59.9 - 79.5
C	I-75 NB/SB from SR 42 to South of SR 16	53.4 - 78.1	53.7 - 78.4	54.0 - 79.6
D	I-75 NB/SB from Cabiness Rd to SR 42	52.8 - 76.6	53.0 - 76.9	54.9 - 76.7
E	I-75 NB/SB from Juliette Rd to Cabiness Rd	53.1 - 76.5	53.4 - 76.7	55.0 - 75.6
F	I-75 NB/SB from North of Rumble Rd to Juliette Rd	52.0 - 77.3	52.1 - 77.5	51.6 - 76.0
G	I-75/I-475 NB/SB from I-475 Interchange	50.8 - 77.7	51.2 - 77.8	50.5 – 80.2

Source: ***Appendix F-3, Noise Impact Assessment Report (Section 3, Table 5)***

The total number of noise impacts (dwelling units/receptors) that would approach or exceed the NAC is presented in **Exhibit 3-48**. Prior to noise abatement, design-year Preferred Alternative noise levels would approach or exceed the NAC at a total of 763 dwelling units/receptors. None of the impacts would be considered a substantial increase, which is defined as a 15 dBA increase in noise level. The detailed noise analysis is anticipated to mitigate approximately 617 impacts, resulting in 117 impacts after construction of the Project.

EXHIBIT 3-48: NUMBER OF RECEPTORS APPROACHING/EXCEEDING THE NAC BY ACTIVITY CATEGORY (PREFERRED ALTERNATIVE)

NAC B	NAC C	NAC D	NAC E	TOTAL
452	**92**	**0**	**190**	**734**

Source: ***Appendix F-3, Noise Impact Assessment Report*** *(Section 3, Table 6)*

A detailed noise analysis was conducted to assess the potential mitigation of project impacts. Details of the 31 barriers analyzed, including impacted receptors, benefited receptors and noise barrier cost are presented in **Section 3.8.4**.

There are no existing noise barriers within the Noise Study Area to be considered for reconstruction in the Preferred Alternative.

3.8.4 Potential Avoidance, Minimization, and Mitigation Measures

This subsection will discuss any potential avoidance, minimization, and/or mitigation measures applicable to the alternatives based on their potential impacts from noise. In accordance with Georgia DOT Noise Abatement Policy,[75] noise abatement that has been considered include alteration to the horizontal or vertical alignment of the roadway, traffic control measures, acquisition of land to create buffer zones, planting, and/or quieter pavements. However, realigning the project, reducing highway speed limits, restricting types of vehicles, restricting use of the facility to certain times, introducing buffer vegetation, and installing quieter pavement designs were infeasible solutions to noise impacts. Realigning the Project would not be reasonable given the size of the facility and its location throughout largely rural areas with minimal development. Traffic control measures would interfere with the function of the roadway. Much of the Project is in already vegetated areas. And quieter pavements are not approved by FHWA and Georgia DOT due to their limited lifespan.

Noise barriers were evaluated as a mitigation strategy and were considered feasible and reasonable at eight locations based on the current preliminary design. **Section 3.8.4.1** provides additional details of the noise impact assessment for each of the 31 barriers analyzed. In accordance with Georgia DOT Noise Abatement Policy, barriers are considered feasible based on several factors including their constructability, safety and maintainability, access limitations, and potential noise reduction. A noise barrier is considered to be feasible if it can provide at least 5 dB(A) of noise reduction to at least one impacted receptor. When a barrier is considered to be feasible it must then meet the reasonableness criteria. A reasonable noise barrier must meet the noise reduction design goal of 7 dB(A) to at least one benefited receptor and meet the overall cost-reasonable criteria. Using a $50 per square foot cost for the barrier, the total cost must not exceed $110,000 per benefited receptors. Additionally, for a noise barrier to be reasonable, the viewpoints of benefited receptors must be considered. Georgia DOT policy is that a noise barrier is considered reasonable if a majority of the benefited receptors are in favor of its construction.

As outlined by the Georgia DOT Noise Abatement Policy, outreach methods to determine the viewpoints of benefited receptors may consist of a first class mailed letter and survey provided to property owners and tenants, public meetings, phone conversations, or any other method based on the project circumstances. If there are no or minimal responses (less than 25 percent) then the outreach method will be reviewed to determine if another method would result in increased participation. A noise barrier will only be constructed if a minimum 50 percent plus one of the respondents vote in favor of noise abatement. Both property owners and dwellers get a vote and their vote must be returned within 30 calendar days to receive consideration. Property owners will receive one vote per unit owned and an additional vote if they reside in the unit, and tenants will receive one vote for the benefited receptor unit that they occupy. For some projects, individual meetings, community meetings, or other outreach efforts may also be utilized to determine a majority consensus.

[75]Georgia DOT. August 1, 2024. Highway Noise Abatement Policy for Federal-Aid Projects. Accessed from https://www.dot.ga.gov/PartnerSmart/EnvironmentalProcedures/Noise/References/Noise%20-%20Highway%20Noise%20Abatement%20Policy%20for%20Federal-Aid%20Projects.pdf. Accessed on September 10, 2024.

3.8.4.1 NOISE ABATEMENT ANALYSIS

The Project Area was divided into seven CNEs including a total of 31 noise impact areas where noise abatement analyses are warranted based on potential noise impacts to 763 dwelling units/receptors.

A preliminary evaluation was conducted for 31 noise barriers in the noise impact areas (see figures with noise barrier locations in **Appendix F-3, Noise Impact Assessment Report**. **Exhibit 3-49** presents the results of the noise abatement analysis including the location, length, and height of potential barriers and the number of impacted and benefited (receiving 5 dB or more of noise reduction) receptors. The table presents the estimated barrier cost based on $50 per square foot and whether it is feasible and reasonable.

Noise abatement is likely, but not guaranteed, at approximately eight locations where noise barriers would be feasible and reasonable for the Preferred Alternative. One of the eight new noise barriers along the proposed project is anticipated to be constructed by P.I. #0017182. If GDOT project P.I. #0017182 is delayed the CVL Project would construct all eight barriers. The noise barriers would be primarily ground-mounted with some locations mounted on retaining wall. Noise levels were evaluated at Section 4(f) lands including High Falls State Park in the City of Jackson. The High Falls State Park area does not exceed the NAC for Category C land use, and noise levels are generally below the No-Build conditions. At no receptor within the High Falls State Park area would Preferred Alternative noise levels increase by 3 dBA or more compared to the No-Build condition. Therefore, there would be no constructive use related to potential noise effects to Section 4(f) lands.

Noise abatement is based upon preliminary noise analyses and design criteria. A reevaluation of the noise analysis will occur during final design, should changes warrant a reevaluation. If during final design it is determined that conditions have changed such that noise abatement is not feasible and reasonable, the abatement measures might not be provided. The final decision on the installation of any abatement measure(s) will be made upon the completion of the Project's final design and the public involvement processes.

Noise barrier materials will comply with the Georgia DOT Design Policy Manual (date August 1, 2024). Typically, concrete noise barriers will have an ashlar, brick, rock textured, or plain finish. Input from local governments may be considered for the aesthetics of the noise barriers, but the public will not be asked to vote on the aesthetic treatment.

2296 EXHIBIT 3-49: NOISE IMPACTS AND NOISE ABATEMENT AREAS, SEE APPENDIX F-3 FOR DETAILED INFORMATION

IMPACT AREA	CNE	LOCATION	BARRIER LENGTH (FT)	BARRIER HEIGHT (FT)	NOISE REDUCTION (DBA)	IMPACTS RECEIVERS (RECEPTORS) (DUS)	BENEFITS RECEIVERS (RECEPTORS) (DUS)	EST. COST	ABATEMENT FEASIBLE AND REASONABLE
1	A	I-75 SB Granada Trail to Madrid Circle	3,500	16 to 28	5 to 11	43 (201)	55 (287)	$0	Yes. Barrier to be constructed by Project P.I. #0017182[76]
2	A	I-75 NB Cherokee Cir to Indian Creek Rd	1,811	28	6 to 16	15(15)	11(11)	$2,535,400	Not Reasonable
3	A	I-75 NB Indian Creek Rd to Shawnee Ln	1,241	22 to 30	5	10(10)	2(2)	$1,812,400	Not Reasonable
4	A	I-75 SB South of Indian Creek Rd	920	30	7	2(2)	1(1)	$1,380,000	Not Reasonable
5	B	I-75 NB Hosannah Rd to Deer Trail Rd	1,000	18	7	1(1)	1(1)	$900,000	Not Reasonable
6	B	I-75 SB 1610 to 1710 Sipka Rd	1,589	22	5 to 8	2(2)	2(2)	$1,747,900	Not Reasonable
7	B	I-75 NB North end of E Anderson Rd	1,385	18	5 to 9	4(4)	4(4)	$1,246,500	Not Reasonable
8	B	I-75 SB Glade Rd to Glade Dr	2,200	30	5 to 12	8(64)	14(112)	$3,300,000	Yes
9	C	I-75 SB 531 to 576 Harkness Rd	1,916	30	6 to 7	3(3)	3(3)	$2,874,000	Not Reasonable
10	C	I-75 SB 1224 Bucksnort Rd to Exit 201	1,860	26	5 to 7	1(1)	2(2)	$2,418,000	Not Reasonable
11	C	I-75 NB 851 to 933 High Falls Rd	2,207	24	5 to 10	5(5)	6(6)	$2,648,400	Not Reasonable
12	C	I-75 NB 178 to 224 Antony Drive	2,109	30	5 to 8	1(1)	7(7)	$3,163,500	Not Reasonable
13	C	I-75 NB High Falls Lake to 1365 Hickory Rd	1,409	30	5 to 7	1(1)	2(2)	$2,113,500	Not Reasonable

[76] Should Project P.I #0017182 be delayed, this barrier would be constructed as part of the CVL Project.

IMPACT AREA	CNE	LOCATION	BARRIER LENGTH (FT)	BARRIER HEIGHT (FT)	NOISE REDUCTION (DBA)	IMPACTS RECEIVERS (RECEPTORS) (DUS)	BENEFITS RECEIVERS (RECEPTORS) (DUS)	EST. COST	ABATEMENT FEASIBLE AND REASONABLE
14	C	I-75 SB 826 Unionville Rd to Rocky Creek Rd	1,899	28	7	2(2)	1(1)	$2,658,600	Not Reasonable
15	C	I-75 NB Crescent Drive	1,697	26	6 to 7	1(1)	2(2)	$2,206,100	Not Reasonable
16	C	I-75 NB River Overlook to Johnstonville Rd	5,761	14 to 26	5 to 15	20(20)	20(20)	$7,128,950	Not Reasonable
17	C	I-75 NB Dan Pitts Dr to English Rd	3,407	18	5 to 8	7(35)	13(65)	$3,066,300	Yes
18	C/ D	I-75 SB Mahala Dr to Russell Pkwy	5,824	18 to 30	5 to 11	71(134)	55(177)	$8,199,100	Yes
19	D	I-75 NB SR 42 to Cabiness Rd	3,206	18 to 30	5 to 10	26(97)	13(84)	$4,028,400	Yes
20	E	I-75 SB Cabiness Rd to Dodson Memorial Dr	1,856	22	5 to 9	12(12)	14(13)	$2,041,600	Not Reasonable
21	E	I-75 NB Cabiness Rd to Old Water Works Rd	1,510	18	5 to 9	18(18)	13(13)	$1,359,000	Yes
22	E	I-75 NB Old Water Works Rd to Johnson Ln	1,693	18	5 to 8	8 (32)	8 (32)	$1,523,700	Yes
23	F	I-75 SB Patrol Rd to Starr Mobile Home Park	1,398	18	6 to 10	22(23)	21 (22)	$1,258,200	Yes
24	F	I-75 NB 821 to 821 Benson Ham Rd	1,000	30	5 to 15	5(5)	5(5)	$1,500,000	Not Reasonable
25	F	I-75 NB 477 Dames Ferry Rd	N/A	N/A	N/A	1(1)	N/A	N/A	Not Feasible
26	F	I-75 NB 766 Bunn Rd	902	28	7	1(1)	1(1)	$1,262,800	Not Reasonable
27	F	I-75 SB Bunn Rd to Gose Rd	712	26	7	1(1)	1(1)	$925,600	Not Reasonable
28	G	I-75 NB 584 to 674 Stag Dr	835	18	5	1(1)	1(1)	$751,500	Not Reasonable
29	G	I-75 NB Stag Dr to Harrison Dr	1,843	28	5 to 8	2(2)	4(4)	$2,580,200	Not Reasonable
30	G	I-75 SB Pea Ridge Rd to Rivoli Rd	2,896	28	5 to 7	5(5)	2(2)	$4,054,400	Not Reasonable

IMPACT AREA	CNE	LOCATION	BARRIER LENGTH (FT)	BARRIER HEIGHT (FT)	NOISE REDUCTION (DBA)	IMPACTS RECEIVERS (RECEPTORS) (DUS)	BENEFITS RECEIVERS (RECEPTORS) (DUS)	EST. COST	ABATEMENT FEASIBLE AND REASONABLE
31	G	I-75 SB I-475 to 5969 US Hwy 41	3,200	26	5 to 13	5(5)	5(4)	$4,160,000	Not Reasonable

2297 *Source:* ***Appendix F-3, Noise Impact Assessment Report***

3.9 WATER RESOURCES

This subsection presents the study methodology and analyses of the affected environment and environmental consequences for water resources including surface waters, groundwater, floodplains, and wetlands. Discussions on the potential impacts of the No-Build and Preferred Alternatives on water resources are presented. Also provided are any avoidance, minimization, and mitigation measures that were or will be implemented as a result of potential impacts by the Preferred Alternative on water resources.

