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HAMPO 2045 MTP

September 10, 2020





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I. Introduction

Metropolitan Planning Organizations (MPOs) are the federally designated organizations with the responsibility to facilitate cohesive planning practices, project identification and programming within their identified region. MPOs are areas with over 50,000 in population that are federally mandated to carry out the transportation planning process within the MPO area, including the allocation of federal funding for transportation projects..

The current transportation legislation, the Fixing America's Surface Transportation Act (FAST Act),. essentially carries forward the same requirements from previous legislation, particularly the charge for MPOs to execute a continuing, cooperative, and comprehensive (3-C) process among local, state, and federal partners as plans and programs are developed. In addition, MPOs are required to develop and maintain a financially constrained or financially feasible Metropolitan Transportation Plan (MTP). This long-range plan has a minimum 20-year planning horizon and must be updated on a regular, recurring basis. The FAST Act also includes a requirement for the MPO planning process to incorporate performance-based planning initiatives.

Generally, each MPO consists of representatives from the respective municipalities and agencies within its boundaries to provide feedback and direction on how best to utilize federal state and local transportation funds to achieve the established goals and objectives for the region.

A. HAMPO

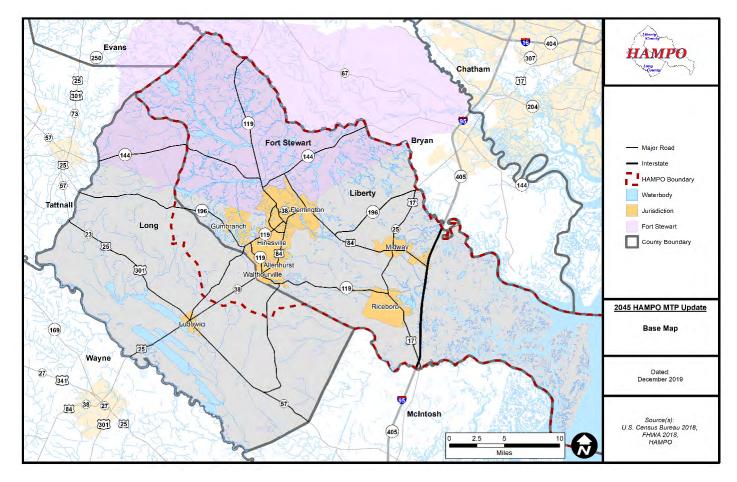
As a result of the 2000 Census, in 2003, the Hinesville Area Metropolitan Planning Organization (HAMPO) was established pursuant to federal law to address transportation planning within Liberty County and the urbanized portions of Long County, including Fort Stewart and the municipalities of Hinesville, Allenhurst, Flemington, Gum Branch, Midway, Riceboro and Walthourville. In 2005, the Memorandum of Understanding with the Georgia Department of Transportation, affirmed by the Governor, designated the Liberty Consolidated Planning Commission (LCPC) as the recipient and management entity for all planning funds and activities associated with HAMPO. The Policy Committee (PC), comprised of elected officials and other decision makers from each participating jurisdiction, provides leadership for HAMPO. The Technical Coordinating Committee (TCC) and Citizens Advisory Committee (CAC) provide insightful input to the Policy Committee on transportation issues. The Technical Sub-Committee supports the TCC through careful technical analysis of the transportation projects and their anticipated effects in the HAMPO region.

Figure 1 depicts the region with delineations of the HAMPO Urbanized Area (UZA) shown in gold and the HAMPO Planning Area Boundary shown as a dashed red line.





Figure 1. HAMPO Study Area



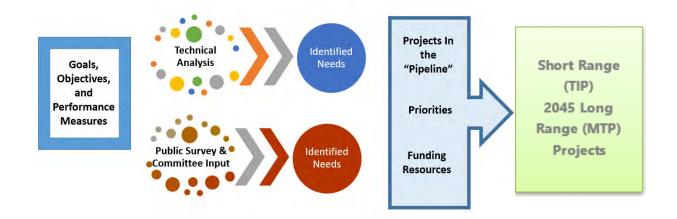
B. Metropolitan Transportation Plan

One of the primary responsibilities of the HAMPO is the development and maintenance of the MTP. This 25-year MTP, with a planning horizon of 2045, identifies the vision, goals and objectives, and strategies that will promote the movement of people and goods throughout the MPO planning region. The MTP is required to be updated every five years to remain eligible for federal and state transportation funding. Figure 2 provides an overview of the key elements included in the MTP planning process.





Figure 2: HAMPO MTP Planning Process



C. Related Plans

In order to gain a thorough understanding of current planning efforts for the MPO region and the State of Georgia, a review of existing plans and documents was conducted. Local governments, LCPC, and HAMPO have developed plans to address a variety of community needs and issues that both impact and guide transportation investments. The Georgia Department of Transportation (GDOT) has also developed statewide plans, which were reviewed within the context of this MTP update and applicable information included. These plans were collected and carefully analyzed to form the basis for the MTP goals, objectives, existing conditions, and future conditions for the region.

Long County & The City of Ludowici 2019 – 2039 Joint Comprehensive Plan

This comprehensive plan was a cooperative work between Long County and the City of Ludowici. It was developed within the framework of state standards and procedures for local comprehensive plans. This plan contains community visions and mission statements that are used as guiding principles for future improvements and a five-year work program. There are recommendations for land use, housing, coastal vulnerability and resilience, economic development, and transportation. The transportation chapter is most relevant to the 2045 MTP, with data on parking, alternate modes of transportation, and strategies for transportation improvements throughout Long County. Projects included as 'Regionally Significant Transportation Recommendations in Long County are incorporated in this MTP update.

2040 Joint Comprehensive Plan – Liberty County, Allenhurst, Flemington, Gum Branch, Hinesville, Midway, Riceboro, Walthourville

In 2016, the LCPC completed the 2040 Joint Comprehensive Plan in collaboration with Liberty County and the seven municipalities within the county (Allenhurst, Flemington, Gum Branch,





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Hinesville, Midway, Riceboro, Walthourville). Elements included transportation, land use, and development were included in this plan, meeting all Georgia Department of Community Affairs (DCA) requirements. Existing and future land use data and maps were used as the guiding source for socioeconomic data; a key input used in the development of the MTP Travel Demand Model (TDM). In addition, transportation issues, needs, and opportunities were examined, which have been incorporated into recommended projects for the 2045 MTP. A major priority identified in the Joint Comprehensive Plan for Liberty County is the US 84 Freight Bypass.

2018 – 2021 Transit Development Plan (TDP) (Liberty Transit)

Liberty Transit published this short- and long-range transit planning document in 2018. Updated every five years, the TDP summarizes the existing conditions of the transit system, defines the community's public transit needs, and outlines goals and objectives with recommended actions for the transit agency and community. Key initiatives identified in the TDP include the implementation of a complementary ADA Paratransit bus service, continued strategic investments in multimodal transit supportive infrastructure, regional connections to adjacent metropolitan areas, and preparing for fleet replacement to maintain a state of good repair.

HAMPO Multimodal Plan: Transit Coordination and Bicycle/Pedestrian Facilities

This 2008 plan focused on multimodal aspects of the HAMPO planning area, building on the previous Transit Implementation Study and Transit Feasibility Study. The focus was building an integrated, multimodal transportation network by analyzing existing conditions, reviewing existing data from similar sized successful transit systems, and forming recommendations based on apparent needs in the HAMPO region. This plan included detailed proposals of new bike lanes and sidewalks, and multimodal improvements in Downtown Hinesville and other cities in Liberty County.

HAMPO Regional Freight Plan

This regional freight plan, completed in 2017, highlights the importance of freight in the HAMPO region, due to the proximity to the Ports of Savannah, Brunswick, as well as the Ports of Jacksonville and Charleston. Freight plays a major role in this region, and this plan was developed to capitalize on the strengths of the existing freight infrastructure while highlighting problem areas and places that hinder growth potential. The US 84 Corridor is emphasized as a freight corridor with significantly higher crash rates than the state average. Recommendations range from completing the US 84 Bypass, developing corridor signal timing on major freight routes, and implementing the US 84 Safety and Access Management projects.





2040 Statewide Transportation Plan (SWTP)/ 2018 Statewide Strategic Transportation Plan (SSTP)

The SWTP is a federally mandated long-range transportation plan that defines policies over a minimum 20-year period and must be periodically updated. This plan focuses on all modes of transportation and their connectivity. The SSTP is a strategic plan that focuses on transportation investment strategies to advance the State's economic growth, and this plan must be updated every two years. By focusing on economic growth, the SSTP prioritizes projects and goals that support Georgia's economic vitality. This plan is the first in the state's history to combine both the SWTP and the SSTP and combines traditional planning analyses found in the SWTP with business insight and investment strategies included in the SSTP. The depth of this plan and its ability to focus in on statewide issues and trends and apply that to local MPOs throughout the state reinforces the importance of a combined Statewide Transportation/Strategic Transportation Plan.

Georgia Strategic Highway Safety Plan (SHSP) (2019 – 2021)

The SHSP is a comprehensive plan that incorporates the "4 Safety E's" – engineering, education, enforcement, and emergency medical services. The SHSP is a federally mandated plan (part of the Highway Safety Improvement Program which itself is an important Federal-aid program) that is designed 'to reduce or eliminate safety hazards on Georgia Roads.' Data incorporated into this plan utilized sources such as the Fatality Analysis Reporting System (FARS), Georgia Electronic Accident Reporting System (GEARS), the Georgia Department of Driver Services (DDS) Data Reports, the Georgia Department of Public Health (Hospitalization and Emergency Room Data) and the Federal Motor Carrier Safety Administration (Analysis and Information Online System). One of the goals of the HAMPO MTP is to improve the safety for the users of the transportation system, and the SHSP is a valuable source for trends, statistics, and recommendations to improve the HAMPO planning area.

Georgia Statewide Freight and Logistics Plan

Freight and logistics are critical to the economic vitality of the state and have significant impacts on the state's transportation system. The Statewide Freight and Logistics Plan, which incorporates highways, rail, air, and water, was developed to analyze the needs for efficient freight movements and identify projects and recommendations to address those needs throughout the state. The plan includes short-term, mid-term, and long term needs for project implementation.



II. Goals, Objectives, Performance Measures

A. Goals and Planning Factors

The 2045 Metropolitan Transportation Plan includes the development of goals and objectives that serve as the framework for the planning process and guides the approach for transportation investments in the region. HAMPO's goals are created by incorporating local public and stakeholder input with national and state goals, as well as the federal planning factors found in the FAST Act.

The FAST Act states that the metropolitan transportation planning process must address specific factors. Those factors are indicated below, with the critical element of each factor in bold.

- Support economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency
- Increase the **safety** of the transportation system for motorized and non-motorized users
- Increase the security of the transportation system for motorized and non-motorized users
- Increase accessibility and mobility of people and freight
- Protect and enhance the environment, promote energy conservation, improve
 the quality of life, and promote consistency between transportation improvement
 and state and local planned growth and economic development patterns
- Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight
- Promote efficient system management and operation
- Emphasize the preservation of the existing transportation system
- Improve the **resiliency and reliability** of the transportation system and reduce or mitigate stormwater impacts of surface transportation
- Enhance travel and tourism

These factors are a key aspect in the formation of the MTP and provide a base for the development of the goals and objectives. Addressing these factors in the MTP ensures that HAMPO can effectively support the national goals identified in the FAST Act and develop goals and objectives for the MPO region that are cohesive with national initiatives. The national goals include:

- **Safety** to achieve a significant reduction in traffic fatalities and serious injuries on all public roads
- **Infrastructure Condition** to maintain the highway infrastructure asset system in a state of good repair
- **Congestion Reduction** to achieve a significant reduction in congestion on the National Highway System
- **System Reliability** to improve the efficiency of the surface transportation system





• **Freight Movement and Economic Vitality** – to improve the national freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development

- **Environmental Sustainability** to enhance the performance of the transportation system while protecting and enhancing the natural environment
- Reduced Project Delivery Delays to reduce project costs, promote jobs and the
 economy, and expedite the movement of people and goods by accelerating project
 completion through eliminating delays in the project development and delivery
 process, including reducing regulatory burdens and improving agencies' work
 practices

The 2018 GDOT Statewide Strategic Transportation Plan lists state goals for transportation initiatives for the State of Georgia. Along with the national goals, these state goals provide an additional layer to the framework for the MTP goals, ensuring a coordinated approach to transportation investments throughout the State. The SWTP/SSTP goals are listed below:

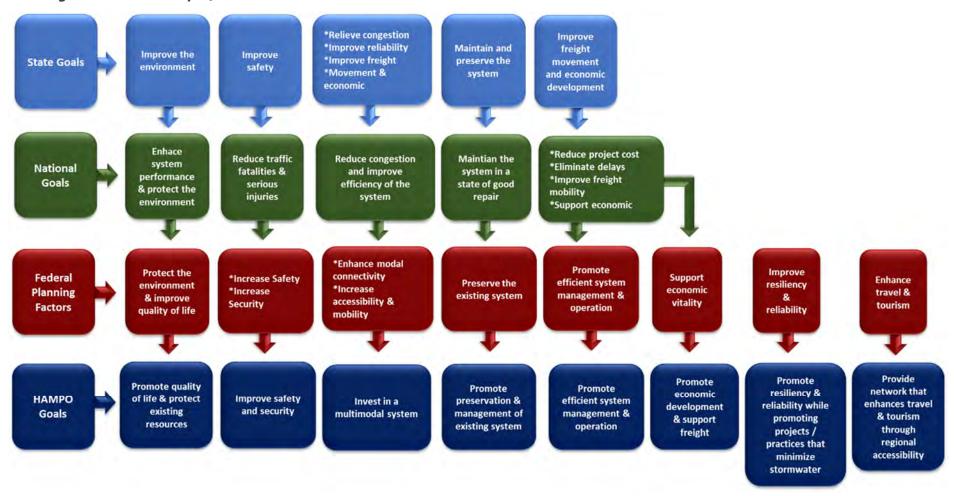
- Improve safety
- Improve reliability
- Reduce congestion
- Maintain and preserve the system
- Improve freight and economic growth
- Improve the environment

B. HAMPO Goals and Objectives

The goals and objectives in this 2045 MTP were formulated after reviewing the goals and objectives from the previous 2040 MTP, as well as the state and national goals. Goals and objectives still relevant and important from the previous MTP were maintained and additional goals and objectives were incorporated to align HAMPO with state and national planning factors and goals. Figure 3 shows the relationship of the HAMPO 2045 MTP goals to those of the FAST Act national planning factors, national goals, and state goals. In addition, specific performance measures were also identified for the goals and objectives.



Figure 3: Relationship of Goals







Input on the goals and objectives was collected from stakeholders and members of the public through surveys. In addition, the goals and objectives were reviewed with the HAMPO Committees (Citizens Advisory Committee, Technical Coordinating Committee, Policy Committee) and the Policy Committee adopted the goals, objectives, and performance measures for the 2045 MTP Update. These goals, objectives and performance measures are shown in Table 1.

Table 1: HAMPO Adopted 2045 MTP Goals, Objectives, and Performance Measures

	GOALS	OBJECTIVES	PERFORMANCE MEASURES
*	Promote Quality of Life and Protect Existing Resources: Provide a transportation system that protects the environment and improves the quality of life for all residents	Minimize impacts on wetlands, historic resources, neighborhoods, recreational facilities and other important resources Support infill development Provide access to essential services Preserve/enhance the community character	Impacts to cultural, historic and community resources associated with transportation projects Impacts to the natural environment associated with transportation projects Reduction in Vehicle Miles of Travel (VMT)
*	Invest in a Multimodal System: Provide a connected, multimodal transportation system that allows for efficient movement of freight while meeting the needs of all transportation users	Provide for a connected bicycle and pedestrian network Maximize accessibility for populations to employment and activity centers Minimize network deficiencies and impacts on efficient freight mobility and access	Reduce gaps within modal networks Increase connectivity and access between modes Projects that include multimodal or complete streets elements
*	Promote the Management and Preservation of the existing transportation system: >> Preserve and maintain the existing transportation system >> Promote the efficient management and operations of the transportation system	Require improvements necessary to accommodate future growth in the development review process Coordinate with state, regional, and local planning partners Maximize efficiency of signalized intersections Expand the use of Intelligent Transportation Systems Maintain the existing transportation system	 » NHS Bridges with sufficiency rating of ≤ 50 » Projects with ITS elements identified » Projects identified to address roadways that do not meet state and/or local maintenance standards





GOALS		OBJECTIVES	PERFORMANCE MEASURES		
»	Promote Economic Development and Support Freight Movement: Support the economic vitality of the area through efficient transportation systems that support local and global competitiveness and productivity	 Minimize work trip and congestion delays Enhance Freight Connections Provide Transportation Alternatives 	Projects address existing and future development for the region Projects that improve freight routes or projects identified in HAMPO Freight Plan Projects that improve existing or planned transit service routes Projects with existing or projected LOS D - E AADT and Truck %		
»	Ensure the safety of the multimodal transportation system for all users Ensure the security of the multimodal transportation system for all users Ensure the security of the multimodal transportation system for all users	 Ensure all transportation systems are structurally and operationally safe and secure Minimize frequency and severity of vehicular crashes Promote continuity with applicable state and local emergency preparedness plans Prepare Coordinated Incident Responses Enhance Safe Routes to Schools through multimodal infrastructure improvements Improve safety and accessibility of the non-motorized transportation network 	 Number of crashes (5-year average and CY) Crash rate per 100 Million VMT Number /rate of fatalities per 100 million VMT Number/ rate of serious injuries per 100 million VMT Number of combined non-motorized fatalities and non-motorized serious injuries Number of bicycle/pedestrian fatalities Number of bicycle/pedestrian injuries Projects identified to address structural or operational deficiencies Bridges with sufficiency ratings of < 50 Projects improving emergency evacuation or emergency first response access corridors Miles of bicycle/pedestrian infrastructure and/or number of safety features 		
»	Invest in Mobility Options: Maximize mobility for all users through an integrated, connected, and accessible transportation system	 Minimize congestion delays Maximize accessibility for populations to employment and activity centers Provide efficient and reliable freight movement Encourage transportation services for the transportation disadvantaged Encourage multimodal use 	Projects that improve existing or planned transit service routes Projects with existing or projected LOS D - E Projects that include multimodal / complete streets infrastructure		

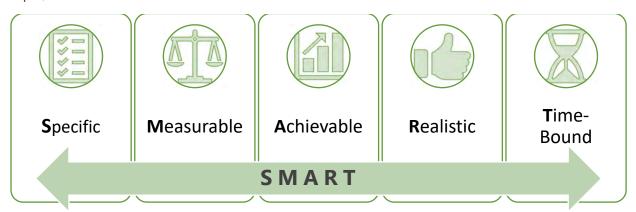




GOALS		OBJECTIVES			PERFORMANCE MEASURES		
»	Promote the resiliency and reliability of the system while promoting transportation projects and practices that minimize stormwater impacts	» » »	Minimize delays due to recurring and non-recurring congestion Coordinate with local and state emergency management agencies Identify vulnerable areas of the system that impact the reliability of travel and identify strategies to address Review transportation projects to ensure minimal stormwater impacts	» »	Projects identified along corridors with documented flooding Projects improving emergency evacuation or emergency first response access corridors NPMRDS bottlenecks		
»	Provide a transportation network that enhances travel and tou rism through regional accessibility	» »	Promote regional connectivity Promote transportation investments and strategies that provide access to tourist attractions	» »	Connections to regional tourist attractions Multimodal transportation services and/or infrastructure targeted to visitors		

C. HAMPO Performance Measures

The performance measures developed for the 2045 MTP were identified as key measures of effectiveness for the adopted goals and objectives. These performance measures were developed through public, stakeholder, and agency input and follow the FHWA SMART principle, which focuses on measures that are:



This approach uses data that is quantifiable over a defined period of time. Each goal and objective in the MTP has a related performance measure to gauge their effectiveness and support prioritization of project to best meet the region's transportation needs. Table 2 is a matrix that demonstrates the relationship between the FAST Act national planning factors, national goals, and the corresponding state goals, and HAMPO goals, objectives, and performance measures.

















Table 2: Relationship of HAMPO, Federal, and State Goals, Objectives, and Performance Measures

FAST Act National Planning Factors	FAST Act National Goals	GA 2040 SWTP/2015 SSTP State Goals	HAMPO 2045 Goals	HAMPO 2045 Objectives	HAMPO Performance Measures	Data Source for Performance Measure
Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvement and state and local planned growth and economic development patterns	To enhance the performance of the transportation system while protecting and enhancing the natural environment.	Improve the environment	Promote Quality of Life and Protect Existing Resources: Provide a transportation system that protects the environment and improves the quality of life for all residents.	 Minimize impacts on wetlands, historic resources, neighborhoods, recreational facilities and other important resources Support infill development Provide access to essential services 	 Impacts to cultural, historic and community resources associated with transportation projects Impacts to the natural environment associated with transportation projects Reduction in Vehicle Miles of Travel (VMT) 	 Environmental Justice analysis; US Census Project review Local land development actions occurring along State Highway System with documented transportation review and recommendations
Increase the safety of the transportation system for motorized and nonmotorized users. Increase the security of the transportation system for motorized and nonmotorized users.	To achieve a significant reduction in traffic fatalities and serious injuries on all public Rds.	Improve safety	Improve Safety and Security: Ensure the safety of the multimodal transportation system for all users Ensure the security of the multimodal transportation system for all users	 Ensure all transportation systems are structurally and operationally safe and secure Minimize frequency and severity of vehicular crashes Promote continuity with applicable state and local emergency preparedness plans Prepare Coordinated Incident Responses Enhance Safe Routes to Schools through multimodal infrastructure improvements Improve safety and accessibility of the non-motorized transportation network 	 Number of crashes (5-year average and CY) Crash rate per 100 Million VMT » Number /rate of fatalities per 100 million VMT Number/ rate of serious injuries per 100 million VMT Number of combined non-motorized fatalities and non-motorized serious injuries Number of bicycle/pedestrian fatalities Number of bicycle/pedestrian injuries Projects identified to address structural or operational deficiencies Bridges with sufficiency ratings of < 50 Projects improving emergency evacuation or emergency first response access corridors Miles of bicycle/pedestrian infrastructure and/or number of safety features 	 GDOT Georgia Electronic Accident Reporting System (GEARS) GDOT Traffic Analysis and Data Application





HAMPO 2045 MTP

FAST Act National Planning Factors	FAST Act National Goals	GA 2040 SWTP/2015 SSTP State Goals	HAMPO 2045 Goals	HAMPO 2045 Objectives	HAMPO Performance Measures	Data Source for Performance Measure
Increase accessibility and mobility of people and freight	To achieve a significant reduction in congestion on the National Highway System To improve the efficiency of the surface transportation system	Relieve congestion and improve reliability Improve freight movement and economic development opportunities	Invest in a Multimodal System: Provide a connected, multimodal transportation system that allows for efficient movement of freight while meeting the needs of all transportation users	 Provide for a connected bicycle and pedestrian network Maximize accessibility for populations to employment and activity centers Minimize network deficiencies and impacts on efficient freight mobility and access 	 Reduce gaps within modal networks Increase connectivity and access between modes Projects that include multimodal or complete Streets elements 	 Environmental Justice analysis; US Census Project review and identification of connections Public Works/Engineering Depts. Transit Systems Inventory of Capital Assets Ridership data Remix access density reports NTD reporting data
Enhance the integration and connectivity of the transportation system, across and between modes for people and freight	To achieve a significant reduction in congestion on the National Highway System To improve the efficiency of the surface transportation system	Relieve congestion and improve reliability	Invest in Mobility Options: Maximize mobility for all users through an integrated, connected, and accessible transportation system	 Minimize congestion delays Maximize accessibility for populations to employment and activity centers Provide efficient and reliable freight movement Encourage transportation services for the transportation disadvantaged Encourage multimodal use 	 Projects that improve existing or planned transit service routes Projects with existing or projected LOS D - E Projects that include multimodal / complete Streets infrastructure 	 National Performance Management Data Research Set GDOT Traffic Analysis and Data Application Public Works/Engineering Depts Transit Service Profiles: Routes, Service Area, Route Miles, Bus Stop Improvement Program Inventory
Emphasize the preservation of the existing transportation system Promote efficient system management and operation	To maintain the highway infrastructure asset system in a state of good repair To reduce project costs, promote jobs and the economy, and expedite the movement of people and goods by accelerating project completion through eliminating delays in the project development and delivery process, including reducing regulatory burdens and improving agencies' work practices.	Maintain and preserve the existing transportation system	Promote the Management and Preservation of the existing transportation system: Preserve and maintain the existing transportation system Promote the efficient management and operations of the transportation system	 Require improvements necessary to accommodate future growth in the development review process Coordinate with state, regional, and local planning partners Maximize efficiency of signalized intersections Expand the use of Intelligent Transportation Systems Maintain the existing transportation system 	 NHS Bridges with sufficiency rating of < 50 Projects with ITS elements identified Projects identified to address roadways that do not meet state and/or local maintenance standards 	 GDOT Traffic Analysis and Data Application National Performance Management Research Data Set Public Works/Engineering/Traffic Depts.