3.9.1 Methodology

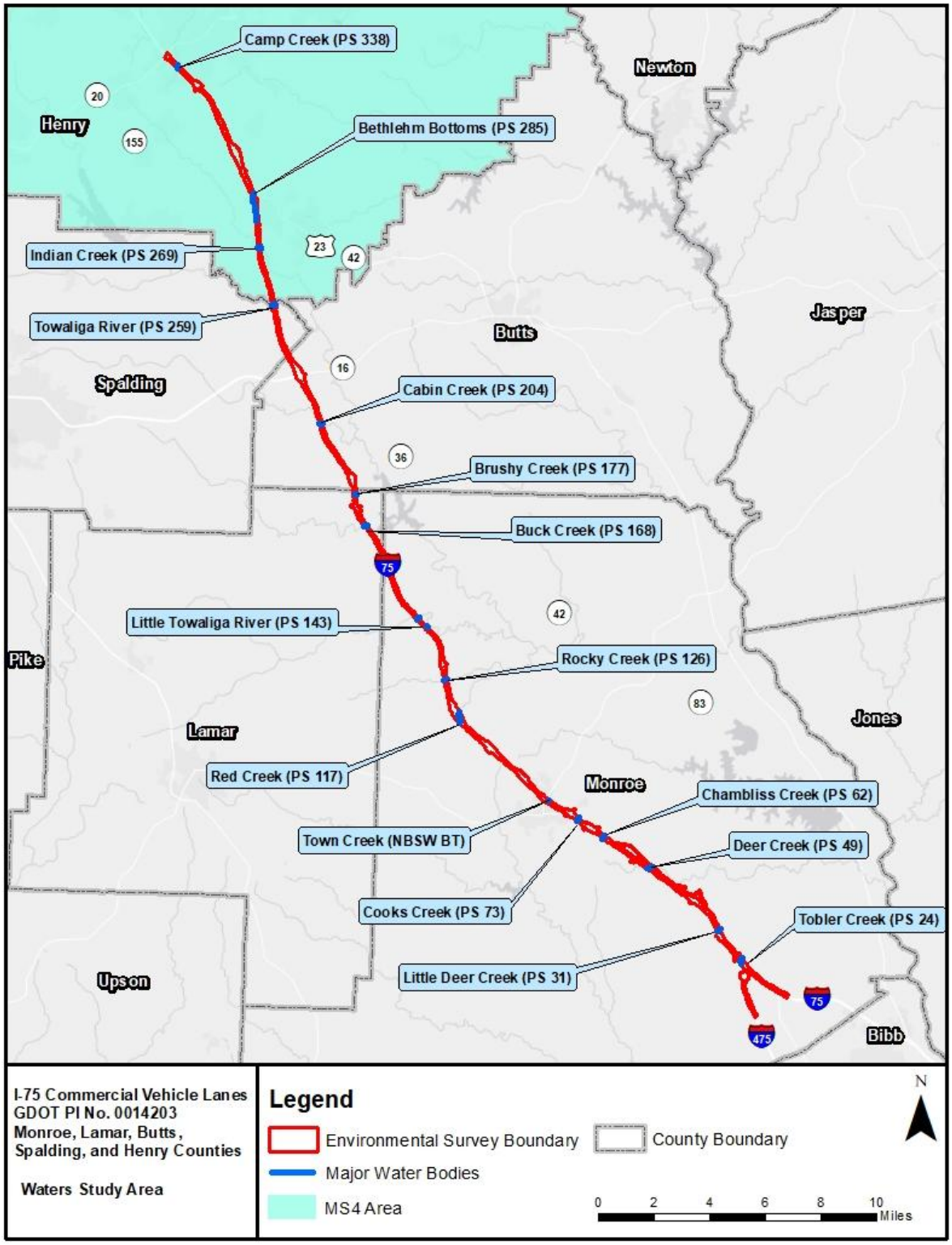
The affected environment was determined based on the surveys conducted in 2019-2024 for the Project. The environmental survey boundary established the Water Study Area (**Exhibit 3-50**), which includes 100 feet beyond the proposed and existing ROW of the Project along I-75 from I-475 to SR 20.

Coordination under the Fish and Wildlife Coordination Act (FWCA) is required due to a loss of more than 100 linear feet of perennial stream (PS). The requisite information on impacts to water resources and proposed mitigation was submitted to the U.S. Fish and Wildlife Service (USFWS) on September 29, 2021. On October 28, 2021, the USFWS recommended that avoidance and minimization alternatives continue to be considered for dewatering impacts, particularly for PS 117, PS 120, PS 128, and PS 152. It is recommended that dewatering be limited to what is strictly necessary for the construction of needed structures to limit the project's impact to these perennial streams. USFWS also recommended implementing a natural stream channel design for each of PS 128 and PS 161 to the greatest extent practicable to achieve sediment transport, habitat enhancement, and bank and channel stabilization to prevent the loss and damage to wildlife resources. FHWA re-initiated consultation under FWCA on February 12, 2025, due to minor design changes required by the proposed project. USFWS concurred with GDOT's updated findings on March 19, 2025 (see **Appendix I, Agency Correspondence**).

The Water Study Area was surveyed with respect to WOTUS jurisdictional wetland determinations were performed using the three-parameter approach (prevalence of hydrophytic vegetation, hydric soils, and permanent or periodic inundation or saturation) of the *1987 U.S. Army Corps of Engineers (USACE) Wetland Delineation Manual* and using the *2012 Eastern Mountains and Piedmont Regional Supplement* as guidance.

Surveys for surface waters and streams were conducted in 2019 to 2024, covering approximately 3,970 acres of the Water Study Area. Stream classifications were performed using the North Carolina Division of Water Quality (NC DWQ) *Methodology for Identification of Intermittent and Perennial Streams and Their Origins*, (Version 4.11). State waters were delineated using the Georgia EPD *2017 Field Guide for Determining the Presence of State Waters that Require a Buffer*. Impact quantities were calculated using Sufficient Construction Envelopes (SCEs), which are resource by resource assessments of the limits of disturbance beyond cut and fill lines that would be required for constructability, access, erosion control measures, and other activities to support construction of the costing plan design (NEPA Basic Configuration). The SCEs take into account site conditions such as topography, hydrology, and ROW at impact areas within ESAs. Orange Barrier Fencing is utilized on the plans within ESAs to demarcate the limits of the SCEs.

EXHIBIT 3-50: WATER STUDY AREA



Source: ESRI, USGS, HERE, NPS, Georgia DOT

In accordance with the Municipal Separate Storm Sewer System (MS4) permit, an analysis of water quality impacts to downstream water bodies was conducted. Eight drainage basins within the Indian Creek and Camp Creek watersheds are within MS4 jurisdiction. Analysis of downstream impacts was performed on the 74 drainage basins that are outside MS4 jurisdiction.

3.9.2 Affected Environment

This section describes the quality of waters in the Water Study Area and categorizes them as perennial, intermittent, and ephemeral. A description of the quality and quantity of groundwater resources will be provided, along with floodplains and wetlands.

3.9.2.1 WATER QUALITY

All water bodies in the Water Study Area are within the Upper Ocmulgee River basin. The major water bodies include the following perennial streams (PS): Tobler Creek (PS 24), Little Deer Creek (PS 31), Deer Creek (PS 49), Chambliss Creek (PS 62), Town Creek (Non-buffered State Water NBSW-BT), Cooks Creek (PS 73), Red Creek (PS 117), Rocky Creek (PS 126), Little Towaliga River (PS 143), Buck Creek (PS 168), Brushy Creek (PS 177), Cabin Creek (PS 204), Towaliga River (PS 259), Indian Creek (PS 269), Bethlehem Bottoms (PS 285), and Camp Creek (PS 338). Effects of urbanization have degraded the streams in the more urban areas of the corridor, near Macon, Forsyth, and McDonough, while the streams in rural areas are generally in very good condition. Part of the Project Area (eight of 82 drainage basins), including the Indian Creek and Camp Creek basins, is located within an area where compliance with the MS4 Program is required.

Exhibit 3-51 presents the findings of the latest (2022) *Water Quality in Georgia* assessment for area water bodies. The assessment also reports whether the water body is subject or not subject to Total Maximum Daily Load (TMDL) restrictions. Only three of the thirteen water bodies are listed as supporting all designated uses due to water quality issues.[77]

3.9.2.2 SURFACE WATERS AND RIVERINE SYSTEMS

There are 231 streams in the Water Study Area, all of which are in Hydrologic Unit Code (HUC) 03070103 as part of the Upper Ocmulgee River watershed. Thirty of the streams have floodplains, as discussed in **Section 3.9.2.4**. There are three types of streams in the Water Study Area:

- 93 Perennial streams (PS), which are streams that flow in a well-defined channel throughout most of the year under normal climatic conditions;
- 117 Intermittent Streams (IS), which are streams that flow in a well-defined channel during wet seasons of the year but not for the entire year; and
- 21 Ephemeral Channels (EC), which are streams that typically have no well-defined channel, and which flow only in direct response to precipitation with runoff.

There are 11 open water areas in the Water Study Area, which are also included in HUC 03070103.

[77] The Clean Water Act requires that all states establish designated intended uses for their waters, which typically include recreation, drinking water supply, agricultural or industrial use, or protection of aquatic wildlife. For those waters that do not meet their designated use due to pollution the GA EPD typically requires that a TMDL be developed for the particular water resource.

3.9.2.3 GROUNDWATER

The Project is located within the Piedmont Province with the area's groundwater typically occurring as an unconfined aquifer. The Piedmont Geologic Province has relatively porous saprolite overlaying crystalline rocks with little or no porosity. The most significant groundwater recharge areas typically occur in low slope areas where porous soil layers are located above bedrock.[78]

There are no USGS groundwater monitoring stations in the Ocmulgee River basin. The nearest USGS groundwater monitoring station (331507084171801 11AA01) is in the City of Griffin, approximately nine miles west of the Water Study Area, in the Flint River basin. Based on the 77 years of available data, groundwater levels range from 6.9 to 21 feet below surface, with no apparent trend of ground water levels over time.[79]

EXHIBIT 3-51: WATER QUALITY SUMMARY TABLE

WATER BODY	DESIGNATED USE	SUPPORTING	TMDL	CATEGORY
High Falls Lake	Recreation, Fishing	Recreation use supported; Fishing use is not supported	Yes	5
Buck Creek	Fishing	Yes	No	1
Cabin Creek	Fishing	No	Yes	4a
Camp Creek	Fishing	No	Yes	4a
Chambliss Creek	Fishing	Yes	No	1
Deer Creek	Fishing	Yes	No	1
Indian Creek	Drinking water, fishing	Fishing supported; no data on drinking water	No	2
Little Deer Creek	Fishing	No	Yes	4a
Little Towaliga River	Drinking water, fishing	Drinking water supported; Fishing use: assessment pending	No	2
Red Creek	Fishing	No	Yes	4a
Tobler Creek	Fishing	No	Yes	4a
Towaliga River	Drinking water, fishing	Fishing supported; no data on drinking water	No	2
Town Creek (NBSW BT)	Fishing	No	Yes	4a

Notes: Category 1 indicates that all designated uses are met. Category 2 indicates that the water body has attained some designated uses, and insufficient or no data is available to determine if remaining uses are attained. Category 4 indicates an impaired water that already has a TMDL. Category 4a (which is a sub-category of Category 4) indicates a TMDL is in effect for the parameter that is causing the water body not to meet its designated use. Category 5 indicates that at least one designated use is not being met and TMDL(s) need to be completed for one or more pollutants.
Source: Water Quality in Georgia, GAEPD, 2024

[78] *Davis, K.R., Donahue, J.C., Hutcheson, R.H., and D.L Waldrop. 1989. Hydrologic Atlas 18: Most Significant Ground-water Recharge Areas of Georgia. Accessed from* https://epd.georgia.gov/sites/epd.georgia.gov/files/related_files/site_page/HA-18.pdf.
[79] https://waterdata.usgs.gov/ga/nwis/uv/?site_no=331507084171801. Accessed on January 18, 2021.

3.9.2.4 FLOODPLAINS

The Project would encroach on the Federal Emergency Management Agency (FEMA) 100-year floodplain (Zones A[80]) of the following waterbodies (see **Exhibit 3-52**):

- Little Deer Creek (PS 31)
- Deer Creek Tributary 3-1 (PS 44)
- Deer Creek Tributary 3 (PS 45)
- Deer Creek (PS 49)
- Red Creek Tributary 2 (PS 98 and PS 109, two locations)
- Red Creek (PS 117)
- Rocky Creek (PS 126)
- Little Towaliga River (PS 143)
- Towaliga River Tributary F (PS 152)
- Buck Creek (PS 168)
- Cabin Creek (PS 204)
- Towaliga River Tributary N-1 (PS 234)
- Towaliga River Tributary N (PS 244, only shown on east side)
- Towaliga River (PS 259)
- Unnamed Tributary to Indian Creek (PS 260, only shown on east side)
- Indian Creek (PS 269)
- Indian Creek Tributary 8 (PS 270, only on west side and PS 285, two locations)
- Indian Creek Tributary 8.1 (PS 280)
- Bethlehem Bottoms Tributary 1 (PS 298 /299)
- Bethlehem Bottoms Tributary 1.3 (PS 301)
- Bethlehem Bottoms Tributary 2.1 (PS 309
- Bethlehem Bottoms Tributary 2.1.1 shown on FIRM 13151C 0170D next to Tributary 2.1
- Bethlehem Bottoms Tributary 2 (PS 314)
- Bethlehem Bottoms Tributary 3 (PS 325)
- Camp Creek (PS 338)
- Camp Creek Tributary 8 (PS 342)

There are three locations where streams that are conveyed across the roadway through cross drains flow longitudinally along the northbound lanes of I-75 creating the potential for longitudinal floodplain encroachments. These specific locations are:

- East of I-75 between the Indian Creek overpass and Bill Gardner Parkway at a floodplain between I-75 and Tanger Boulevard associated with Indian Creek Tributary 8.1 (PS 280), for a distance of 2,000 linear feet;
- East of I-75 between Bill Gardner Parkway and the Bethlehem Road overpass, at a floodplain associated with Bethlehem Bottoms Tributaries 1 and 1.3 (PS 298/299/301) for a distance of 1,700 feet; and
- East of I-75, just south of SR 20, at a floodplain associated with Camp Creek Tributary 8 (PS 342), which runs from north to south for a distance of 1,900 feet.

In order to avoid and minimize impacts to the floodplains associated with the above encroachments design plans have incorporated the use of side barriers, steepening of slopes to 2:1 and the use of guard rails, which effectively reduces the overall project width in the area of these encroachments.

The encroachments on the floodplains noted above would not be considered significant in accordance with 23 CFR 650.105(q) as the following conditions would not be created:

[80] Zone A is an area of special flood hazard without water surface elevations determined (44 CFR § 63.3).

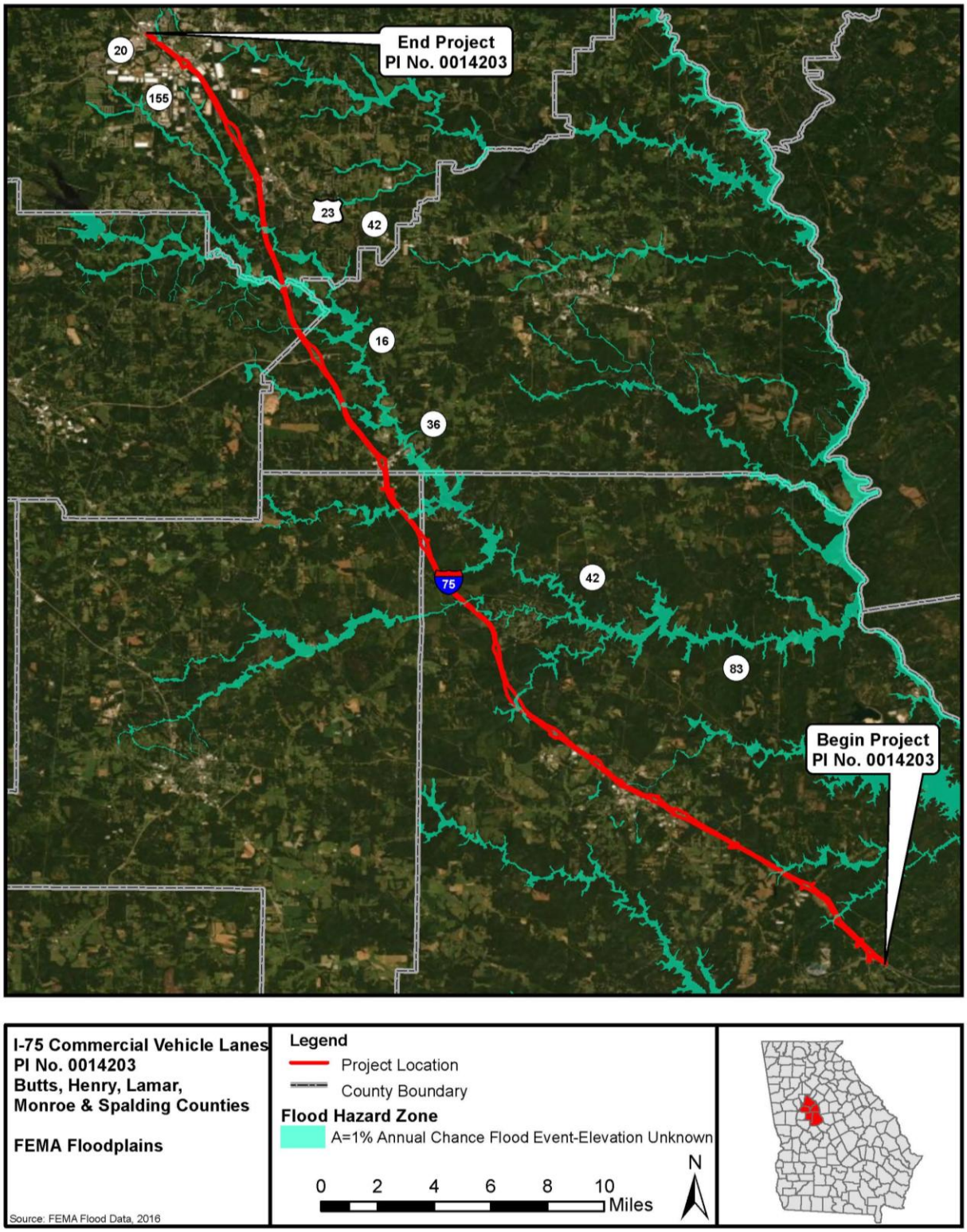
- The Project would not have the potential to interrupt or terminate a transportation facility which is needed for emergency vehicles or provides a community's only evacuation route.
- The Project would not have a significant risk or create a significant adverse impact on natural and beneficial flood-plain values.

In compliance with 23 CFR 650.109, GDOT coordinates with the local floodplain officials regarding proposed impacts to floodplains, and would request comments from the public regarding the above floodplain impacts as part of the Project Public Hearing process.

3.9.2.5 WETLANDS

There are 120 wetland areas within the Water Study Area, all of which are included in HUC 03070103. Wetlands were identified during environmental field surveys conducted in 2019-2024. These wetlands function as wildlife habitat, nutrient/sediment retention, dissipation of erosive forces, and overflow for associated water bodies.

EXHIBIT 3-52: FEMA FLOODPLAINS



Source: FEMA, ESRI, USGS, HERE, NPS

3.9.3 Environmental Consequences

The No-Build Alternative would have no direct impacts to water resources; however, mitigation proposed under the Preferred Alternative for water quality impacts may result in an improvement over the existing condition. This improvement would not be included with the No-Build Alternative.

The Preferred Alternative would result in permanent impacts to 18,470 linear feet (5.578 acres) of streams, 0.34 acre of open waters, and 5.3802 acres of wetlands. Permanent impacts to streams include 17,106 feet (5.4408 acres) of Permitted/Mitigated Permanent Loss Impacts and 1,364 feet (0.186 acre) of non-permitted/non-mitigated impacts. The Preferred Alternative would also result in temporary de-watering impacts to 189 linear feet (0.0488 acre) of streams where culvert extensions and constructions are proposed. The Preferred Alternative involves impacts to 92 streams, three open waters, and 38 wetlands as shown in **Exhibit 3-53** through **Exhibit 3-55**.

EXHIBIT 3-53: PREFERRED ALTERNATIVE STREAM PERMANENT IMPACT SUMMARY

STREAM NAME	PERMANENT IMPACT LENGTH (LINEAR FEET)	PERMANENT IMPACT AREA (ACRES)	TEMPORARY IMPACT LENGTH (LINEAR FEET)	TEMPORARY IMPACT AREA (ACRES)
PS 24 (Tobler Creek)	192	0.10	0	0
IS 25	33	0.01	0	0
PS 31 (Little Deer Creek)	327	0.19	0	0
IS 34	189	0.03	0	0
PS 40	52	0.01	3	0.001
IS 43	916	0.24	0	0
PS 44 (Deer Creek Tributary 3-1)	143	0.07	0	0
PS 45 (Deer Creek Tributary 3)	293	0.15	0	0
IS 46	131	0.05	5	0.002
IS 47	174	0.05	0	0
PS 49 (Deer Creek)	212	0.13	0	0
IS 51	518	0.11	0	0
IS 54	100	0.01	0	0
IS 56	223	0.04	0	0
IS 57	591	0.11	0	0
PS 58	96	0.05	0	0
IS 59	163	0.03	0	0
PS 62 (Chambliss Creek)	217	0.13	0	0
PS 69	207	0.03	0	0
IS 70	52	0.002	0	0
PS 73 (Cooks Creek)	143	0.07	0	0
PS 74	279*	0.03*	0	0
IS 83	12	0.002	0	0
PS 90	9	0.003	41	0.01
PS 98 (Red Creek Tributary 2)	242	0.08	2	0.0006
PS 106	146	0.03	0	0
PS 117 (Red Creek)	303	0.35	0	0
PS 120	170	0.03	0	0

STREAM NAME	PERMANENT IMPACT LENGTH (LINEAR FEET)	PERMANENT IMPACT AREA (ACRES)	TEMPORARY IMPACT LENGTH (LINEAR FEET)	TEMPORARY IMPACT AREA (ACRES)
PS 126 (Rocky Creek)	198	0.18	0	0
IS 127	154	0.01	0	0
PS 128	851*	0.11*	0	0
PS 134	84	0.04	0	0
PS 138	64	0.01	0	0
PS 143 (Little Towaliga River)	166	0.25	0	0
IS 147	1,359*	0.11*	0	0
IS 150	81	0.01	0	0
PS 152 (Towaliga River Tributary F)	163	0.09	0	0
IS 160	52	0.01	0	0
PS 161	1,138	0.23	0	0
IS 162	52	0.01	0	0
PS 168/Buck Creek	139	0.25	0	0
EC 176	127	0.005	0	0
PS 177 (Brushy Creek)	290	0.13	0	0
IS 178	37	0.003	0	0
EC 184	268	0.01	0	0
IS 187	120	0.04	0	0
PS 189	103	0.03	12	0.008
IS 190	91	0.01	0	0
IS 191	188	0.02	0	0
IS 192	60	0.003	0	0
EC 194	65	0.002	0	0
EC 195	160	0.005	0	0
PS 196	39	0.004	0	0
PS 204 (Cabin Creek)	149	0.16	0	0
PS 206	1,229	0.09	0	0
PS 208	37	0.001	0	0
PS 213	42	0.01	0	0
PS 217	108	0.02	0	0
PS 226	78	0.01	0	0
IS 228	30	0.002	0	0
PS 234	183	0.04	0	0
PS 237	116	0.04	0	0
IS 238	140	0.02	0	0
IS 239	7	0.001	0	0
PS 241	24	0.002	10	0.001
PS 244 (Towaliga River Tributary N)	199	0.14	0	0
IS 245	162	0.03	0	0
IS 254	86	0.01	0	0
PS 255	167	0.06	0	0
IS 256	119	0.01	11	0.001
PS 259 (Towaliga River)	179	0.26	0	0
PS 260	157	0.05	7	0.004