September 2020 HAMPO 2045 MTP

FAST Act National Planning Factors	FAST Act National Goals	GA 2040 SWTP/2015 SSTP State Goals	HAMPO 2045 Goals	HAMPO 2045 Objectives	HAMPO Performance Measures	Data Source for Performance Measure
Improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation	To maintain the highway infrastructure asset system in a state of good repair To enhance the performance of the transportation system while protecting and enhancing the natural environment	address this federal goal.	Promote the resiliency and reliability of the system while promoting transportation projects and practices that minimize stormwater impacts	 Minimize delays due to recurring and non-recurring congestion Coordinate with local and state emergency management agencies Identify vulnerable areas of the system that impact the reliability of travel and identify strategies to address Review transportation projects to ensure minimal stormwater impacts 	 Projects identified along corridors with documented flooding Projects improving emergency evacuation or emergency first response access corridors NPMRDS bottlenecks 	 GDOT and Public Works/Engineering Depts.; Project Review National Performance Management Research Data Set Local Stormwater Management Departments Local Emergency Management Agencies Project Review Transit providers AVL data
Enhance travel and tourism	To improve the national freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development.		Provide a transportation network that enhances travel and tourism through regional accessibility	 Promote regional connectivity Promote transportation investments and strategies that provide access to tourist attractions 	 Connections to regional tourist attractions Multimodal transportation services and/or infrastructure targeted to visitors 	 GDOT and Public Works/Engineering Depts.; Project Review Project Review Local Convention and Visitors Bureau
Support economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency	To improve the national freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development. To improve the efficiency of the surface transportation system	Improve freight movement and economic development opportunities	O Promote Economic Development and Support Freight Movement: Support the economic vitality of the area through efficient transportation systems that support local and global competitiveness and productivity	 Minimize work trip and congestion delays Enhance Freight Connections Provide Transportation Alternatives 	 Projects address existing and future development for the region Projects that improve freight routes or projects identified in HAMPO Freight Plan Projects that improve existing or planned transit service routes Projects with existing or projected LOS D - E » AADT and Truck % 	 GDOT Traffic Analysis and Data Application National Performance Management Research Data Set Project Review GDOT Project Review





D. National Transportation Performance Measures and State Targets

The Fast Act outlines a framework for state Departments of Transportation and Metropolitan Planning Organizations to adhere to while carrying out their federally required transportation planning and programming activities. This framework includes federally prescribed national performance measures and mandates the cooperative development of performance targets at the MPO and/or state level. These measures are stratified into three groups, which are focused in the areas of safety, interstate and NHS pavement condition, interstate and NHS bridge condition, system reliability, freight reliability, peak hour excessive delay, and total emissions reduction. Those three groups are as follows:

- PM1: Safety Performance Measures
- PM2: Pavement and Bridge Condition on Interstate and non-Interstate NHS Roads
- PM3: Travel Time Reliability, Peak Hour Excessive Delay, and Freight Reliability on Interstate and non-Interstate NHS roads

Safety Performance Measures (PM1)

The FHWA is responsible for the highway safety performance measures to ensure compliance with the Highway Safety Improvement Program (HSIP). For highway safety, this includes five performance measures:

- 1. Number of fatalities;
- 2. Rate of fatalities per 100 million vehicle miles traveled;
- 3. Number of serious injuries;
- 4. Rate of serious injuries per 100 million vehicle miles traveled; and
- 5. Number of combined non-motorized fatalities and non-motorized serious injuries.

Safety performance targets were initially developed and adopted by GDOT in 2018 and are updated annually by February 27th. MPOs were required to support the Safety Performance Targets identified by GDOT or develop specific targets for the MPO region. HAMPO elected to support the GDOT targets and has continued to support the targets for three consecutive years. The current safety targets address calendar year 2020, with statewide performance measured on a five-year rolling average. Table 3 lists the highway safety performance measures adopted by HAMPO.



Table 3: Highway Safety/PM1: System Conditions and Performance

National Safety Performance Measures	GDOT Statewide Performance (2013 – 2017)	GDOT Statewide Performance (2015 – 2019)	GDOT Statewide Performance Target (2016 – 2020)
Number of Fatalities	1,376.6	1,655.0	1,698.0
Rate of Fatalities per 100 million VMT	1.172	1.310	1.28
Number of Serious Injuries	23,126.8	24,324.0	24,094.0
Rate of Serious Injuries per 100 million VMT	19.756	18.900	21.800
Total Number of Non-motorized Fatalities and Non-Motorized Serious Injuries	978.40	1,126.0	1,163.0

Performance Management (PM2)

To assess pavement condition and bridge condition for the National Highway Performance Program, FHWA established performance measures in 2017. These six performance measures include:

- 1. Percent of Interstate pavement in good condition
- 2. Percent of Interstate pavement in poor condition
- 3. Percent of non-Interstate National Highway System (NHS) pavement in good condition
- 4. Percent of non-Interstate NHS pavement in poor condition
- 5. Percent of NHS bridges by deck area classified as in good condition
- 6. Percent of NHS bridges by deck area classified as in poor condition















The performance measures listed below were developed by GDOT and supported by HAMPO in 2018, providing a vital component of the performance-based planning framework and ongoing performance management. These targets, shown in Table 4, are updated every four years, with a possible revision at the two-year interim for two targets:

- Percent of non-Interstate NHS pavement in good and poor condition
- Percent of NHS bridges by deck area in good and poor condition

Table 4: Pavement and Bridge Condition/PM2: Performance and Targets

	tage conattion, i i iz. i c		
Performance Measures	Georgia Performance (Baseline)	Georgia 2- year Target (2019)	Georgia 4- year Target (2021)
Percent of Interstate pavement in good condition	60%	N/A	≥50%
Percent of Interstate pavement in poor condition	4%	N/A	≤5%
Percent of non- Interstate NHS pavement in good condition	44%	≥40%	≥40%
Percent of non- Interstate NHS pavement in poor condition	10%	≤12%	≤12%
Percent of NHS bridges (by deck area) in good condition	49.1%	≥60%	≥60%
Percent of NHS bridges (by deck area) in poor condition	1.35%	≤10%	≤10%





Performance Management Group 3 (PM3)

The PM3 Performance Targets are two-year and/or four-year performance targets required to be established by state DOTs and MPOs. These targets measure performance of the National Highway System, freight movement on the Interstate system, and the Congestion Mitigation and Air Quality Improvement (CMAQ) Program. The PM3 measures include:

- Percent of person-miles on the Interstate system that are reliable
- Percent of person-miles on the non-Interstate NHS that are reliable: four-year targets
- Truck Travel Time Reliability two-year and four-year targets
- Annual hours of peak hour excessive delay per capita (PHED) four-year targets
- Percent of non-single occupant vehicle travel (Non-SOV): two-year and four-year targets
- CMAQ Emission Reductions: two-year and four-year targets

As with PM 1 and PM2, HAMPO elected to support the GDOT developed performance targets rather than developing their own specific targets. Table 5 details the PM3 targets originally established in 2018 with 2-year targets and 4-year targets.

Table 5: System Performance/Freight Movement (PM3): Performance and Targets

Performance Measures	Georgia Performance (Baseline)	Georgia 2- year Target (2019)	Georgia 4- year Target (2021)
Percentage of Person-Miles Traveled on the Interstate System that are Reliable	80.4%	73.0%	67.0%
Percentage of Person-Miles on the non-Interstate NHS that are Reliable	84.9%	N/A	81.0%
Truck Travel Time Reliability Index	1.44	1.66	1.78
Annual hours of Peak Hour Excessive Delay per Capita (PHED)	20.4 hours	N/A	24.6 hours
Percent Non-SOV travel	22.1%	22.1%	22.1%















Transit Performance Management

In addition to the highway performance measures established by MAP-21 and brought forward in the FAST Act, the Federal Transit Administration (FTA) also established performance measures and requirements for associated targets and monitoring. These elements of the HAMPO performance management process are detailed in the Transit Chapter beginning on page 67 of this report.

III. Existing and Future Conditions

The HAMPO region was designated as an MPO in 2003 and has experienced consistent growth since its establishment. The growth rate in this region is due in part to its proximity to the interstate system (I-95), major ports (Port of Savannah and Port of Brunswick), rail lines (CSX and Riceboro Southern), and Fort Stewart/Hunter Army Airfield (HAAF), which is the largest military installation and strategic projection platform east of the Mississippi River. Fort Stewart is the also the primary employer in the HAMPO region. Due to the continued growth and expansion of these traffic attractors and generators, growth is expected to continue within the HAMPO region. In order to understand the current issues, opportunities, and demand for the multimodal transportation network within the HAMPO region, an existing conditions assessment was conducted and used as a platform for future growth projections.

Assessing and evaluating the existing conditions of the MPO region includes the compilation of

an inventory of demographic and employment data, current land use data, travel patterns and modes of transportation, freight statistics, and safety indicators. The socioeconomic data evaluation included careful evaluation of Title VI and Environmental Justice regulations and application of these federally mandated policies to the population data within the HAMPO region.

A key analysis tool utilized for transportation planning is the Travel Demand Model (TDM). The TDM utilizes a variety of population, employment, and travel behavior data to replicate baseline transportation conditions and to project future conditions for the MPO region. The inputs for this tool are developed collaboratively between GDOT and the MPO and include base year and future horizon population and employment data. These data are assessed utilizing four-step process which includes:

- Trip Generation
- Trip Distribution







- Mode Choice
- Trip Assignment

For modeling purposes, the MPO planning area is divided into smaller geographic areas called Traffic Analysis Zones (TAZ). The socioeconomic (SE) data is applied to the appropriate TAZ and then adjusted as needed to reflect current conditions. With the combination of transportation network characteristics and socioeconomic data, the model can forecast future traffic volumes for the network. These forecasts are then used as a primary

tool to identify existing and future needs and to analyze potential solutions. The map shown in Figure 4 was

developed by the GDOT modeling division to show the TAZ structure for the HAMPO modeling region, which includes all of Liberty and Long Counties, and the urbanized portion of Fort Stewart. The MPO includes 165 TAZs while the modeled area includes a total of 195 TAZs.

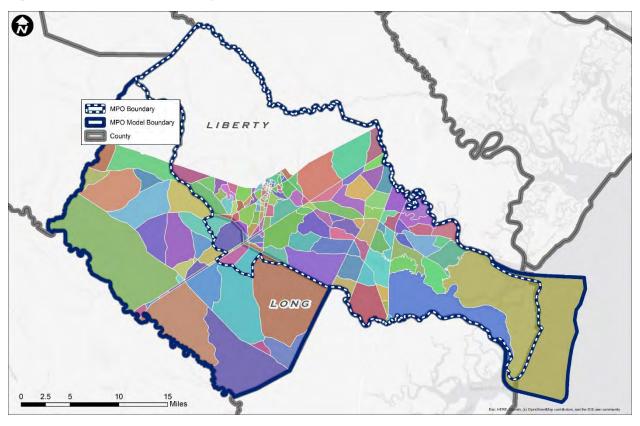


Figure 4: HAMPO Traffic Analysis Zones (TAZ)

Source: GDOT

A. Population

Population data for the MTP include both a base year and future year scenario. To ensure that all data sets needed to complete the MTP analysis are available, a base year of 2015 and future horizon of 2045 were selected.





Source: GDOT Modeling

2015 Base Year Population

The population of Liberty and Long Counties has continued its upward growth trend over the last five-year period, with the highest residential growth concentrations in Long County. Data from the US Census and the American Community Survey were used to estimate population totals for the 2015 base year. These data include Census block and tract level information from the 2010 decennial Census and population estimates from the 2015 American Community Survey. Table 6 displays the population and household estimates by county.

Table 6: HAMPO 2015 Base Year Population

SE Variable	Liberty County	Long County	HAMPO Total
Population	67,559	16,434	83,993
Households	30,990	6,884	37,874

The population density is higher in the Hinesville urbanized area just south of Fort Stewart, in addition to the cantonment area of Fort Stewart. In Long County, the highest density is in the city of Ludowici and on the shared border with Liberty County. This density in Ludowici is due in part to proximity to jobs in Hinesville and Fort Stewart as well as availability of goods, services, and municipal infrastructure.

The greatest population density is primarily located in the Hinesville urbanized area just south of Fort Stewart with concentrations along the major roadway corridors. Figure 5 shows the existing population per acre.



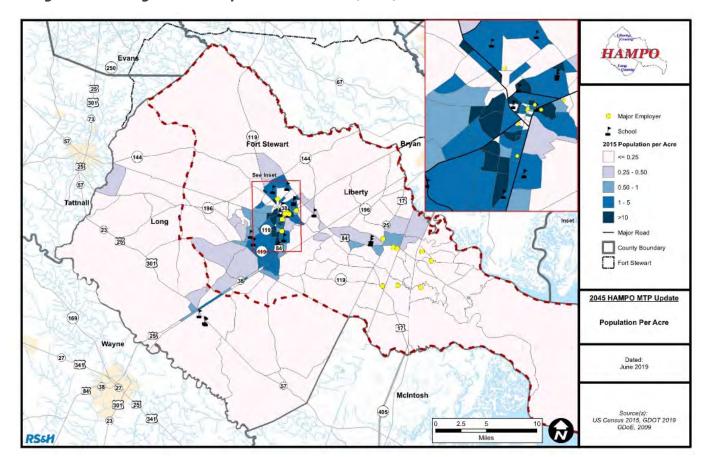


Figure 5: Existing HAMPO Population Per Acre (2015)

In 2011 Liberty County unsuccessfully contested the 2010 Census population results due to deployment activities at Fort Stewart Military Base that dramatically impacted the number of soldiers and dependents physically present in Liberty County during the count. While the effort to contest the census count results was not successful, it is critical that the impacts to population and traffic volumes collected during this deployment period be recognized within the framework of the HAMPO 2045 MTP update. With the 2020 Census count underway, with legislative modifications made to how deployed military personnel are counted, HAMPO anticipates a significant increase in population for the MPO region.

2045 Future Population

The first step in developing the future year SE data was to consider projected regional population. The estimated population control total serves as the base for projecting other variables including total employment and total school enrollment. The two primary population projection data sources are:

- Georgia Office of Planning and Budget (OPB); and
- REMI model data received from GDOT







Figure 6 summarizes the OPB and REMI regional population projections. OPB regional population grows at an average annual growth rate (AAGR) of 0.71% from 2015 to 2045, compared to 0.14% for REMI over the same period. These control totals are shown in Table 7 below for comparison purposes.

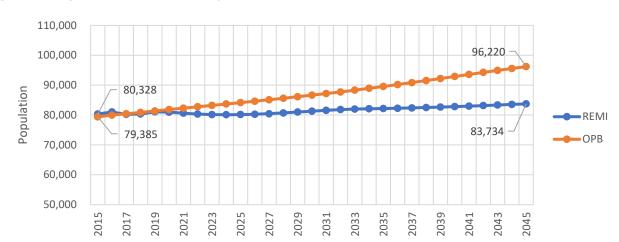


Figure 6: Regional Population Projections

Table 7: Regional Population Growth

Source	2015	2045	AAGR
ОРВ	79,385	96,220	0.71%
REMI	80,328	83,734	0.14%

Geographic distribution of future population was developed by building on the base year population scenario and incorporating two local comprehensive plans, Fort Stewart troop strength projections, and local planned development data sourced from the LCPC.

The population in the region is anticipated to increase steadily, with an anticipated shift of population growth to Ludowici in Long County, as evidenced by construction along US 84 connecting Hinesville to Ludowici and Long County. High-density neighborhoods and TAZs are in Hinesville adjacent to Fort Stewart due to the proximity to the military installation and related employment centers. Figure 7 shows the population per acre from the 2045 Projected Travel Demand Model.



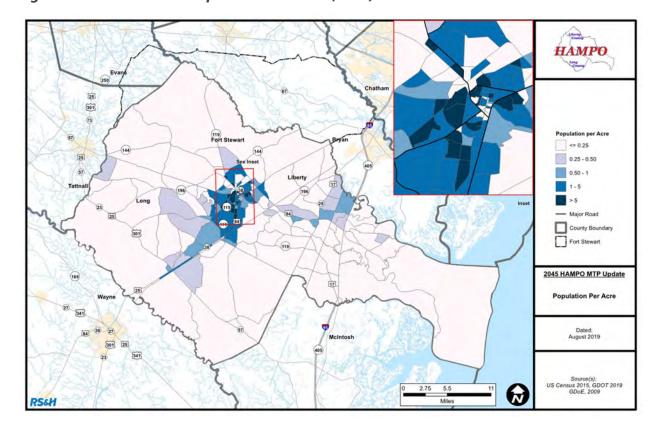


Figure 7: Future HAMPO Population Per Acre (2045)

B. Title VI/Environmental Justice

Title VI of the Civil Rights Act of 1964 states that "no person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance." Environmental Justice "is the fair treatment and meaningful involvement of all people, regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies." Federal agencies are legally mandated to identify and address disproportionally high or adverse human health or environmental impacts of programs, policies, and activities on minority or low-income populations.

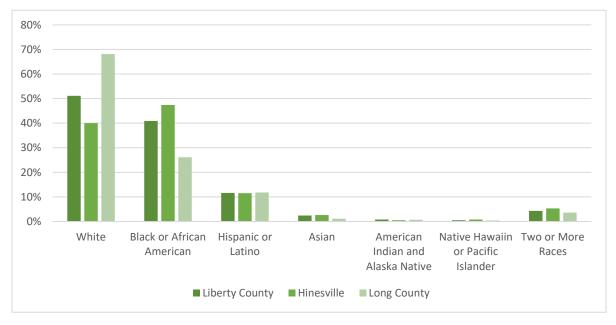
Environmental justice (EJ) is an important aspect of the transportation planning process and must be addressed as part of the MTP development, specifically as it relates to public involvement, project funding priorities, and disproportionate impacts to protected populations.

The HAMPO study area is comprised of an extremely diverse population. Figure 8 demonstrates the breakdown of population percentage by 2010 US Census demographic category.





Figure 8. HAMPO Demographics



Source: US Census Bureau

Using the US Census American Community Survey data, affected communities were identified and the regional average for the following population categories were determined:

- African American
- Asian
- Hispanic
- Persons with Disabilities
- Elderly (age 65 and over)
- Those living in poverty
- Households without access to an automobile

Using block groups and tracts, these identified populations were mapped and key findings summarized.





The block groups with an African American population above the regional average of 37% is primarily located in Riceboro, with one block group in the City of Walthourville.

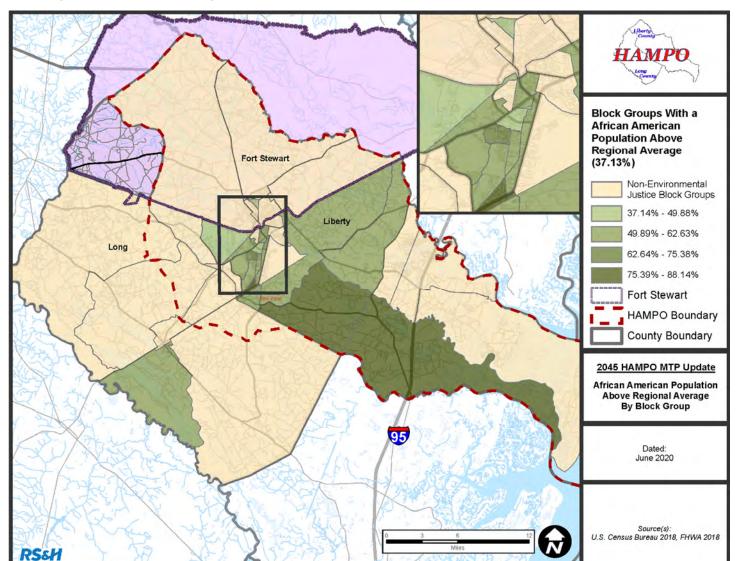


Figure 9: HAMPO Demographics - African American Population





The block groups with an Asian population above the regional average of 2% is concentrated in Hinesville, with some block groups in Midway and unincorporated Liberty and Long Counties.

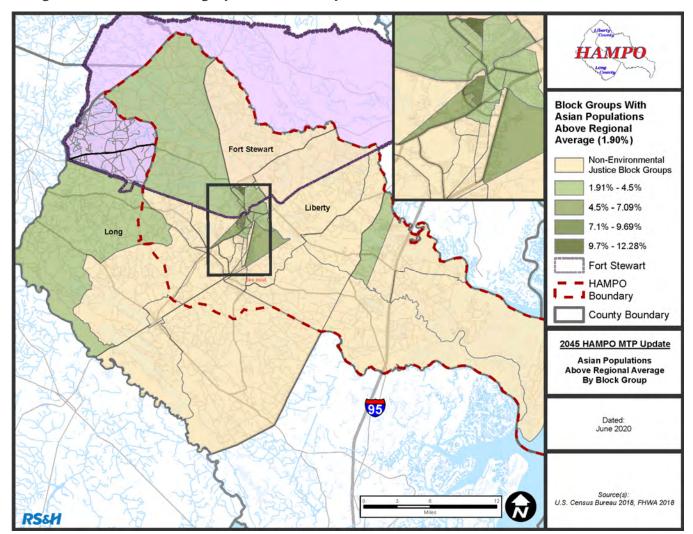


Figure 10: HAMPO Demographics - Asian Population





The block groups with Hispanic populations above the regional average of 2% is concentrated in Hinesville and Fort Stewart, with some block groups in unincorporated Long County having a high percentage of Hispanic residents.

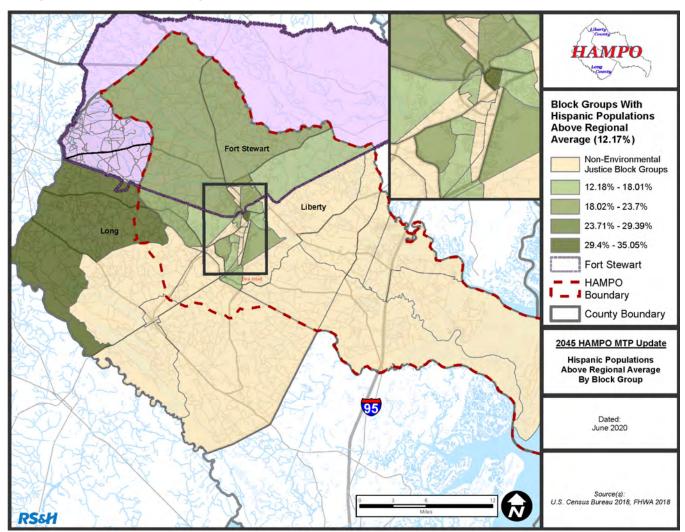


Figure 11: HAMPO Demographics - Hispanic Population





Census tracts containing elderly populations (65+) above the regional average are primarily in Riceboro and Midway. Hinesville also has an elderly population above the regional average.

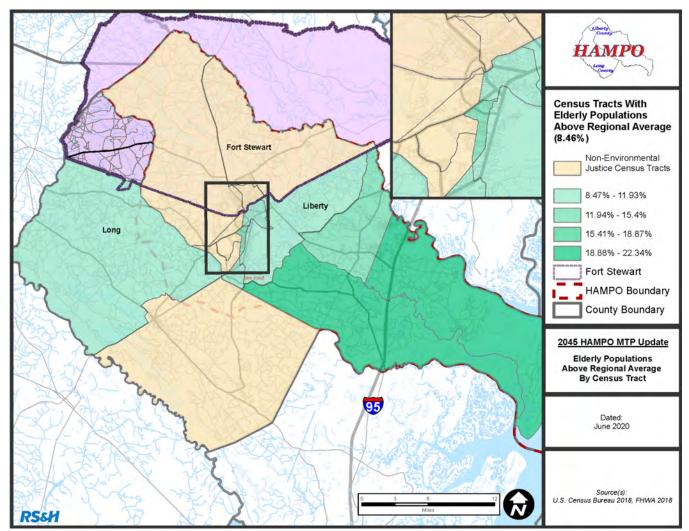


Figure 12: HAMPO Demographics - Elderly (65+) Population





Block Groups with Zero Vehicle Households are located near Liberty Transit Routes, with Midway containing zero vehicle households above the regional average.