STREAM NAME	PERMANENT IMPACT LENGTH (LINEAR FEET)	PERMANENT IMPACT AREA (ACRES)	TEMPORARY IMPACT LENGTH (LINEAR FEET)	TEMPORARY IMPACT AREA (ACRES)
PS 263	134	0.06	8	0.003
IS 265	96	0.03	7	0.002
PS 269 (Indian Creek)	159	0.20	0	0
PS 270 (Indian Creek Tributary 8)	118*	0.036*	5	0.002
PS 273	264	0.05	8	0.002
PS 277	369	0.10	0	0
PS 285 (Indian Creek Tributary 8)	170*	0.08*	0	0
IS 288	122	0.02	0	0
IS 290	31	0.004	0	0
PS 298 (Bethlehem Bottoms Tributary 1)	156	0.05	2	0.0002
PS 299 (Bethlehem Bottoms Tributary 1)	165	0.03	8	0.001
PS 301 (Bethlehem Bottoms Tributary 1.3)	350	0.04	0	0
EC 306	77	0.003	0	0
PS 309 (Bethlehem Bottoms Tributary 2.1)	103	0.02	0	0
PS 312 (Bethlehem Bottoms Tributary 2.1)	120	0.02	0	0
PS 314	126	0.04	9	0.003
IS 315	51	0.004	0	0
PS 325 (Bethlehem Bottoms Tributary 3)	140	0.05	0	0
IS 329	61	0.003	19	0.001
PS 331	178	0.03	32	0.007
PS 338 (Camp Creek)	60	0.04	0	0
IS 340	26	0.003	0	0
Total Impacts	**18,470** feet**	**5.578 *** acres**	**189 feet**	**0.0488 acres**

Source: Ecology Resource Survey and Assessment of Effects Report Addendum 2 (on file at Georgia DOT)
** Includes Non-Permitted/Non-Mitigated Impacts*
***Total impacts include 17,106 feet Permanent Loss Impacts (Permitted/Mitigated) and 1,364 feet Non-Permitted/Non-Mitigated Impacts*
****Total impacts include 5.4408 acres Permanent Loss Impacts (Permitted/Mitigated) and 0.186 acre Non-Permitted/Non-Mitigated Impacts*

EXHIBIT 3-54: PREFERRED ALTERNATIVE OPEN WATER PERMANENT IMPACT SUMMARY

OPEN WATER NAME	IMPACT AREA (ACRES)
OW 19	0.04
OW 81	0.08
OW 166	0.22
Total Impacts	**0.34**

Source: Ecology Resource Survey and Assessment of Effects Report Addendum 2

2484 EXHIBIT 3-55: WETLAND PERMANENT IMPACT SUMMARY FOR THE PREFERRED ALTERNATIVE

WETLAND NAME	IMPACT AREA (ACRES)
WL 42	0.01
WL 50	0.23
WL 55	0.57
WL 68	0.03
WL 87	0.0002
WL 99	0.25
WL 101	0.02
WL 102	0.15
WL 105	0.27
WL 107	0.01
WL 108	0.25
WL 111	0.20
WL 122	0.24
WL 129	0.01
WL 139	0.002
WL 146	0.1
WL 149	0.003
WL 151	0.13
WL 163	0.02
WL 167	0.35
WL 175	0.01
WL 180	0.06
WL 185	0.06
WL 197	0.01
WL 209	0.30
WL 214	0.24
WL 227	0.01
WL 240	0.07
WL 242	0.05
WL 258	0.16
WL 266	0.10
WL 272	0.005
WL 274	0.10
WL 281	0.85
WL 296	0.35
WL 300	0.09
WL 310	0.04
WL 330	0.03
Total Impacts	**5.3802**

2485 *Source: Ecology Resource Survey and Assessment of Effects Report Addendum 2*

2486 The Preferred Alternative would typically have impacts from land development such as increased runoff
2487 and sedimentation, fragmentation, loss of groundwater recharge area, or changes in drainage patterns as a
2488 result of addition and/or augmentation of impervious surfaces. The Preferred Alternative has the potential

to encroach on state-mandated buffers, which are intended to prevent indirect impacts to water resources, at 96 locations. Buffer variances are anticipated at 64 of these locations, with the remainder being exempt.

3.9.4 Potential Avoidance, Minimization, and Mitigation Measures

The permanent impacts to streams, open waters, and wetlands impacts would require a Section 404 Individual Permit with compensatory mitigation. During the PAR process (**Appendices D and E**), alternatives involving avoidance, minimization, and mitigation of impacts to water resources were presented to USACE. Purchase of 12,221.05 (128,445.04 legacy) stream credits and 4.87 (38.96 legacy) wetland credits would be required to offset the permanent impacts. Changes to the final design may require additional credit purchase. Credits would be purchased from a USACE approved mitigation bank that serves HUC 03070103, the Upper Ocmulgee River Watershed.

Coordination with the local agencies responsible for implementing the Federal Emergency Management Program will occur to ensure that the encroachments are consistent with local floodplain management and floodplain management programs. No floodways were mapped within the affected area. These analyses will be completed as design progresses. If substantial increases in flood heights are expected, mitigation alternatives including conveyance and storage improvements will be evaluated. If necessary, a risk assessment or risk analysis will be performed.

Permanent BMPs were evaluated at each of eight drainage basins that are within MS4 jurisdiction to determine whether they would be feasible in minimizing impacts to water quality. Outfall level exclusions applied to four of these basins, where the BMP installation would have stream or wetland buffer impacts. BMPs were determined to be infeasible at one location, due to limited space without causing impacts to adjacent development. The BMPs that were recommended are bioslopes and dry detention basins. In addition, a dry detention basin is proposed for the one basin of the 74 drainage basins that are outside MS4 jurisdiction that was shown to have adverse impacts due to the project. Potential locations for the construction of these BMPs have been identified on the design plans throughout the Preferred Alternative.

3.10 ECOSYSTEMS

This subsection presents the study methodology and analyses of the affected environment and environmental consequences for ecosystems. Discussions on the potential impacts of the No-Build and Preferred Alternatives on ecosystems are presented to include natural communities, threatened and endangered species, neotropical migratory birds, and invasive species. Also provided are any avoidance, minimization, and mitigation measures that were or will be implemented as a result of potential impacts by the Preferred Alternative on ecosystems.

3.10.1 Methodology

The Ecosystems Study Area was defined in coordination with design processes and includes 100 feet beyond the proposed and existing ROW of the Preferred Alternative. The affected environment was determined based on field and desktop surveys conducted from 2019 through 2023. Field surveys for protected species habitat and state-protected bat species were conducted on the following dates:

- March 20-29, 2019
- April 11-12, 2019
- April 26-May 3, 2019
- May 8-9, 2019

- June 5, 2019
- June 13, 2019
- June 12, 2020
- August 28, 2020
- January 28, 2021
- May 9, 2022
- June 6, 2022
- June 8, 2022
- July 31, 2023
- February 28, 2024
- July 19, 2024

Protected species field surveys for the presence of fringed campion (*Silene polypetala*) and relict trillium (*Trillium reliquum*) were conducted on March 26-27, 2020 and March 30, 2020. A resource survey was conducted to address the expanded ESB, including assessment of WOTUS and species habitat on June 12, 2020 and August 28, 2020. Aquatic field and desktop habitat surveys was conducted on November 14, 2019 and July 20, 2021. A protected species field survey for the presence of Ocmulgee skullcap (*Scutellaria ocmulgee*) was conducted on July 23, 2021 and September 7, 2021. A protected species field survey for the presence of relict trillium and fringed campion was conducted on March 25, 2022 to cover additional areas identified as suitable during the expanded ESB surveys between March 2020 and March 2022. A resource survey was conducted to address the expanded ESB, including assessment of WOTUS and species habitat on May 9, 2022, June 6, 2022, and June 8, 2022. A resource survey was conducted to address the expanded ESB, including assessment of WOTUS and species habitat on July 31, 2023. An additional protected species field survey for the presence of Ocmulgee skullcap was conducted on July 31, 2023. A resource survey was conducted to address the expanded ESB at proposed stormwater quality basins, including assessment of WOTUS and species habitat on February 28, 2024. A resource verification survey was completed for waters within the overlapping Bethlehem Road project (GDOT PI 0017182) on July 19, 2024. The environmental consequences were determined based on the Preferred Alternative costing plans dated September 11, 2024.

Potential habitat for federal- and state-protected species was determined through presence/absence field surveys and desktop reviews of the Ecosystems Study Area. Assessments for protected species and suitability for their habitats were conducted using approved survey methodologies from Georgia DOT in conjunction with the USFWS and GADNR and/or appropriate resource agency recommendations.

3.10.2 Affected Environment

3.10.2.1 NATURAL COMMUNITIES

The following habitat and land use types in **Exhibit 3-56** are within the Ecosystems Study Area: transportation/right-of-way, mixed pine-hardwood forest, developed, utility right-of-way, planted pine, mesic hardwood forest, agriculture, bottomland hardwood forest, clear cut, and water.

2567 EXHIBIT 3-56: HABITAT AND LAND USE TYPES WITHIN THE ECOSYSTEMS STUDY AREA

HABITAT/ LAND USE TYPE	DESCRIPTION
Transportation/ Right-of-Way	• Not suitable for protected species, comprises 37.7 percent (1,500 acres) of the Ecosystems Study Area • Periodically mowed and maintained • Interrupted natural succession • Dominant vegetative cover limited to non-native tall fescue (*Schedonorus arundinaceus*), Bermuda grass (*Cynodon dactylon*), Bahia grass (*Paspalum notatum*), crab grass (*Digitaria* spp.), and Johnson grass *(Sorghum halepense*) • Non-native species are present here, including invasive mimosa (*Albizia julibrissin*), English ivy (*Hedera helix*), thorny olive (*Elaeagnus pungens*), Chinese privet (*Ligustrum sinense*), and kudzu (*Pueraria montana var. lobata*)
Mixed Pine-Hardwood Forest	• Suitable for the proposed federally protected tricolored bat, comprises 37.0 percent (1,479 acres) of the Ecosystems Study Area • Forested habitat on upper slopes with adequately drained soils • Characteristic vegetation includes 20- to 40-year-old stands of sweetgum (*Liquidambar styraciflua*), loblolly pine (*Pinus taeda*), water oak (*Quercus nigra*), Virginia creeper (*Parthenocissus quinquefolia*), pokeweed (*Phytolacca americana*), Christmas fern (*Polystichum acrostichoides*), Chinese privet, thorny olive, and Japanese honeysuckle (*Lonicera japonica*)
Developed	• Suitable for the proposed federally protected tricolored bat, comprises 8.1 percent (321 acres) of the Ecosystems Study Area • Consists of commercial and institutional buildings, houses, and pavement • Common vegetation characterizing these areas includes red maple (*Acer rubrum*) and tulip poplar (*Liriodendron tulipifera*) and ornamental trees such as crape myrtle (*Lagerstroemia indica*); shrubs and vines including non-native invasive mimosa, English ivy, Chinese privet, thorny olive, and Japanese honeysuckle, as well as poison ivy (*Toxicodendron radicans*); and turf-type grasses, including tall fescue, Bermuda grass, and St. Augustine grass (*Stenotaphrum secundatum)*
Utility Right-of-Way	• Not suitable for protected species, comprises 4.4 percent (177 acres) of the Ecosystems Study Area • Maintained areas underneath power lines characterized by field and turf-type grasses including Bermuda grass, dogfennel (*Eupatorium capillifolium*), goldenrod (*Solidago canadensis*), panicgrass (*Panicum* spp.) blackberry (*Rubus* spp.), and pine (*Pinus* spp.) saplings

HABITAT/ LAND USE TYPE	DESCRIPTION
Planted Pine	• Suitable for the proposed federally protected tricolored bat, comprises 2.8 percent (115 acres) of the Ecosystems Study Area • Established planted pines areas • Vegetation consists of even-aged (~30 years-old), monocultural stands of loblolly pine or slash pine (*Pinus elliottii)* • Sub-canopy and understory vegetation are sparse in majority of these areas, though species including blackberry, roundleaf greenbrier (*Smilax rotundifolia*), and poison ivy were evident
Mesic Hardwood Forest	• Suitable for the federally protected fringed campion and relict trillium, and the proposed federally protected tricolored bat and Ocmulgee skullcap, comprises 2.8 percent (110 acres) of the Study Area • Forested habitat on ravines, lower slopes, and well-drained flatwoods with nutrient rich soil • Vegetation consists mainly of 20- to 40-year-old Southern sugar maple (*Acer barbatum*), Southern shagbark hickory (*Carya ovata*), American beech (*Fagus grandifolia*), bitternut hickory (*Carya cordiformis*), eastern red cedar (*Juniperus virginiana*), eastern hophornbeam (*Ostrya virginiana*), mountain laurel (*Kalmia latifolia*), red buckeye (*Aesculus pavia*), Christmas fern, mayapple (*Podophyllum pelatum*), eastern sweetshrub (*Calycanthus floridus*), little sweet Betsy (*Trillium cuneatum*), and other trillium species (*Trillium* spp.)
Agriculture	• Not suitable for protected species, comprises 1.9 percent (77 acres) of the Ecosystems Study Area • Active, passive, and former agricultural land that is or was being used for production of commodity crops • Pasture grasses such as Bahia grass and tall fescue that are used for sod or hay. Other prominent community components of these areas include camphorweed (*Heterotheca subaxillaris*), late goldenrod (*Solidago altissima*), and sneezeweed (*Helenium amarum*)
Bottomland Hardwood Forest	• Suitable for the proposed federally protected tricolored bat, comprises 2.1 percent (84 acres) of the Ecosystems Study Area • Seasonally flooded forest with wetlands located along waterways and floodplains. Vegetation mainly consists of 20- to 40-year-old stands of sweetgum, tulip poplar, water oak, blackgum (*Nyssa sylvatica*), American elm (*Ulmus americana*), asplenium southern lady fern (*Athyrium filix-femina asplenioides*), smallspike false nettle (*Boehmeria cylindrica*), roundleaf greenbrier, cat greenbrier (*Smilax glauca*), Virginia creeper, poison ivy, Chinese privet, kudzu, and Japanese honeysuckle
Water	• Six perennial streams within this habitat type are suitable for the state-protected Altamaha shiner (*Cyprinella xaenura*) • This habitat type comprises 1.6 percent (62 acres) of the Study Area • Large areas of water, including perennial streams and open waters
Clear Cut	• Not suitable for protected species, comprises 1.7 percent (68 acres) of the Ecosystems Study Area

HABITAT/ LAND USE TYPE	DESCRIPTION
	• Previously forested in loblolly pine and slash pine, with moderate canopy coverage (approximately 60 to 75 percent) and have since been cleared

3.10.2.2 THREATENED AND ENDANGERED SPECIES

Early coordination from the USFWS, National Marine Fisheries Service (NMFS), and GADNR (see **Appendix I, Agency Correspondence**) indicated there are five federally protected species: monarch butterfly (*Danaus plexippus*), tricolored bat (*Perimyotis subflavus*), Ocmulgee skullcap, fringed campion, and relict trillium and four state-protected species: Altamaha arcmussel (*Alamidonta arcula*), Altamaha shiner, goldstripe darter (*Etheostoma parvipinne*), and robust redhorse (*Moxostoma robustum*) with the potential to occur in the Ecosystems Study Area.

The federally and state-protected resources with potential to occur in the Ecosystems Study Area are provided in **Exhibit 3-57** below.

EXHIBIT 3-57: FEDERALLY AND STATE-PROTECTED RESOURCES

RESOURCE	DESCRIPTION
FEDERALLY PROTECTED SPECIES	
Monarch butterfly	• On December 15, 2020, the USFWS announced that listing the monarch butterfly as endangered or threatened under the ESA is warranted but precluded. As a result, the monarch butterfly is now a candidate under the ESA. • Habitat was not assessed
Tricolored bat	• On September 14, 2022, the USFWS published a proposal to list the tricolored bat as endangered under the ESA. • Suitable roosting and foraging habitat was identified within the forested areas of the corridor. There are 31 bridges and 83 culverts suitable for the tricolored bat roosting in the survey area, and tricolored bats were identified within 34 of these bridges and culverts. All impacted culverts would be extended rather than replaced. For the majority of the culvert extensions, there would be a minimal disturbance to the existing culvert. The existing wingwalls and footings would be removed up to the end face of the existing culvert. The interior of the culvert would not be demolished. The new culvert extension would be added to the existing culvert end face and a new joint would be formed where they connect. For two of the existing culverts, which include a single box culvert at PS 277 and a single box culvert north of Johnstonville Road (STA. 21386+70), the skew angles are below 75 degrees with less than 4 feet of fill height. For these culverts, the existing culvert top slab will be removed in order to form a squared-off end face. The length of the top slab to be removed would be limited to 5 feet or less. Two tricolored bats were observed in the culvert north of Johnstonville Road (STA. 21386+70). Bridge work on the project would affect eight bridges including complete demolition and replacement construction of four bridges and only partial demolition and widening of the other four bridges. The remaining bridges would not require widening or replacement as the CVL bridges would be constructed adjacent to the existing bridges.

RESOURCE	DESCRIPTION
	• Due to the scale of anticipated clearing and proposed construction schedule, seasonal tree clearing restrictions would not be practicable, as discussed in a coordination meeting between USFWS, FHWA, GADNR, and GDOT on August 7, 2024. During this meeting, the agencies confirmed that GDOT could make a project-specific conservation fund payment to GDNR for the proposed tree clearing under the Bat Programmatic Agreement §7(a)(1) Conservation Plan, Strategy 10. The conservation fund payment would use project-specific funds and would be tracked independently from the standing GDOT-GADNR Bat Conservation Funding Agreement.
Ocmulgee Skullcap	• Since the 2021 ERS-AOER, the Ocmulgee skullcap was proposed for listing in the ESA by the USFWS. It was previously assessed under the State Protected Species Section, and the effect determination was no significant adverse effect. • Suitable habitat was identified during the survey on the southbound side of I-75 south of Klopfer Road, on the northbound side of I-75 south of PS 31/Little Deer Creek, along PS 31/Little Deer Creek, on the northbound side of I-75 north of Rumble Road, on the southbound side of I-75 south of PS 49/Deer Creek, on the southbound side of I-75 along Bunn Road and Gose Road, on the northbound side of I-75 south of PS 62/Chambliss Creek, along PS 85 off of Dan Pitts Drive on the northbound side of I-75, along PS 117/Red Creek, on the northbound side of I-75 along PS 143/Little Towaliga River, along PS 204/Cabin Creek, on the northbound side of I-75 just north of PS 204/Cabin Creek, on the northbound side of I-75 near Mattie Thomason Road, and along PS 226 north of Highway 16 during the protected species survey conducted on July 23, 2021 and September 7, 2021. An additional protected species survey conducted on July 31, 2023, eliminated seven of the suitable habitat areas (Habitats 5, 7, 9. 10, 11, 12, and 13) due to local mylonite bedrock, which does not provide minerals to support calcium rich soils. • Vegetation in the suitable habitat locations includes buckeye (*Aesculus glabra*), bloodroot (*Sanguinaria canadensis*), little brown jug (*Hexastylis arifolia*), box elder (*Acer negundo*), water oak, poison ivy, muscadine (*Vitis rotundifolia*), and Southern red oak (*Quercus falcata*), red maple, pignut hickory (*Carya glabra*), tulip poplar, American hornbeam (*Carpinus caroliniana*), eastern hophornbeam, slippery elm (*Ulmus rubra*), mockernut hickory (*Carya tomentosa*), Chinese privet, American beautyberry (*Callicarpa americana*), Virginia creeper, Japanese honeysuckle, river oats (*Chasmanthium latifolium*), and Carolina milkvine (*Matelea carolinensis*) • Species-specific surveys conducted in July 2021 and September 2021 found no Ocmulgee skullcap occurring within identified suitable habitat
Fringed Campion and Relict Trillium	• Suitable habitat was identified on the southbound side of I-75 south of Klopfer Road, on the northbound side of I-75 south of PS 31/Little Deer Creek, along PS 31/Little Deer Creek, on the northbound side of I-75 north of Rumble Road, on the southbound side of I-75 south of PS 49/Deer Creek, on the southbound side of I-75 along Bunn Road and Gose Road, on the northbound side of I-75 south of PS 62/Chambliss Creek, along PS 85 off of Dan Pitts Drive on the northbound side of I-75, along PS 117/Red Creek, on the northbound side of I-75 along PS 143/ Little Towaliga River, along PS 204/Cabin Creek, on the northbound side of I-75 just north of PS 204/Cabin Creek, on the northbound side of I-75 near Mattie Thomason Road, and along PS 226 north of Highway 16.

RESOURCE	DESCRIPTION
	• Vegetation in the suitable habitat locations includes southern sugar maple, southern shagbark hickory, American beech, bitternut hickory, eastern red cedar, eastern hophornbeam, mountain laurel, red buckeye, Christmas fern, eastern sweetshrub, little sweet Betsy, and other trillium species • Species-specific survey conducted in March 2020 found no fringed campion or relict trillium occurring within identified suitable habitat
Critical Habitat	• Critical Habitat for the proposed threatened Ocmulgee skullcap has been proposed as designated within the project area. The proposed designated critical habitat occurs in Monroe County north of Pea Ridge Road and south of Rumble Road. The proposed designated critical habitat extends from southwest of the Bolingbroke Rest Area (Rest Area No. 22), across I-75 to the northeast. The total acreage of this proposed designated critical habitat within the ESB is 18 acres. Approximately 1.6 acres of vegetated critical habitat would be disturbed by the project. • Due to the recent proposed designation of the Critical Habitat, the area has not yet been surveyed to determine species presence. Critical Habitat within the ESB will be surveyed within two years of let.
Bald and Golden Eagles	• There are no known bald eagle nests within 3 miles of the Ecosystems Study Area
Essential Fish Habitat	• No Essential Fish Habitat occurs within the Ecosystems Study Area
STATE PROTECTED RESOURCE	
Altamaha Arcmussel	• No suitable habitat identified in the Ecosystems Study Area
Altamaha Shiner	• State-protected species with potential to occur in the Ecosystems Study Area • Of the 87 perennial streams evaluated, six streams were identified as having suitable habitat, and presence of the Altamaha shiner is assumed in these five streams: Red Creek/PS 117, Rocky Creek/PS 126, the Little Towaliga River/PS 143, the Towaliga River/PS 259, Indian Creek/PS 269, and Camp Creek/PS 338.
goldstripe darter	• No suitable habitat identified in the Ecosystems Study Area
robust redhorse	• No suitable habitat identified in the Ecosystems Study Area
State- Protected Bats	• Identified both roosting and foraging habitat • Roosts were present in cracks and crevices of bridges and culverts, in expansion joints on the underside and top side of bridges, and under and along the main bridge and culvert structures • Foraging habitat exists within stream corridors and open waters

Source: Ecology Resource Survey and Assessment of Effects Report Addendum 2

3.10.2.3 NEOTROPICAL MIGRATORY BIRDS

Surveys observed evidence of 806 migratory bird nests of the barn swallow (*Hirundo rustica*) and eastern phoebe (*Sayornis phoebe*) at 27 bridge locations and 47 box culvert locations within the Ecosystems Study Area. These species are protected under the Migratory Bird Treaty Act (MBTA) of 1918, as well as subsequent amendments.

3.10.2.4 INVASIVE SPECIES

A survey for populations of invasive species that may spread during construction was conducted. The invasive species observed in the survey are those identified by Georgia DOT as having the highest priority due to environmental and economic impacts. Within the Ecosystems Study Area, the survey

identified 10 priority one invasive species including mimosa, autumn olive (*Elaeagnus umbellata*), Japanese privet (*Ligustrum japonicum*), Chinese privet, Japanese honeysuckle, chinaberry (*Melia azedarach*), Japanese stiltgrass (*Microstegium vimineum*), kudzu, multiflora rose (*Rosa multiflora*), and Chinese wisteria (*Wisteria sinensis*) with coverage concentrated at 55 locations.