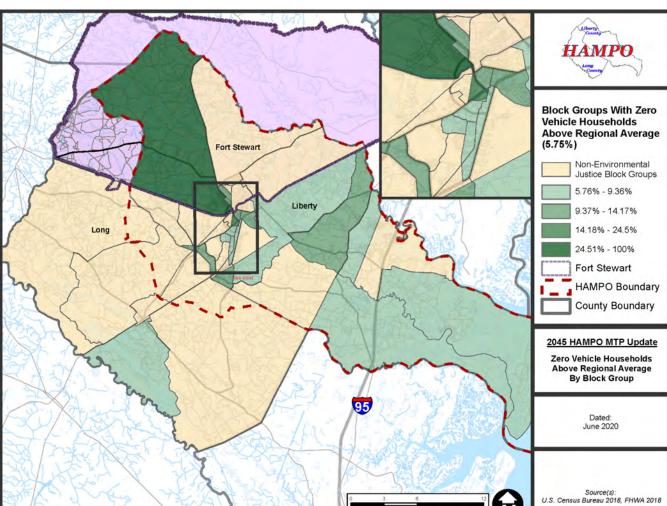


Figure 13: HAMPO Demographics - Zero Vehicle Households



RS&H

Liberty and Long County contain a high percentage of block groups with populations of persons with disabilities above the regional average. As Fort Stewart is a military base, there are no block groups with populations of persons with disabilities above the regional average.

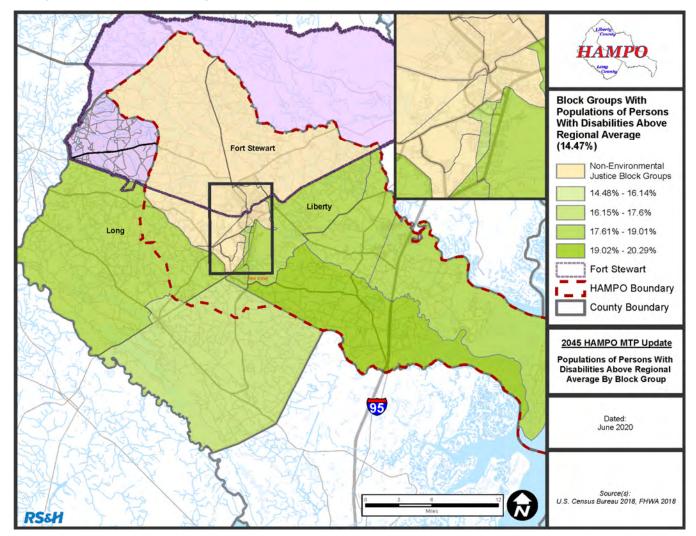


Figure 14: HAMPO Demographics - Persons with Disabilities





Block groups with populations of individuals in poverty above the regional average are found primarily in Hinesville. There is a geographically large block group in Fort Stewart that displays a high percentage of individuals in poverty.

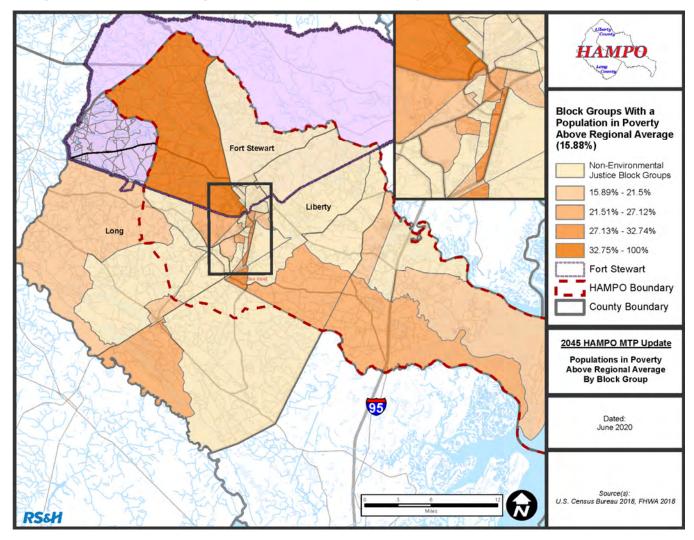


Figure 15: HAMPO Demographics - Population in Poverty

C. Employment

2015 Base Year Employment

A variety of data sources are incorporated in the HAMPO existing and future employment projections. These sources include the US Census Longitudinal Employer Household Dynamics (LEHD), Georgia Department of Labor (GDOL), the Bureau of Economic Analysis (BEA) housed at













the US Department of Commerce, and the Regional Economic Models, Inc. (REMI) model provided by GDOT.

Using these resources, known employment centers and densities have been identified within the HAMPO planning boundary. Table 8 shows the base year employment data sourced from the 2040 MTP in comparison to the 2015 employment data developed for the 2045 MTP.

Table 8: Regional Employment by County

	2010 Base Year Employment	2015 Base Year Employment
Liberty County	15,307	17,462
Long County	2,799	956
Fort Stewart	22,184	28,108
Total	40,290	46,526

In order to ensure the most accurate analysis possible, and to comply with GDOT Travel Demand Model data standards, the information was processed in several different ways. Employment data was identified by economic sector and geographically within the MPO area. To fully understand the trends, the 2010 base year data from the previous 2040 MTP was compared to the updated 2015 base year. In addition, employment by category data was also developed. The North American Industry Classification System employment categories from the LEHD data were used as the base and then converted to the employment categories for use in the Travel Demand Model. Table 9 depicts the existing employment statistics by category within the HAMPO region with Fort Stewart employment figures included, and Figure 16 provides a geographical reference for these concentrations. Fort Stewart is the largest single employer within the planning area.

Table 9: HAMPO 2015 Employment by Sector

SE Variable	Liberty County	Long County	Total
Total Non-Fort Stewart Employment	18,208	1,046	19,254
Service	11,827	811	12,638
Retail	2,061	55	2,116
AMC*	561	148	709
MTCUW**	3,759	32	3,791
Fort Stewart Employment	31,145	-	31,145





Military	16,564	-	16,564
Civilian	3,703	-	3,703
Defense Troops	10,878	-	10,878
Students	12,172	2,379	14,551
School (K-12) Enrollment	11,022	2,379	13,401
College Enrollment	1,150	-	1,150

^{*}AMC – Agriculture, Mining, and Construction Employment

^{**}MTCUW – Manufacturing, Transportation, Communication, Utilities, and Warehousing Employment

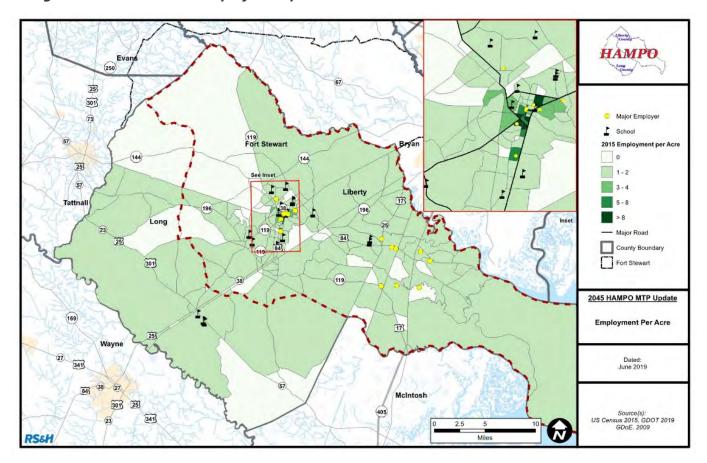


Figure 16: HAMPO 2015 Employment per Acre

The HAMPO study area has a diverse employment base, with primary employment sectors including service, manufacturing/wholesale, and government services. The 10 largest employers within the study area are:





- Fort Stewart Defense
- Liberty County Board of Education Education
- SNF Holding Company Manufacturing
- Liberty Regional Medical Center Healthcare
- Wal-Mart Super Center Retail
- Target Distribution Center Retail Distribution
- Liberty Board of Commissioners Local Government
- Interstate Paper, LLC Manufacturing
- The Heritage Bank Service / Financial
- City of Hinesville Local Government

2045 Future Employment

Two primary sources of data were used in the development of the HAMPO 2045 future year employment projections. These datasets include:

- REMI model data received from GDOT; and
- Army Stationing and Installation Plan (ASIP) Database

Employment projections are available from REMI at the regional level but not for individual counties. The REMI total employment annual growth rate is negative 0.12%, significantly lower compared to OPB regional AAGR of 0.71%.

Table 10: Regional Employment - Growth Rate

Source	2015	2045	AAGR
	Employment	Employment	
REMI	41,541	40,029	-0.12%

As a result, future non-Fort Stewart employment was estimated by multiplying the base year ratio of employment and population to the projected population. Using ASIP database, Fort Stewart military and defense troop employment was projected to decrease; and increase in civilian employment. Final comparison of 2015 and 2045 regional population to employment ratios show a slight increase of 6.6%.

Following the GDOT SE data development guidelines, local input confirmed the utilization of population growth rates as the basis for establishing the 2045 future year county control totals for employment. Factors that would cause future growth to deviate from historical trends, and established OPB projections, were evaluated. These factors are summarized as follows:





<u>Infrastructure:</u> No significant changes in highway capacity or new major roads are planned that would induce changes in development patterns.

<u>Unemployment and Population Demographics:</u> No changes in the regional unemployment rate or population age distribution are assumed to impact growth rates.

<u>Schools:</u> Specific plans for addition of one new school (and consequently the closing of another) caused future school enrollment growth projections to slightly deviate from historical trends.

<u>Post-Secondary Institutions:</u> The local college enrollment will likely increase proportionately to population growth. Service employment at each school was increased proportionately with increase in college enrollment.

<u>Income</u>: Per GDOT guidelines, as development patterns are not assumed to change, the median income is held constant (equal to the base year).

Industry Mix: REMI data confirms no significant change in industry mix at a regional level.

Table 11 and Table 12 summarize regional employment projection control totals and employment by industry group and Figure 17 displays the employment per acre.

Table 11: Regional Employment - Future Projections

SE Variable	2015	2045
Total Employment	39,520	45,006

Table 12: Employment by Industry Group (REMI)

Industry	2015 Employment	2045 Employment	2015 Share	2045 Share
Service	33,934	33,583	81.69%	83.90%
MTCUW	4,884	4,002	11.76%	10.00%
Retail	2,467	2,189	5.94%	5.47%
AMC	256	255	0.62%	0.64%
Total	41,541	40,029	100.00%	100.00%





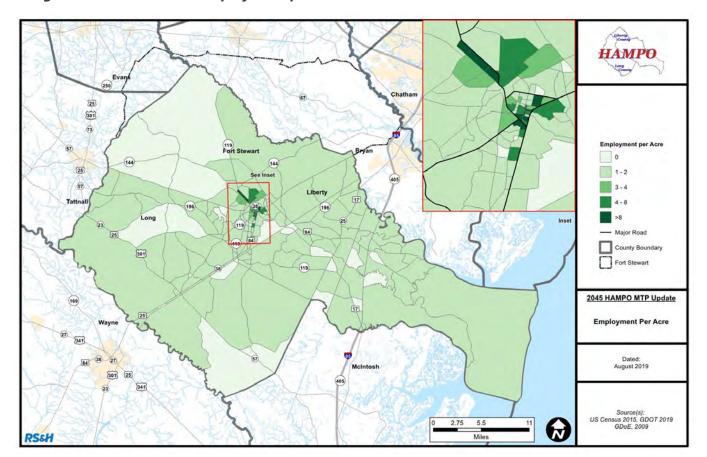


Figure 17: HAMPO 2045 Employment per Acre

D. Land Use

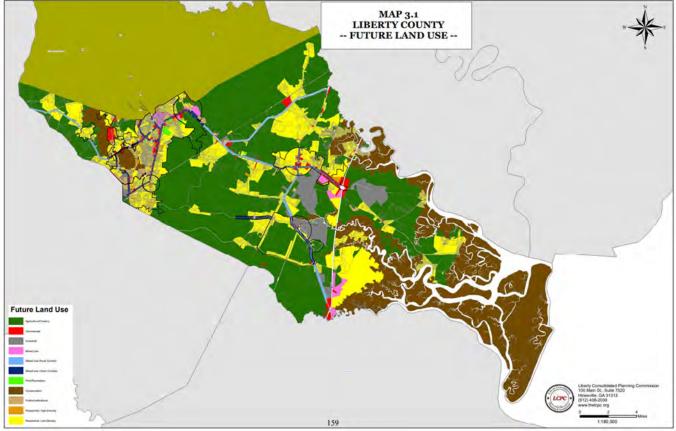
Understanding the existing land uses within the study area provides valuable insights regarding the travel behaviors between trip generators and attractors. Liberty County is 538 square miles in size, with 185 of those square miles under the jurisdiction of Fort Stewart. After eliminating protected land, such as the coastal estuarine system and Fort Stewart from calculations, there are 99,801 acres of developable land.