3.10.3 Environmental Consequences

3.10.3.1 NATURAL COMMUNITIES

The Preferred Alternative would have minimal effects on natural communities due to the Ecosystems Study Area's low-quality habitat as a result of the existing interstate. The greatest impacts from the Preferred Alternative to natural communities would be attributed to clearing of forested habitats and impacts to waters. Impacts to waters are discussed in **Section 3.9, Water Resources.**

3.10.3.2 THREATENED AND ENDANGERED SPECIES

Suitable habitat is present for four federally protected species: tricolored bat, Ocmulgee skullcap, fringed campion and relict trillium and for one state-protected species: Altamaha shiner. Due to the presence of suitable habitat for fringed campion, and relict trillium, the Preferred Alternative "may affect, but is not likely to adversely affect" these species. The USFWS concurred with the effect determination on October 28, 2021 (see **Appendix I, Agency Correspondence**). Due to the presence of suitable habitat for Ocmulgee skullcap, the Preferred Alternative "may affect, but is not likely to adversely affect" this species. Critical Habitat for the proposed threatened Ocmulgee skullcap has been proposed as designated within the project area. Due to the recent proposed designation of the Critical Habitat, the area has not yet been surveyed to determine species presence. The Critical Habitat within the ESB will be surveyed within two years of let, and if needed, coordination with USWFS to determine appropriate avoidance and minimization measures will be conducted at that time. Due to the presence of and impact to critical habitat, the project "may affect, but is not likely to adversely affect" proposed designated Ocmulgee skullcap critical habitat. Informal consultation was completed on January 8, 2024. Additionally, due to the presence of suitable habitat and species presence, the Preferred Alternative "may affect, is likely to adversely affect" the tricolored bat. GDOT initiated consultation on October 18, 2023, and USFWS concurred with GDOT's determination on January 8, 2024 (see **Appendix I, Agency Correspondence**). FHWA re-initiated consultation on February 12, 2025, due to changes in tree clearing required by the proposed project. USFWS concurred with GDOT's updated determination on March 19, 2025 (see **Appendix I, Agency Correspondence**). Due to the presence of suitable habitat and assumption of species presence within the Preferred Alternative would have "no significant adverse effect" on the Altamaha shiner. **Exhibit 3-58** lists potential impacts to federally and state-protected species by the Preferred Alternative.

3.10.3.3 NEOTROPICAL MIGRATORY BIRDS

Evidence of 806 migratory bird nests were identified on bridges and culverts throughout the Ecosystems Study Area. The Preferred Alternative, with the use of Special Provision 107.23G, likely would not adversely impact the habitat of migratory birds. The Preferred Alternative would have potential beneficial impacts by constructing additional elevated structures and box culverts, providing more potential habitat for migratory birds. Adverse indirect impacts are not expected to affect migratory birds at the population level given the prevalence of suitable forests habitats and structural habitats in the five-county vicinity.

3.10.3.4 INVASIVE SPECIES

Ten priority one invasive species were identified in 55 concentrated locations within the Ecosystems Study Area. The contractor will adhere to the earthwork provisions outlined in Section 201, Clearing and Grubbing of Right-of-Way of Georgia DOT's Standard Specifications for Construction Transportation Systems. Generally, the work defined by Section 201 includes the clearing, grubbing, removing, and disposing of vegetation, buildings, and debris within the entire ROW and easements areas adjacent to the ROW or as designated by the Project engineer. Adherence to the primary measures outlined in Section 201 is anticipated to minimize the spread of invasive species.

2635 EXHIBIT 3-58: PROTECTED SPECIES WITH POTENTIAL TO OCCUR IN THE ECOSYSTEMS STUDY
2636 AREA

COMMON NAME	SCIENTIFIC NAME	FEDERAL STATUS	STATE STATUS	HABITAT	HABITAT AVAILABLE	EFFECT DETERMINATION	SPECIAL PROVISION
Altamaha arcmussel	*Alasmidonta arcula*	None	T	Sloughs, oxbows, or depositional areas in large creeks to rivers with silt, mud, and sand substrates	No	No Effect	N/A
Altamaha shiner	*Cyprinella xaenura*	None	T	Medium sized creeks and rivers often found in small pools with rocky to sandy substrates	Yes	No Significant Adverse Effect	Yes: 107.23H and 165.3.05
monarch butterfly	*Danaus plexippus*	PT	-	Open habitats that contain milkweed plants or other nectar-producing plants	Not Assessed	Not Likely to Jeopardize	No
goldstripe darter	*Etheostoma parvipinne*	None	R	Small streams and spring seeps and runs associated with aquatic vegetation, organic debris, or slow-moving riffle habitats	No	No Effect	N/A
robust redhorse	*Moxostoma robustum*	None	E	Main-stem rivers, riffles, runs, and pools in moderate to swift currents	No	No Effect	N/A
tricolored bat	*Perimyotis subflavus*	PE	-	Roosts in forested habitats, caves and similar natural features, and transportation structures	Yes	May Effect, Likely to Adversely Affect	Yes: SP 107.23H
Ocmulgee skullcap	*Scutellaria ocmulgee*	PT	T	Moist hardwood forests on stream terraces, slopes, and bluffs, usually with a northern or eastern aspect and in a calcium-rich soils along the Oconee, Ocmulgee, and Savannah Rivers and their tributaries	Yes	May Affect, Not Likely to Adversely Affect	No
fringed campion	*Silene polypetala*	E	E	Mature hardwood forests on mid- to lower-slopes and small stream terraces	Yes	May Effect, Not Likely to Adversely Affect	No

COMMON NAME	SCIENTIFIC NAME	FEDERAL STATUS	STATE STATUS	HABITAT	HABITAT AVAILABLE	EFFECT DETERMINATION	SPECIAL PROVISION
Relict trillium	*Trillium reliquum*	E	E	Mature hardwood forests in rich ravines and on stream terraces over calcium-rich bedrock	Yes	May Affect, Not Likely to Adversely Affect	No

Key: T=Threatened; E=Endangered; R=Rare; PE =Potentially Endangered; PT=Potentially Threatened

Source: Ecology Resource Survey and Assessment of Effects Report Addendum 2

Avoiding impacts to the identified resources would be possible only through the No-Build Alternative. However, as stated in **Chapter 1, Need and Purpose** the No-Build Alternative would not address the state's mobility needs. The Preferred Alternative would have minimal effects on natural communities, threatened and endangered species, neotropical migratory birds, or invasive species.

3.10.4 Potential Avoidance, Minimization, and Mitigation Measures

3.10.4.1 NATURAL COMMUNITIES

Clearing of forested habitat would be protected by orange barrier fence (OBF) in areas identified as protected species habitat where feasible. A commitment is included in the design-build contract that any clearing on the southbound side must be evaluated by environmental subject matter experts before being conducted. Avoidance, minimization, and mitigation measures to waters are discussed in **Section 3.9 Water Resources**.

3.10.4.2 THREATENED AND ENDANGERED SPECIES

Georgia DOT implements Special Provisions and Supplemental Specifications when there is potential to impact protected species. Implementation of Special Provision 107.23H would protect the Altamaha shiner, tricolored bat, and state-protected bats. This Special Provision has conditions restricting construction activity in the vicinity of streams in the Ecosystems Study Area with suitable habitat for the Altamaha shiner. The Special Provision also includes conditions restricting construction activity at one quadruple barrel box culvert for that protection of state-protected bats. This measure was included in the Special Provision after coordination with GADNR (See **Appendix I, Agency Correspondence**). The requirements defined in Special Provision 107.23 include the following:

- Work on the quadruple barrel box culvert at Red Creek/PS 117 with the Structure ID# of 207-0049-0 shall be treated as a bridge from the standpoint of bat and migratory bird protection. Thus, work on this structure shall follow Items 2 a-d and 4 a-c outlined in Special Provision 107.23G, not 3 a-d;
- Equipment staging areas and equipment maintenance areas will be located at least 200 feet from stream banks to minimize potential for wash water, petroleum products, or other contaminants from construction equipment entering streams;
- All disturbed soil, excavation spoil/overburden, and stockpiled materials will be located at least 200 feet away from stream banks to prevent rain runoff;
- No application of pesticides or herbicides can occur within 200 feet of streams;
- The contractor shall notify the Project engineer immediately in the event of an erosion or sediment control failure that results in the discharge of sediment into streams;
- The contractor shall keep a log during construction activities detailing any sightings or incidents that could cause injury to the Altamaha shiner;
- Stockpiling and pesticide or herbicide application as well as omitting lime and fertilizer application within 200 feet of suitable habitat will be prohibited;
- Enhanced maintenance of temporary erosion and sedimentation control devices will be required;
- Temporary lighting would be directed away from forested areas during any Project activities conducted between dusk and dawn.
- Seasonal restrictions for culvert construction activities during the tricolored bat pup season (May 1-July 31);
- Culverts must be surveyed by a 1.06(h) ecologist within 14 days prior to construction to confirm the absence of tricolored bats if work occurs during hibernation season (December 1-February 28); and
- Inspection of culverts where exclusionary devices are installed or utilized must occur within 14 days of these actions to ensure tricolored bats are absent.

Federally protected plant species would not be protected by the Special Provision. However, habitats considered suitable for Ocmulgee skullcap, fringed campion, or relict trillium would be avoided where feasible during constructions. OBF would be used to prevent personnel and construction equipment from accessing these areas during the construction phase of the Preferred Alternative.

Special Provision 165.3.05 identifies additional erosion control measures that are required to followed adjacent to the Altamaha shiner habitat.

3.10.4.3 NEOTROPICAL MIGRATORY BIRDS

Avoidance and minimization measures, including seasonal work restrictions near bridges and culverts would be implemented to protect migratory birds. The U.S. Department of Agriculture's Animal and Plant Health Inspection Service (APHIS) would conduct deterrence measures on bridges and quadruple box culvert Structure ID# 207-0049-0 on behalf of Georgia DOT. Following federal procedures, APHIS would remove any old nests and would monitor the bridges for new nests. The contractor would be required to notify APHIS 30 calendar days prior to the start of construction. The construction of extensions, or demolition or maintenance activities on any box culvert would take place outside of the breeding and nesting season of migratory birds from April 1 through August 31. If exclusionary barriers (PVC Strip Doors or Strip Curtains) are put in place to prevent birds from nesting, activities may take place without calendar restrictions. For any box culvert being extended, demolished, or maintained, the contractor would install exclusionary barriers at the inlet and outlet opening where the work would take place.

3.10.4.4 INVASIVE SPECIES

During the construction process, Georgia DOT would prevent or minimize the spread of invasive species as appropriate for the time of year. These measures would include removal and disposal of vegetative parts of the soil that may reproduce by root raking, burning onsite any such parts and aboveground parts that bear fruit, controlling or eradicating infestations prior to construction, and cleaning of vehicles and other equipment prior to leaving the infested site or upon entering the site from another site unless invasive species were absent from the previous site where the equipment was used. The measures used would be those that are appropriate for the particular species and the specific site conditions that exist within the Project area, as described in the Georgia Standard Specifications Section 201, *Clearing and Grubbing of Right-of-Way*.

3.11 CONSTRUCTION/UTILITIES

Under the No-Build Alternative there would no impacts from construction and there would be no impacts to utilities. This section also describes the construction and utility impacts anticipated for the Preferred Alternative.

Construction of the Preferred Alternative would create unavoidable inconveniences to motorists; however, access would be maintained within the project area except where one roadway detour is anticipated. An overpass would be constructed at the Pea Ridge Road corridor, a mostly rural residential area. Construction in this area would potentially require short-term detours. Any necessary traffic shifts would be temporary and would only occur during construction. Construction activities would be planned and conducted in a manner that would minimize traffic conflicts and maintain public safety at all times. Any necessary relocation of utilities i.e., water, sewer, telephone, etc. would be accomplished with no long-term interruption of services. All other required construction functions would be accomplished in a timely and orderly fashion so as to keep disruptions minimal, for short duration and so as not to compromise safety.

4. SECTION 4(F) AND LWCF RESOURCES

Section 4(f) of the 1966 USDOT Act ("Section 4(f)") declared a national policy that special efforts be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites. Section 4(f) prohibits the FHWA and the Georgia DOT from using land from the following resources (referred to as Section 4(f) resources), unless a Section 4(f) evaluation is completed:

- Public parks and recreation areas of national, state, or local significance;
- Public wildlife and waterfowl refuges of national, state, or local significance;
- Public or private historic sites of national, state, or local significance (generally those on or eligible for inclusion on the NRHP as determined in coordination with the SHPO or Tribal Historic Preservation Officer (THPO) for sites on tribal lands); and
- Public or private archaeological sites of national, state, or local significance (generally those on or eligible for inclusion on the NRHP that warrant preservation in place).

According to Section 4(f), the Secretary of Transportation may approve a transportation program or project requiring the use of a Section 4(f) resource only if (1) there is no prudent and feasible alternative to using the land; and (2) the program or project includes all possible planning to minimize harm to the Section 4(f) resource. Or, as explained further in **Appendix F-4, Draft Individual Section 4(f) Evaluation and LWCF Analysis**, the FHWA may make a finding that the project has a *de minimis* impact on the Section 4(f) resource.

Similar to Section 4(f), the Land and Water Conservation Fund (LWCF) Act of 1965 preserves public park and recreation areas. LWCF resources include public parks, recreation areas, or facilities acquired or developed with LWCF federal funding. The LWCF regulations protect these properties from conversion to another use; no change from public outdoor recreational use is allowed unless the U.S. Department of Interior (DOI)/NPS approves replacement land of at least equal value, location, and usefulness. Therefore, this section also identifies potential impacts to LWCF resources. Notably, LWCF resources are also protected under Section 4(f) when U.S. DOT funds are used for a project that impacts a public park or recreational land. However, unlike Section 4(f), there are no *de minimis* provisions for LWCF resources.