There are different types of land uses in Liberty County, including low-density and high-density residential, commercial, industrial, public/institutional, park/recreation, agriculture/forestry, mixed-use, conservation, and transportation. There are mixed-use urban corridors and mixed-use rural corridors throughout the Liberty County, with Hinesville and parts of Walthourville containing the majority of the mixed-use urban corridors in the region. Figure 18 is the future land use map from the Liberty County Consolidated Comprehensive Plan.





Figure 18: Liberty County Future Land Use



To help develop a more thorough understanding of short-range land development, the LCPC collected local zoning and permitting data and mapped the locations of each ongoing or planned residential development. This data, shown in Figure 19, was a fundamental resource used in the development of the base and future year SE data for the TDM.



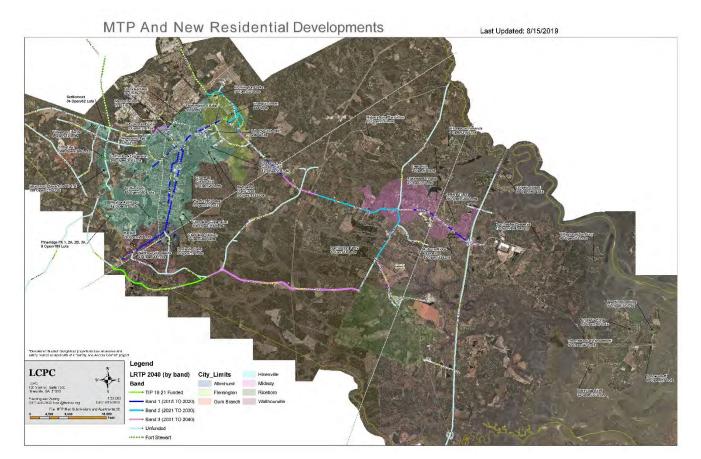


Figure 19: Liberty County Residential Developments

Long County recently partnered with the Coastal Regional Commission (CRC) to complete a major update to their Comprehensive Plan. The 2019 update was conducted collaboratively with the City of Ludowici and captures the growth that has occurred, which is projected to continue through the horizon of this MTP. The recommendations of the plan guide development towards areas with existing and planned public water and/or sewer facilities, identifies a "step down or step up" approach to transition between adjoining uses, and limitations on establishment of heavy industrial or commercial land uses near existing residential uses. The existing and future land use is primarily residential and agricultural, with pockets of commercial and industrial strategically located throughout the county.

Figure 20 and Figure 21 are future land use maps for Long County and the City of Ludowici from the recently updated comprehensive plan.





Figure 20: Ludowici Future Land Use

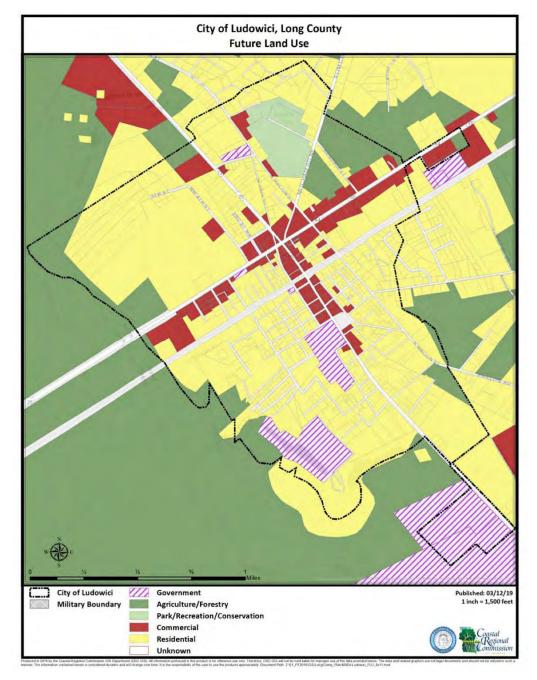
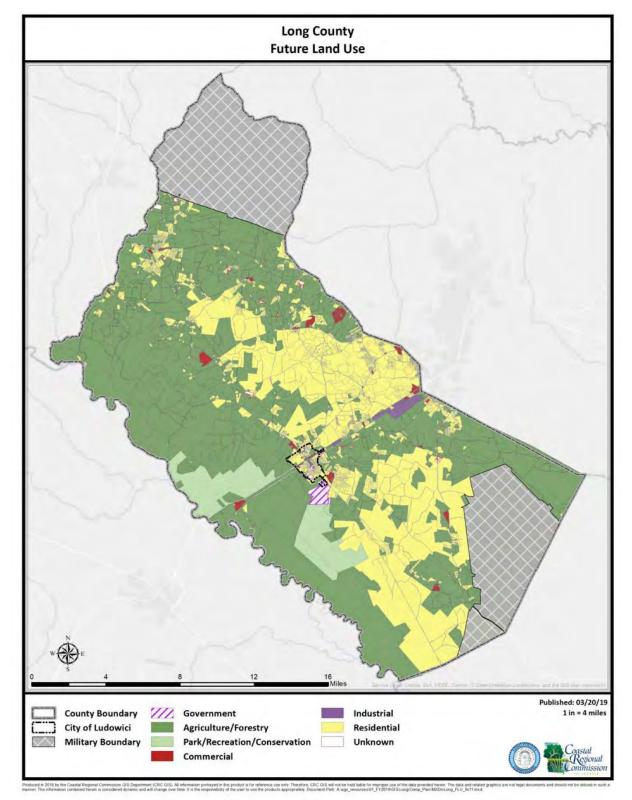




Figure 21: Long County Future Land Use







E. Modes and Travel Patterns

1. Roadway

US and state routes are primary roadways that provide access within and through the region. The only interstate in the HAMPO region is I-95, located in eastern Liberty County.

The US and state roadways in the HAMPO region include:

- I-95
- US 17
- US 25/301
- US 84
- SR 119
- SR 144

According to the 2015 GDOT Mileage by Route and Road System Report 445, the HAMPO region has a total of 271 roadway miles included in the modeled highway network. Table 13 provides a breakdown of the facility type and associated HAMPO mileage.

Table 13: HAMPO Facilities and Mileage

Facility Type	Mileage
Interstates	13
Principal Arterial	35
Minor Arterial	77
Collectors	146
Total	271

Source: GDOT Mileage by Route and Road System Report 445

SR 144 and SR 119 have portions that are inaccessible because they traverse the access-controlled portions of Fort Stewart that are not open to the general public. Figure 22 shows the existing roadway network within the HAMPO area.





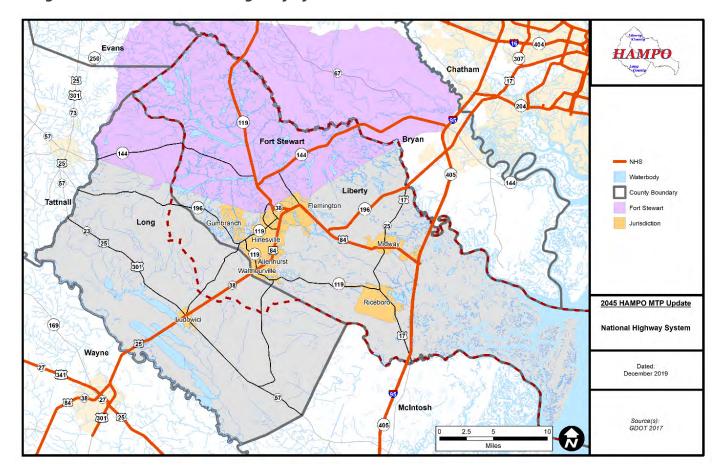


Figure 22: HAMPO National Highway System

Each of the roadways are also defined by their size and usage through the functional classification system. GDOT has assigned a functional classification to all the roadways which fall into the following categories:

- Interstate Limited access roadways used to make long distance trips, with typically high volumes and speeds,
- Principal/Minor Arterial Used to make regional trips, with typically medium to high volumes and speeds.
- Major /Minor Collector Connection between arterial roadways and local roads, typically low to medium volumes and speeds.
- Local Roads serve short distance trips, typically low volumes, and speeds. (Not shown on the map)

Figure 23 depicts the GDOT functional classification of these roadways within the HAMPO region.





Functional Class

Fort Stewart

Bryan

Chatham

Functional Class

Functional Class

Functional Class

Interested

Phonograph Annual

Major Collector

Major Collector

Monor Col

Figure 23: HAMPO Functional Classification

Using the available data from GDOT, the number of lanes and the approximate length of the centerline miles was calculated. The most prevalent road type within the two-county area are two lane roads, which account for approximately 848 miles of the total 929 mile network.

Table 14: Road Centerlines by Type

Number of Through Lanes	Approximate Number of Miles
1-2 Lanes	854
3-4 Lanes	62
5+ Lanes	13
All Roads (Total)	929

Source: GDOT Baseline Roadway Data 2017













The GDOT TDM was utilized as a primary tool to analyze the existing and future performance of the roadway system. The model utilizes the socioeconomic data developed by HAMPO to demonstrate existing travel behaviors and patterns, as well as demand on the roadway network. The TDM offers insights regarding network needs and deficiencies and generate key data used in the prioritization of projects.

The initial step in the modeling process is the development of the 2015 Base Year scenario that depicts existing conditions. The key outputs of the model are travel volumes, volume to capacity, and level of service. Figure 24 depicts the HAMPO base year model outputs of Annual Average Daily Traffic (AADT). The darkest brown line represents volumes greater than 30,000 vehicles per day, while the dark orange shows facilities with 15,000 – 30,000 vehicles per day. The light orange, yellow and grey lines represent roadways with volumes less than 15,000 vehicles per day.

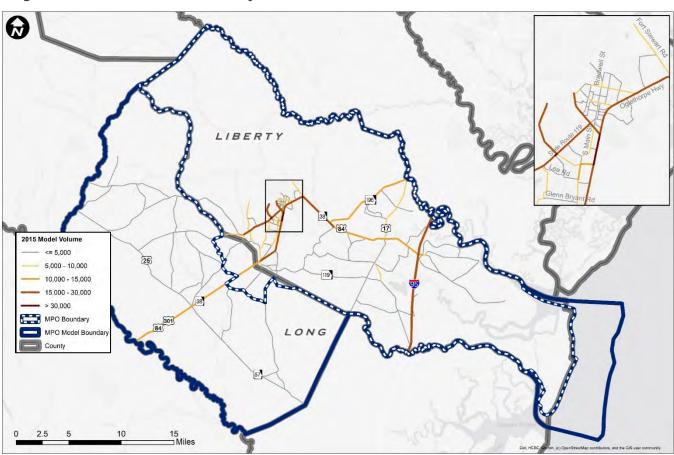


Figure 24: HAMPO 2015 Total Daily Volumes (AADT)





Volume-to-capacity ratio is a key tool for identifying roadway segments that are operating at a deficient level of service. Level of service (LOS) designations are letter grades "A" through "F", where "A" is considered the best and a free flow condition, with "E" and "F" indicating unsatisfactory operations. While "A" is the best level of service, transportation funding resources are constrained, which makes achieving LOS "A" on all facilities in a transportation network unrealistic. Generally, an acceptable LOS is defined as "D" or better for urbanized areas. Table 15shows the letter grades for each Level of Service and provides a brief description of the associated traffic flows.

Table 15: Level of Service (LOS)

Level of Service Designation	Description
Α	Free flow with individual users virtually unaffected by the presence of others in the traffic stream.
В	Stable flow with a high degree of freedom to select speed and operating conditions but with some influence from other users.
С	Restricted flow which remains stable but with significant interactions with others in the traffic stream. The general level of comfort and convenience declines noticeably at this level.
D	High-density flow in which speed and freedom to maneuver are severely restricted and comfort and convenience have declined even though traffic flow remains stable.
E	Unstable flow at or near capacity levels with poor levels of comfort and convenience.
F	Forced flow in which the amount of traffic approaching a point exceeds the amount that can be served, and queues form, characterized by stop andgo waves, poor travel times, low comfort and convenience, and increased accident exposure.

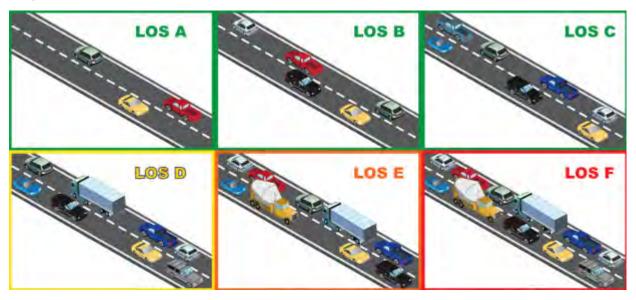
Source: Transportation Planning Handbook (2nd Edition), Institute of Transportation Engineers, 1999.