This chapter summarizes the information and analysis presented in detail in **Appendix F-4, Draft Individual Section 4(f) Evaluation and LWCF Analysis**, which was prepared to comply with the provisions of Section 4(f) and LWCF. This chapter discusses the identified Section 4(f) and LWCF resources; describes potential impacts; and discusses avoidance, minimization, and mitigation measures. This chapter also summarizes coordination with the official(s) with jurisdiction over the Section 4(f) and LWCF resources and makes a draft Section 4(f) and LWCF determination.

4.1 AFFECTED ENVIRONMENT

This section discusses the Section 4(f) and LWCF resources that are within or near the Project. The discussion covers the type of resource, size, location, and the official with jurisdiction. As noted above, **Appendix F-4, Draft Individual Section 4(f) Evaluation and LWCF Analysis** provides additional, more detailed information on the identified Section 4(f) and LWCF resources, such as applicable existing clauses affecting the ownership, primary function of the property, description and location of existing and

planned facilities, detailed maps, access, usage, hours of use, characteristics of the property that either reduce or enhance the property's value, as well as relationship to other similarly used lands nearby and potential effects the Section 4(f) property may have on these lands.

4.1.1 Section 4(f) Resources

Exhibit 4-1 summarizes the public parks and recreation areas, and the historic and archaeological sites that are located within or near the Project. There are no public wildlife and waterfowl refuges within or near the Project.

EXHIBIT 4-1: SUMMARY OF SECTION 4(F) RESOURCES

NAME OF RESOURCE	TYPE OF RESOURCE	OFFICIAL WITH JURISDICTION
Monroe County Youth Center/ Recreation Complex	Recreational Site	Monroe County Recreation Department
High Falls State Park	Recreational Site	GDNR - Parks, Recreation, and Historic Sites Division
Willingham Farm	Historic	SHPO
New Forsyth Motel	Historic	SHPO
Colwell Farm	Historic	SHPO
9MO580	Archaeological	SHPO
9MO585	Archaeological	SHPO
9LR70	Archaeological	SHPO
9LR72	Archaeological	SHPO

4.1.1.1 PARK AND RECREATIONAL AREAS

The two publicly-owned parks and recreation areas determined to be protected under Section 4(f) include the Monroe County Youth Center/Recreation Complex and High Falls State Park.

The Monroe County Youth Center and associated facilities is operated and maintained by the Monroe County Recreation Department. The facility lies on the east side of the I-75 northbound corridor, approximately 1.5 miles north of SR 83 in Forsyth. The recreational and sports facility is approximately 82 acres in size and consists of baseball and softball fields, batting cages, pitching mounds, tennis courts, football fields and soccer fields. In addition, there are two ponds, two pavilions, picnic tables, grills, a horse arena, and a Youth Center with a basketball court, weight room, two locker rooms, and a meeting room.

High Falls State Park is located on state-owned public land, south of SR 36/Barnesville-Jackson Road interchange. High Falls State Park is a 1,050-acre park centered around an impoundment of the Towaliga River, which forms the central feature of the park—High Falls Lake. Boating and fishing are the major attractions. Boat rental, ramps and fishing docks provide easy access to the lake.

4.1.1.2 HISTORIC SITES

The seven historic sites determined to be protected under Section 4(f) include Willingham Farm, New Forsyth Motel, Colwell Farm, Site 9MO580, Site 9MO585, Site 9LR70, and Site 9LR72. **Section 3.5, Historic and Archaeological Resources**, provides an overview of these seven historic sites. More detailed information about these sites and their areas of significance can be found in the Cultural Resources Assessment of Effects Report.

4.1.2 LWCF Resources

The LWCF resources identified within or near the Project include the Monroe County Youth Center/Recreation Complex and High Falls State Park. Grant funding from the LWCF was used to construct the Monroe County Youth Center/Recreation Department; consequently, this facility is protected under LWCF. Likewise, grant funding from the LWCF was used for acquisition of adjacent property to increase the size of High Falls State Park; consequently, this park is protected under LWCF.

4.2 SECTION 4(F) APPLICABILITY

The No-Build Alternative would avoid impacts to Section 4(f) and LWCF resources because there would be no ROW acquisition. However, as stated in **Chapter 1, Need and Purpose**, the projected growth in freight traffic along this corridor due to the enlargement of the Port of Savannah will need long-term transportation solutions including the implementation of CVLs to help manage the increasingly congested conditions. The No-Build Alternative would not address the region's freight transportation mobility and safety needs.

The following subsections summarize direct, indirect, and constructive use (if applicable) to each Section 4(f) and LWCF resource based on permanent and temporary use as it pertains to the Preferred Alternative. This subsection also summarizes the temporary and/or permanent uses of land.

4.2.1 Section 4(f) Direct Use

4.2.1.1 PARK AND RECREATIONAL AREAS

Exhibit 4-2 summarizes direct uses that would occur to park and recreational areas under the Preferred Alternative.

EXHIBIT 4-2: SECTION 4(F) IMPACT DETERMINATIONS – PARK AND RECREATIONAL AREAS

NAME OF RESOURCE	IMPACT DETERMINATION
Monroe County Youth Center/ Recreation Complex	No Use
High Falls State Park	No Use (Temporary Occupancy)

The Preferred Alternative would not permanently incorporate land from the Monroe County Youth Center/Recreation Complex; therefore, there would not be a use of this resource under Section 4(f).

The Preferred Alternative would involve 0.10 acre of temporary, physical impacts to High Falls State Park. A temporary construction easement within the High Falls State Park property would be required for equipment access for construction of the CVLs over Buck Creek. The temporary easement would occupy approximately 0.10 acre of stream bank within the park property, adjacent to the existing ROW at the existing I-75 bridge, on the south side of Buck Creek. The temporary easement would be used to access the Project site for construction of the bridge piers, the installation of a rip rap apron, and may be needed for the placement of bridge beams and the construction of side slopes. Temporary closure of High Falls State Park at this location would be required for the safety of the public. This 0.10-acre impact is anticipated to be considered a temporary occupancy under Section 4(f) for the following reasons:

- Construction work within the temporary easement would be completed within six months.
- The scope of work is minor.
- There would be no permanent adverse physical impacts or interference with park activities.
- Although the CVLs would construct an additional bridge structure over the Creek that would be visible to the park users, this change would not be considered to adversely alter the viewshed since the existing bridge and highway are already visible to the park users in this area.
- The construction easement area would be fully restored post-construction.
- The official with jurisdiction (OWJ) over High Falls State Park concurred with the temporary occupancy determination (see **Appendix I- Agency Correspondence**).

4.2.1.2 HISTORIC SITES

Exhibit 4-3 summarizes direct uses that would occur to historic sites under the Preferred Alternative.

EXHIBIT 4-3: SECTION 4(F) IMPACT DETERMINATIONS – HISTORIC RESOURCES

NAME OF RESOURCE	IMPACT DETERMINATION
Willingham Farm	Use *(de minimis)*
New Forsyth Motel	Use
Colwell Farm	Use *(de minimis)*
9MO580	No Use
9MO585	No Use
9LR70	No Use
9LR72	No Use

The Preferred Alternative would involve the acquisition of small strips of ROW from the following two historic resources: Willingham Farm and Colwell Farm. Because the Preferred Alternative would permanently incorporate land from these two historic resources, there would be a use of each property under Section 4(f). However, because a Section 106 finding of *No Adverse Effect* is anticipated for these

two historic resources, a *de minimis* impact determination is anticipated for the use of these Section 4(f) resources.

One property, the New Forsyth Motel, would be demolished. This impact would result in a use under Section 4(f), because land is proposed to be permanently incorporated into a transportation facility. In compliance with the requirements of Section 4(f), a Draft Individual Section 4(f) Evaluation has been prepared to evaluate avoidance alternatives and complete a least overall harm analysis. See **Appendix F-4, Draft Individual Section 4(f) Evaluation and LWCF Analysis**.

The Preferred Alternative would not permanently incorporate land from any of the archaeological sites; therefore, there would not be a use of any of the archaeological sites under Section 4(f).

4.2.2 Section 4(f) Constructive Use

The noise levels around the Section 4(f) resources have risen over time as traffic volumes have increased; however, the Preferred Alternative would reduce noise levels due to the construction of new noise barriers. These noise barriers are expected to keep noise levels below abatement levels through the future traffic volumes as identified in the design year. Therefore, it is not anticipated that the Preferred Alternative would result in a constructive use of the identified Section 4(f) properties.

4.2.3 LWCF Direct Use

The Preferred Alternative would not involve a LWCF use of the Monroe County Youth Center/Recreation Complex because there would be no permanent change in use or conversion of land, and there would be no temporary non-conforming use.

The Preferred Alternative would not involve a LWCF use of High Falls State Park because there would be no permanent change in use or conversion of land. As described above, a 0.10-acre temporary construction easement would be established within the park boundary; however, this temporary construction easement is not a temporary non-conforming use because construction work within the easement would be completed within six months.

4.3 COORDINATION AND CONSULTATION

NEW FORSYTH MOTEL

The SHPO concurred with a finding of Adverse Effect for the New Forsyth Motel on November 2, 2021 and reconfirmed on October 25, 2023 (**see Appendix I**). A Memorandum of Agreement (MOA) regarding the Adverse Effect and mitigation measures would be signed by FHWA, Georgia DOT, and the Georgia SHPO upon issuance of the NEPA decision.

HIGH FALLS STATE PARK

A temporary construction easement would be required to allow construction equipment access to the proposed project area for construction of the proposed CVLs. The GADNR is the OWJ for High Falls State Park, and consultation with the OWJ is required regarding the proposed temporary easement. Georgia DOT prepared and submitted a coordination letter to the OWJ (July 13, 2021) requesting concurrence that the temporary occupancy of 0.10 acre of the High Falls State Park would not result in an

impact under Section 4(f), as the temporary easement would not adversely affect the features, attributes or activities qualifying the property for Section 4(f) protection. GADNR concurrence for the temporary occupancy was received via email on September 17, 2021.

4.4 DRAFT SECTION 4(F) AND LWCF DETERMINATION

4.4.1 Section 4(f) *De Minimis* Impacts

For all types of properties afforded protection under Section 4(f), a *de minimis* impact is an impact that is generally minor in nature. A *de minimis* impact is one that, after taking into account avoidance, minimization, mitigation, and enhancement measures, results in no adverse effect historic resources, or the activities, features, or attributes qualifying a park, recreation area, or refuge for protection under Section 4(f). For historic properties, a *de minimis* impact is one that results in a Section 106 determination of "no adverse effect" or "no historic properties affected." A *de minimis* impact determination does not require analysis of feasible and prudent avoidance alternatives.

Following coordination with the appropriate agencies and officials with jurisdiction, it was determined that the Preferred Alternative would have a *de minimis* impact on the following Section 4(f) protected resources: Willingham Farm and Colwell Farm. The detailed Section 4(f) analysis can be found in **Appendix F-4, Draft Individual Section 4(f) Evaluation and LWCF Analysis**.

4.4.2 Individual Section 4(f) Determination

The Section 106 process determined that the proposed project would have an "adverse effect" on the Section 4(f) protected New Forsyth Motel. Before approving the use of a Section 4(f) resource, paragraph (a)(1) of 23 CFR 774.3 requires a determination that there "is no feasible and prudent avoidance alternative, as defined in 23 CFR 774.17 to avoid the use of land from the property." The analysis of alternatives was carried out pursuant to the definition of "feasible and prudent avoidance alternative", with an alternative being determined either to be not feasible or prudent if it involves multiple factors (in paragraph 3(i) through 3(v) of this definition), that while individually minor, cumulatively cause unique problems or impacts of extraordinary magnitude. Each build alternative that avoids Section 4(f) resources is feasible if it could be built as a matter of sound engineering judgment; however, that does not mean it is prudent. Evaluating whether an alternative is prudent under 23 CFR 774.17 includes considering the project's stated purpose and need, safety and operational concerns, certain severe impacts resulting after reasonable mitigation to non-Section 4(f) protected resources, and associated costs of extraordinary magnitude. Based on the Avoidance Alternatives Analysis in the *Draft Individual Section 4(f) Evaluation and LWCF Analysis* (see **Appendix F-4**) there were no feasible and prudent avoidance alternatives.

When there are no avoidance alternatives found feasible and prudent, Paragraph (a)(1) of 23 CFR 774.3 allows for the approval of an alternative that causes the least overall harm in light of the statute's preservation purpose. Three alternatives were evaluated for least overall harm—the Preferred Alternative, Alternative 1 No-Build, and Alternative 2 Forsyth Bypass. Based on the Least Harm Analysis, the Preferred Alternative demonstrated the least overall harm.

The Individual Section 4(f) Analysis determined that there is no feasible and prudent avoidance alternative, as defined in 23 CFR 774.17 to avoid the use of land from the New Forsyth Motel and

that the Preferred Alternative meets the project's purpose and need, is both feasible and prudent, and causes the least overall harm. This determination was concurred on by FHWA on March 31, 2026. The detailed Section 4(f) analysis can be found in **Appendix F-4, Draft Individual Section 4(f) Evaluation and LWCF Analysis**.

4.4.3 LWCF Determination

There would be no required conversion of land from the Monroe County Youth Center under the Preferred Alternative, nor would the Project require any temporary use of the property; therefore, a LWCF Analysis and formal Coordination and Consultation are not required for this property.

Temporary physical impacts would occur as a result of the Preferred Alternative within the boundary of the High Falls State Park. A temporary non-conforming use of the property for a construction easement would be required within the park boundary to accommodate the construction of the proposed CVLs over Buck Creek. Construction of the proposed project would not require a permanent change in the use of the High Falls State Park property, and construction activities occurring within the temporary easement would be completed within six (6) months. Therefore, a LWCF Analysis and formal Coordination and Consultation are not required for High Falls State Park. The detailed LWCF analysis can be found in **Appendix F-4, Draft Individual Section 4(f) Evaluation and LWCF Analysis**.

5. CONSULTATION AND COORDINATION

This section summarizes the agency coordination, public involvement, and community outreach efforts for the Project. FHWA is the lead federal agency for the Project in cooperation with Georgia DOT, the lead state agency. Stakeholder engagement for the Project was guided by the Public Involvement Plan (on file at Georgia DOT).

5.1 PUBLIC INVOLVEMENT PROGRAM

Under NEPA, agencies are required to make "diligent efforts to involve the public in preparing and implementing their NEPA procedures." The specific Public Involvement Plan (PIP) for this Project has been developed in a way that exceeds all applicable state and federal requirements meant to integrate environmental values and public interaction into transportation improvements. The NEPA public involvement process deliberately allows the environmental analysis to be open and visible, ensuring that the affected communities and interested parties are aware of the Project and can raise their concerns, provide comments, and participate during the Project's development and progression. The process is not designed to be a vote on project implementation by the public; rather, it is a way for the public to help inform the NEPA decision-making process. Because the proposed I-75 CVLs Project encompasses multiple counties and municipalities, the Project PIP was developed to ensure the public has adequate opportunity to comment on scoping, alternatives, areas of community concern, environmental consequences, and mitigation measures. The purpose of the PIP is to ensure that there are measures in place to keep the Project stakeholders and the public informed about the Project development. Some of these measures include advanced notification of dates, times, and locations of public meetings, setting up a process for the public to review and comment on the EA, and to capture a complete record of the public involvement comment process to be included in the EA. The PIP is regarded as a living document and will be evaluated for effectiveness throughout the EA process and revised accordingly to reflect Project updates, conditions, and/or concerns and needs of the public and the project team. Features of the PIP are discussed in this section (**Section 5.1, Public Involvement Program)** and **Section 5.2, Summary of Public Comments** summarizes public input received, responses provided, and how the input informed the NEPA process.

5.1.1 Project Mailing List and Database

In order to keep stakeholders up to date and informed about Project developments, an electronic database and mailing list was developed early in the scoping process consisting of representatives and their contact information from each of the identified target audiences and Project partners, including local partners, community stakeholders, state/federal partners, elected officials, transportation and logistics industry, and public citizens. Please refer to **Appendix G, Project Stakeholders** for additional information.

5.1.2 Project Hotline

A dedicated telephone hotline (678-528-7275) and Project email address (75cvl@dot.ga.gov) for the Project was established in October of 2018 to maximize the opportunity for all members of the public to communicate with the Project team. The Project hotline and email inbox are being monitored to ensure all inquiries received by phone, voicemail, or email are captured promptly and routed appropriately for response within 24-48 hours. Both the Project hotline and email address will be monitored through the NEPA and Project construction process..

5.1.3 Project Website and Other Electronic Media

A dedicated webpage hosted on the Georgia DOT website (https://0014203-gdot.hub.arcgis.com/) was developed and is continuously updated in coordination with Georgia DOT. The use of social media platforms such as Facebook, Twitter, Instagram, and YouTube are used to disseminate Project information. Any comments received through social media were tracked in e-Builder and responses were developed in coordination with Georgia DOT and tracked. Comments received were treated like a media request and responded to within 24-48 hours. Virtual meetings were provided by Georgia DOT and consisted of a pre-recorded presentation with speaker video and slides side-by-side. The virtual meetings were hosted though the project webpage. A three-dimensional fly-through model of the entire project corridor, including simulated traffic, existing buildings, and trees, was prepared and is available to the public on the project website and through the Georgia DOT's YouTube channel (https://www.youtube.com/watch?v=Oir8b3cd-r8). As part of the public involvement outreach effort, email alerts were sent out to the project mailing list and posted to the Proposed Project's website and also used to announce meetings.

5.1.4 Newsletter and Fact Sheets

To facilitate the public's understanding of the Project and the technical aspects of certain environmental topics a fact sheet was posted on the website and provided at informal meetings. For example, a Noise Barrier Fact Sheet was created to describe what a noise barrier is, what it looks like, what a noise impact is, and how a barrier can benefit the adjacent residents. The fact sheets also provide general information for the CVLs, including a project description, the Project's status, where the Project is in the development process, and how to stay informed as the project moves forward. A postcard was mailed to all recipients on the mailing list to provide updates on the CVL project and information on how to submit questions or comments using the telephone hotline and email address. The postcard also included information on how to access the webpage. E-newsletters were distributed by Georgia DOT's MMIP team to inform the public of proposed project updates. The newsletters also provided updated information to the public, detailing the various ways the reader could receive regular project communications, such as bookmarking the Proposed Project website, through the dedicated Proposed Project email address, or using the Proposed Project hotline. Copies of the fact sheet, newsletters, and postcard are in **Appendix J, Public Involvement Documents**.

5.1.5 Stakeholder Meetings

Recognizing the extensive number of municipalities, residents, and community organizations in the Project Area, Georgia DOT held several presentations and meetings to educate and obtain input from local citizens and Proposed Project stakeholders. The initial meetings were held between November 2018 and May 2021; a list of the stakeholder meetings including the dates of occurrence and purpose of outreach can be found in **Appendix I, Agency Correspondence** in the Project Stakeholders Section. In December 2020, Georgia DOT hosted a virtual PIOH/PDOH to provide information on the Project and to solicit public comments. The virtual PIOH/PDOH was hosted on the Project website and was open for public commenting from November 18, 2020 to December 15, 2020. Georgia DOT also hosted a live presentation and Question and Answer (Q&A) session on December 2, 2020, allowing members of the public to ask questions. The comments generated and their respective responses are discussed in **Section 5.2, Summary of Public Comments**.

5.2 SUMMARY OF PUBLIC COMMENTS

Official public comments and information requests can be received via stakeholder meetings, phone call, website submission, email, social media, postal mail, comment card, or verbally through a court reporter during the open house meetings and hearings. One formal meeting (PIOH/PDOH) has been held thus far. All of this input is considered in the EA process.

5.2.1 Public Information and Detour Open House Comments

During the comment period for the virtual PIOH/PDOH, 98 comments were recorded. The main concerns raised by the public included Project information requests, design considerations and alternatives, emergency access, construction, commercial vehicles, environmental impacts, noise/noise barriers, ecology, tolling, technology, and ROW. Requests for information about the project phase and the project time frame were made. Requests for information about the current design of the Project and suggestions for alternative considerations were made. Requests for information about the traffic analysis and why the CVLs are limited to the northbound direction were made. Requests for information about the current project termini and suggestions to extend the project limits were made. Requests for information about the noise analysis Georgia DOT conducts as part of the NEPA process and potential noise barriers were made. Questions were voiced by communities within or near the project corridor regarding property impacts, truck-related issues, noise, and environmental impacts. A complete record of comments received and responses provided are included in **Appendix H Public Involvement Comments**.

5.3 AGENCY COORDINATION

The purpose of the scoping process is to provide an opportunity for agencies (and the public) to provide input for the EA during its initial stages. This section provides an overview of the agency coordination and scoping efforts. Documented agency comments and correspondence can be found in **Appendix I, Agency Correspondence**.

USACE is the only cooperating agency for this Project (**Exhibit 5-1**). If new information becomes available that would require the designation of any additional cooperating agency, FHWA will issue that

agency an invitation. Under Section 106 of the NHPA, FHWA has identified parties that need to be consulted regarding resources that are listed in or eligible for the NRHP. These agencies and organizations listed in **Exhibit 5-1** have known or potential interest in historic and archeological resources and were sent invitations to participate in the Section 106 consultation as consulting parties.

EXHIBIT 5-1: COOPERATING AND CONSULTING AGENCIES

COOPERATING AGENCY	
United States Army Corps of Engineers	
CONSULTING AGENCIES	
Georgia Historic Preservation Division	Middle Georgia Regional Commission
Monroe County Board of Commissioners	Three Rivers Regional Commission
Lamar County Board of Commissioners	Atlanta Regional Commission
Butts County Board of Commissioners	Historic Macon
Spalding County Board of Commissioners	Monroe County Historical Society
Henry County Board of Commissioners	Genealogical Society of Clayton and Henry Counties
City of Forsyth	Barnesville-Lamar County Historical Society
City of Locust Grove	Griffin Spalding Historical Society
City of McDonough	

5.3.1 Statute of Limitations

Pursuant to 23 U.SC. §139 (l), FHWA intends to publish a notice in the Federal Register following publication of the NEPA decision for the Project. This notice would indicate that the agency has taken final action with respect to compliance with NEPA for the Project. Once published, claims seeking judicial review of this federal action will be barred unless such claims are filed within 150 days after the publication date of the Federal Register Notice.

In addition, the FHWA intends to publish a notice in the Federal Register once the USACE has taken final agency action by issuing permits and approvals for the Project. If such a notice is published, claims seeking judicial review of this additional federal action also will be barred unless such claims are filed within 150 days after the publication date of the Federal Register notice.

5.4 REQUIRED PERMITS

Exhibit 5-2 summarizes the permits required for the Project, the agencies involved in the permitting process, and the timing and coordination necessary to obtain the permits.

EXHIBIT 5-2: REQUIRED PERMITS AND COMPLIANCE SUMMARY TABLE

AGENCY	REGULATION	TYPE OF PERMIT/APPROVAL	TIMING AND COORDINATION
USACE	Section 404 of the Clean Water Act of 1972 (33 U.S.C. § 404)	Section 404 Individual Permit	A USACE Section 404 Individual Permit is required and will be obtained prior to building the Project. The target authorization date is in the second quarter of 2025.
		Section 404 Nationwide Permit 6	A USACE Section 404 Nationwide Permit 6 may be required for temporary impacts during conceptual design. If impacts will exceed 0.1 acre, Georgia DOT will prepare either a letter of notification or a Preconstruction Notification for a Nationwide Permit 6. The schedule will be determined once geotechnical testing is scoped to confirm the need for and obtain the permit prior to fieldwork.
Federal Emergency Management Agency	National Flood Insurance Program 44 Code of Federal Regulations (CFR) Ch. 1, Parts 60, 65, and 72	Permit for Floodplain Development/Conditional Letter of Map Revision	Georgia DOT will coordinate with the Federal Emergency Management Agency to obtain the Conditional Letter of Map Revision, if needed.
Georgia Department of Natural Resources Environmental Protection Division	Georgia Rules and Regulations, Rule 391-3-7-.05, Buffer Variance Procedures and Criteria	Stream Buffer Variance	The target stream buffer variance authorization date is in the third quarter of 2027. Georgia DOT will refine and coordinate with the Environmental Protection Division based on construction areas to match approved erosion control plans.
	Section 402 of the Clean Water Act (33 U.S.C. § 402)	Notice of Intent for National Pollutant Discharge Elimination System Permit	The target National Pollutant Discharge Elimination System permit authorization date is in the third quarter of 2027.
Other/Local Agencies	Not Applicable	Encroachment Permit/Special Use Permit/Zoning Approval	These permits are dependent on local codes that may apply during surveying and construction and are required for temporary traffic delays during testing; construction noise limitations; and off-site temporary uses such as batch plant or materials storage.
Environmental Protection Agency/Issued by Georgia Environmental Protection Division (GAEPD)	Section 401 of the Clean Water Act of 1972	Section 401 Water Quality Certification	The certification is required and will be applied for as part of the Section 404 Individual Permit application. The target authorization is for the second quarter of 2025.