Figure 25 was sourced from the GDOT TDM Model Results presentation offering a graphical representation of LOS conditions as drivers would experience them on the roadway.

Figure 25: Level of Service (LOS)



Source: GDOT Modeling Division

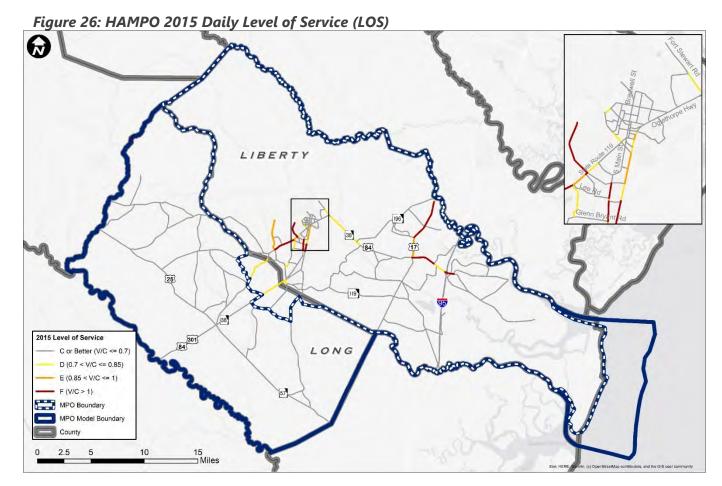
A daily Level of Service is calculated by the traffic on a facility derived from the model and dividing that number by the daily capacity of the roadway. A daily Level of Service of less than 0.7 indicates that the roadways are operating at LOS C or better. LOS D has an operational value between 0.7 and 0.85; LOS E between 0.85 and 1.0 and LOS F is greater than 1.

The corridors listed in this section are currently experiencing a vehicle-to-capacity ratio (v/c ratio) of over 0.85, which corresponds to LOS E. Because these segments are currently approaching a failing LOS, they are candidates for capacity improvements.

The following sections include brief descriptions of the roadway segments operating at LOS E and tables with historic traffic counts for the most recent three-year period (2015 – 2017).

Within the HAMPO area, 90% of the network is operating at LOS D or better, however there are roadway segments that are currently operating at a level of service E and F. It is important to note that the HAMPO region has implemented a number of roadway capacity improvements within the last five year period that were not yet captured in the 2015 base year LOS data. The 2015 daily Level of Service is shown in Figure 26.





Source: GDOT Modeling Division

Table 16shows the 2015 base year model outputs for segments with LOS 0.85 or worse. It is important to note that roadway improvements that occurred from 2016 – 2020 are not reflected in the base year network, therefore some roadway segments below no longer require mitigation.

Table 16: 2015 Base Year Volume to Capacity >.85

Corridor	Volume to Capacity Ratio
Elam Rd. between Devereaux Rd. and County Line	0.9
Elim Church Rd NE between County Line and Horse Creek Rd. NE	0.9
W. Oglethorpe Hwy between Carter St. and Liberty St.	0.9
Glenn Bryant Rd. between Pineland Ave. and Kelly Dr.	1.0











W. Oglethorpe Hwy between General Scriven Way and Veterans Pkwy.	1.0
West 15th St between Davidson Plantation Rd. & GA Highway 196 W	1.1
E. Oglethorpe Hwy between Martin Rd. and Lake Gale Dr.	1.1
Elma G Miles Pkwy between Pipkin Rd. and Veterans Pkwy	.9 to 1.1
S. Main St. between Veterans Pkwy and Kacey Dr.	.9 to 1.1
E. Oglethorpe Hwy between N. Coastal Hwy and Isle of Wight Rd.	.9 to 1.1
Ocean Hwy (N. Coastal Hwy) between Martin Rd. and Johnson Circle	.9 to 1.3
E. Oglethorpe Hwy between Glebe Rd. and I-95 Northbound Ramp	.9 to 1.3
West 15th St before West Gate (Gate 7) at Fort Stewart	0.9 to 1.0
W. Oglethorpe Hwy between Kacey Dr. and Ralph Quarterman Dr.	1.0 to 1.2
Islands Hwy between I-95 Interchange and Sunbury Rd.	1.0 to 1.6
GA Highway 196 W between Pipkin Rd. and W. 15th St.	1.1 to 1.2
Veterans Pkwy between Gate (Fort Stewart) and Weeping Willow Dr.	1.1 to 1.6

The next step in the modeling process was to identify the future conditions on the transportation network if no improvements are made by the horizon year, which is called the "Do-Nothing Network". The daily traffic volumes are developed based on the 2015 traffic and the 2045 socioeconomic data described earlier.

Figure 27 shows the 2045 "Do Nothing" scenario outputs from the TDM depicting the total volumes of daily traffic or AADT. This map provides a clear understanding of travel behaviors within the study area by showing the roadways that are carrying the greatest number of trips.





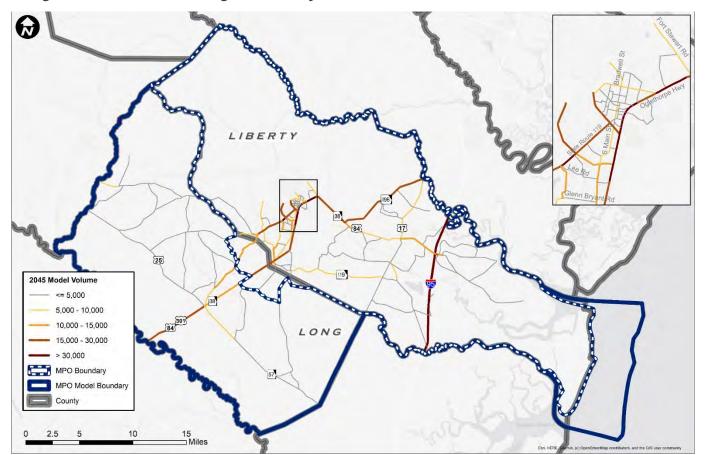


Figure 27: 2045 "Do-Nothing" Total Daily Traffic Volumes

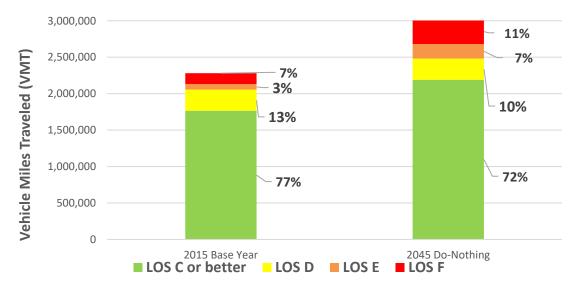
As previously described, a daily Level of Service is calculated by the daily traffic on a facility derived from the model and dividing that number by the daily capacity of the roadway. In the HAMPO 2045 "Do Nothing" scenario, the vehicle miles traveled by LOS show a progression of congestion for roadways moving from acceptable LOS of D or better into unacceptable ranges of E and F.

Figure 28, developed by the GDOT Modeling Division, provides a summary of this model output data.





Figure 28: VMT by LOS



The corridors listed in this section are forecast to experience a vehicle-to-capacity ratio (v/c ratio) of over 0.85, which corresponds to LOS E in 2045. Figure 29 shows segments that are anticipated to have a v/c ratio above 0.85.



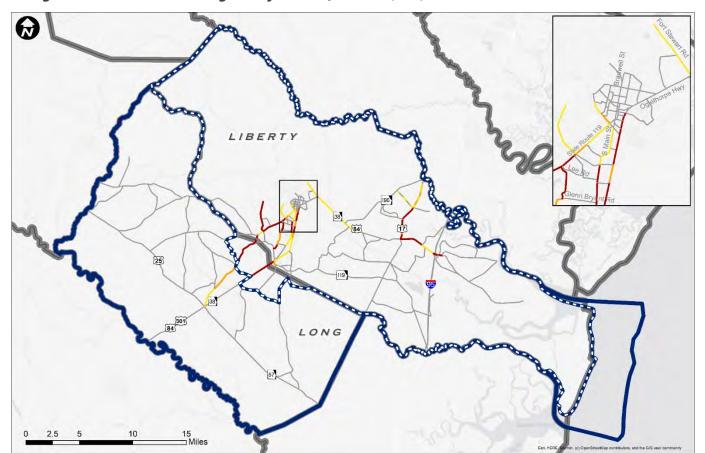


Figure 29: 2045 "Do Nothing" Daily Level of Service (LOS)

Congested corridors in the HAMPO region are projected to increase substantially if no roadway capacity improvements are implemented by 2045. Table 17lists corridors that are expected to be over capacity in the future. For corridors with several adjoining roadway segments with a vehicles-to-capacity ratio of over 1.0, the range of estimated ratios is provided.

Table 17: 2045 "Do-Nothing" V/C Ratios >.85

Corridor	Volume to Capacity Ratio
Arnold Dr. between Talmadge Rd. & Copperhead Rd. SE	1.06
Barry McCaffrey Blvd. between Airport Rd. and Kelly Dr.	1.24 to 1.27
Elam Rd. between Devereaux Rd. & County Line	1.18
Elim Church Rd. NE between County Line and Pingberry Rd.	1.25 to 1.41
Elma G. Miles Pkwy between Veterans Pkwy and Pipkin Rd.	1.2 to 1.3
Glenn Bryant Rd. between Pineland Ave. and Kelly Dr.	1.3













Islands Hwy between Sunbury Rd. & I-95 Interchange	1.3 to 1.9
Live Oak Church Rd. between GA 196 W and Miness Ln.	1.3
E. Oglethorpe Hwy between Martin Rd. and Lake Gale Dr.	1.1
Mitcham Rd. between Lanier Rd. NE and Pingberry Rd.	1.2 to 1.3
Ocean Hwy (N. Coastal Hwy) between SR 196 and SR 38	1.1 to 1.3
SR 38 between County Line and Airport Rd.	1.5
SR 84 between E MLK Jr. Dr and Timberlane Cir.	1.0 to 1.2
Pineland Ave between Glenn Bryant Rd. and SR 119	1.1 to 1.5
S Arnold Dr between Copperhead Rd SE and Winchester Way SE	1.1
S Main St. between Veterans Pkwy and Kacey Dr.	1.2 to 1.5
Elma G Miles Pkwy between Pipkin Rd and W 15th St/Airport Rd Intersection	1.2 to 1.4
Sunbury Rd. between Islands Hwy and Dunwoody Ct.	1.1
E Oglethorpe Hwy between N Coastal Hwy (Ocean Hwy) and Industrial Blvd.	1.1
E Oglethorpe Hwy at I-95 Interchange	1.3 to 1.5
E Oglethorpe Hwy at Barrett Cemetery Rd NE	1. 1
W Oglethorpe Hwy between Veterans Pkwy and Gen Screven Way	1.1 to 1.2
W Oglethorpe Hwy between Kacey Dr. and Ralph Quarterman Dr.	1.2 to 1.3
W. 15 th St. Between GA Hwy 196 W and Davidson Plantation Rd.	1.3
W. 15 th St between Fort Stewart Gate 7 (West Gate) and Independence Place Dr.	1 to 1.2

The corridors listed in the table are forecasted to be operating at LOS E or worse in 2045 and are therefore candidates for roadway capacity improvement projects.

2. Transit

The HAMPO region is currently served by a variety of public and private transportation services with variations in service delivery models. The primary transportation service providers include:

- Regional demand response rural transit service Coastal Regional Coaches
- Fixed route public transportation Liberty Transit
- Intercity transit service Greyhound















These primary service providers are supplemented by private transport companies that provide purchase of service and non-emergency human service trips, taxis, private shuttles, and car/limousine services.

Rural Transit Service

Coastal Regional Coaches, part of the HAMPO transit network, provides regional rural public transit service to the general public. The Coastal Regional Commission (CRC) offers service within the Georgia counties of Bryan, Bulloch, Camden, Chatham, Effingham, Glynn, Liberty, Long, McIntosh, and Screven. Coastal Regional Coaches is a demand-response, advance-reservation service that operates Monday through Friday from 7:00 A.M. until 5:00 P.M. The fare per rider is \$3 per boarding (one-way) within the county of residence. For travel outside the county of residence, the fare will vary based on the number of counties traveled. By rule, the Coastal Regional Coaches cannot provide transportation from one urban area to another urban area. However, a potential traveler may find an address nearby that is considered rural and be picked up and returned to that location; for example, many people from Hinesville (urban) need transportation to Savannah (also urban). The Applebee's restaurant in Hinesville has an address that is designated rural, so if passengers can get to that location, they can

SCREVEN

BULLOCH

SRYAN

CHATHAM

LIBSRY

LONG

MCINTOSH

GLYNN

be picked up and returned there. All CRC transit service vehicles are fully equipped for handicapped and wheelchair passengers.

The CRC rural transit system is funded through a combination of federal, state, and local funds. Annual federal grant funding sources used to offset the capital and operational deficits include the Enhanced Mobility of Seniors and Individuals with Disabilities program (Title 49 U.S.C section 5310), and the Rural Transit Assistance Program (Title 49 U.S.C section 5311). Additional discretionary grant sources are pursued on an annual basis. Table 18, found in the HAMPO FY 2018 – 2021 Transportation Improvement Program (TIP), shows a detailed breakdown of annual revenues by source.



Table 18. Coastal Regional Coaches Funding

Schedule for Coastal Regional Coaches								
Section 5307								
		FY 2018		FY 2019	FY 2020		FY 2021	
Item Discription								
5304 Planning (80/0/20)	\$	3,478.00	\$	3,478.00	\$	3,478.00	\$	3,478.00
5311 Capital (80/10/10)	\$	73,246.00	\$	75,077.15	\$	76,954.08	\$	78,877.93
Operations (50/50)	\$	338,453.00	\$	346,914.33	\$	355,587.18	\$	364,476.86
Total Project Cost	\$	415,177.00	\$	425,469.48	\$	436,019.26	\$	446,832.79
Federal Cost 80%	\$	230,605.70	\$	236,301.28	\$	242,139.25	\$	248,123.18
State Cost 10%	\$	7,324.60	\$	7,507.72	\$	7,695.41	\$	7,887.79
Local Cost 10%	\$	177,246.70	\$	181,660.48	\$	186,184.60	\$	190,821.82

Urban Fixed Route Service

The HAMPO planning area is also home to Liberty Transit, a fixed route and paratransit bus service that serves Fort Stewart and the Hinesville urbanized area within Liberty County. The service area for the system includes the municipalities of Hinesville, Flemington, and

Walthourville, as well as the Fort Stewart military base. Liberty Transit currently operates three fixed routes throughout the service day and runs from approximately 6:00 a.m. to 7:30 p.m. Monday through Friday.

The regular fare for one-way service is \$1 with discounted rates available for senior citizens and Medicare card holders. Curb-to-Curb demand response service is available for eligible passengers at a rate of \$2.00 for a one-way trip. The Liberty Transit system operates a fleet of 9 buses,



each equipped with ADA compliant wheelchair lifts and tie downs as well as bicycle racks for multimodal passengers.

The Liberty Transit System is governed by the City of Hinesville Council with oversight and recommendations provided by the Transit Steering Committee (TSC). The TSC is comprised of the Mayor of Hinesville, Mayor of Flemington, Mayor of Walthourville, Liberty County Board of Commissioners Chairman, and a non-voting Fort Stewart representative. The TSC meets monthly to discuss various aspects of the system such as operational performance, service

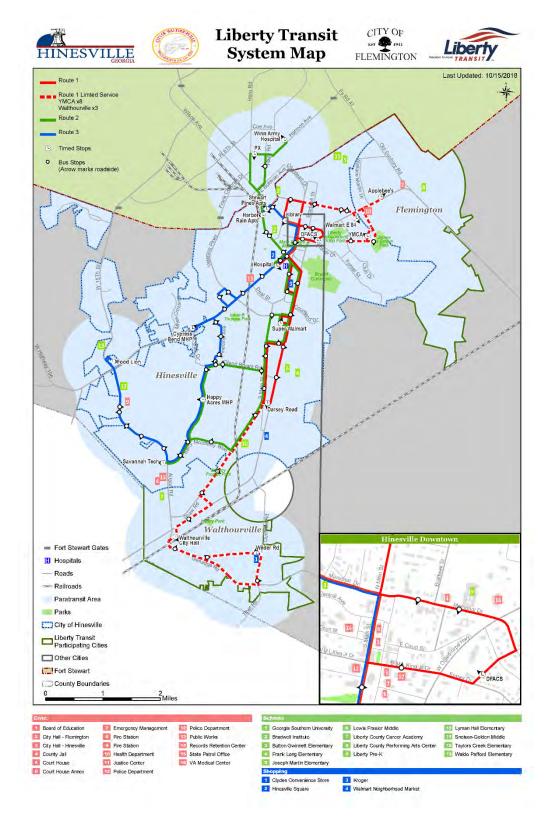




complaints and issues expressed by citizens, capital improvement projects, and planning efforts. TransDev is the transit management firm, or third party operator, responsible for managing Liberty Transit's operations, with the City of Hinesville responsible for planning and marketing the bus service, applying for federal funds annually, and coordinating system operations with Fort Stewart, employers, and other stakeholders. Figure 30 shows the Liberty Transit fixed route service map.



Figure 30: Liberty Transit Fixed Route Service Map







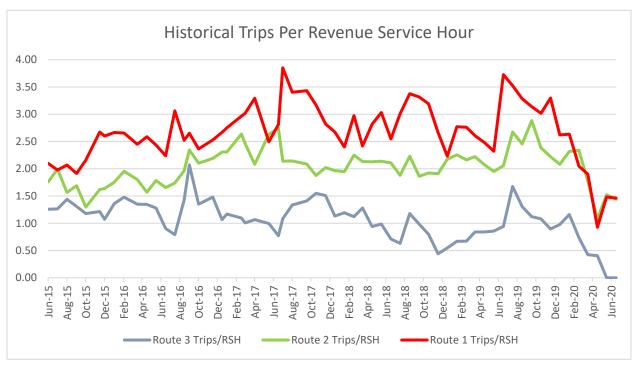
Historical transit ridership data was collected to show system service trends over the last five year period. July is consistently the highest ridership month for Liberty Transit, while Route 1 or the "Red Route" yielded the highest number of trips with a peak monthly trips / revenue service hour ratio of 3.85 in July of 2017. With recent investments in transit supportive infrastructure such as sidewalks, and the implementation of ADA Paratransit service, transit ridership was steadily increasing until February 2020 when Coronavirus or COVID19 became a known threat.

According to the Center for Disease Control (CDC) "COVID-19 is an illness caused by a virus that can spread from person to person with symptoms ranging from mild (or no symptoms) to severe illness". ¹ Despite implementation of safety and infection prevention measures, Route 3



suspended operation in April 2020 due to operator exposure and an inability to fully staff the system. The ridership trends from March through May show steep declines in ridership with a rebound following the lifting of social distancing regulations for the State of Georgia. Figure 31 and Figure 32 show the historical system ridership trends at the route and system level.





¹ Source: https://www.cdc.gov/coronavirus/2019-ncov/index.html





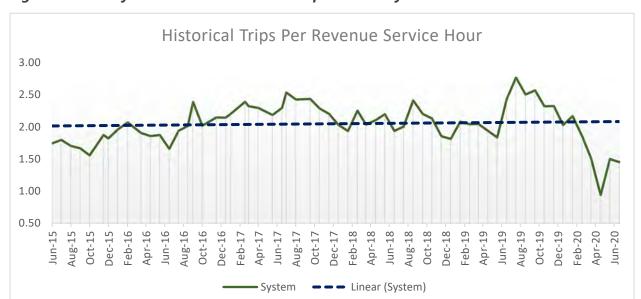
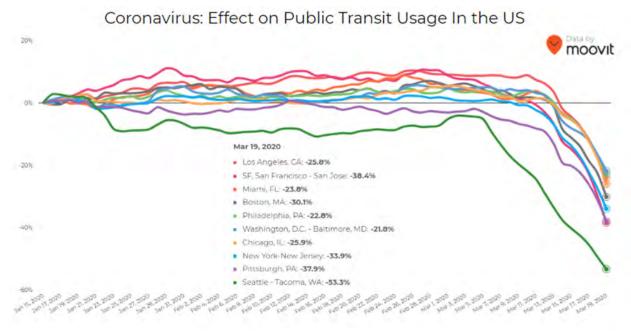


Figure 32: Liberty Transit Historical Ridership Trends – System Level

This trend is consistent with national public transit usage data as depicted in Figure 33 showing transit ridership for major transit systems between January 2020 – March 2020 and the effects of COVID-19.





Source: moovit



In addition to ridership, operational data was gathered from National Transit Database (NTD) reporting to gain an understanding of the system's performance. These service indicators are summarized in Table 19 and Table 20.

Table 19: Liberty Transit General Service Indicators

General Indicator	2018
Service Area Population	38,223
Service Area (sq. miles)	32
Passenger Trips	18,317
Revenue Miles	91,735
Revenue Hours	8631
Employees -FT	6
Vehicles Operated in Max. Service	3
Bus Average Fleet Age	7.1
Spare Ratio	60%

SOURCE: NTD 2018

Table 20: Service Effectiveness

Effectiveness Indicator	NTD 2018
Operating Expenses per Unlinked Passenger Trip	38.39
Unlinked Trips per Vehicle Revenue Miles (VRM)	0.2
Unlinked Trips per Vehicle Revenue Hour (VRH)	2.1
Operating Expenses per VRM	7.67
Operating Expenses per VRH	81.48

SOURCE: NTD 2018

According to the HAMPO approved Fiscal Year 2018 – 2021 Transportation Improvement Program (TIP), the Liberty Transit receives approximately \$845,000 annually in federal capital and















operating assistance through Title 49 U.S.C. Section 5307 Urbanized Area Formula Program funds. Table 21 shows the annual allocation of funds, along with contributions from local, state, and federal sources.

Table 21. Liberty Transit Funding

Capital Schedule for Liberty Transit								
Section 5307								
		FY 2018		FY 2019 FY 2020		FY 2020	FY 2021	
Capital Item Discription								
Mobility Management	\$	40,000.00	\$	41,000.00	\$	42,025.00	\$	43,075.63
Cost of Contracting	\$	239,273.75	\$	245,255.59	\$	251,386.98	\$	257,671.66
Planning (TDP Update)*	\$	45,446.00						
Associated Transit Imp**	\$	232,719.00	\$	336,369.13	\$	344,778.35	\$	353,397.81
Capital Improvements***	\$	50,000.00						
Total Project Cost	\$	607,438.75	\$	622,624.72	\$	638,190.34	\$	654,145.10
Federal Cost 80%	\$	485,951.00	\$	498,099.78	\$	510,552.27	\$	523,316.08
State Cost 10%	\$	60,743.88	\$	62,262.47	\$	63,819.03	\$	65,414.51
Local Cost 10%	\$	48,595.10	\$	49,809.98	\$	51,055.23	\$	52,331.61

Operating Schedule for Liberty Transit									
Section 5307									
		FY 2018		FY 2019	Y 2019 FY 2020		FY 2021		
Operating Item Discription									
Operating	\$	473,626.00	\$	485,466.65	\$	497,603.32	\$	510,043.40	
Total Project Cost									
Federal Cost 50%	\$	236,813.00	\$	242,733.33	\$	248,801.66	\$	255,021.70	
State Cost 0%									
Local Cost 50%	\$	236,813.00	\$	242,733.33	\$	248,801.66	\$	255,021.70	

^{*} The City of Hinesville is updating its Transit Development Plan by utilizing Liberty Consolidated Planning Commission "indefinite delivery indefinite quantity" General Consultant Contract...

^{***} Estimated budget to add a paratransit vehicle for a comlementary service start in FY 2018.





^{**} Associated Transit Improvements: The City of Hinesville identified needed improvements relating to pedestrian access to the fixed route transit system, especially in the older disadvantaged portions of the City. The transit improvement project will identify pedestrian gaps for access transit, develop a strategy, prepare construction drawings, obtain clearances from GDOT, and oversee construction. This is a multi year effort to accrue and construct.

In 2018, the Hinesville MPO completed an update to their Transit Development Plan (TDP) which is required by federal and state agencies and provides a five-year capital and operating program and a longer term 10-year guide and planning tool for the transit agency. The components of a TDP update include public involvement, coordination with other state and local transportation plans, an assessment of the existing and future conditions, agency goals and objectives, the development and evaluation of alternative strategies and action steps, a financial analysis, a five-year operating plan, and a 10-year implementation plan for the identified longer term strategies.

One key recommendation included in the TDP was the transition from point deviation paratransit service to a complementary paratransit system. Paratransit service is on-demand, connecting individuals with disabilities to locations throughout the existing transit service area with curb-to-curb service being available if the location is within 0.75 mile of a bus route. The paratransit service is only for those individuals with disabilities and who have been deemed eligible.

The paratransit service began in September 2019, after a thorough feasibility analysis was conducted. Ridership levels for paratransit service have risen every month since its inaugural trip but have fallen drastically due to COVID-19, starting in March 2020. The paratransit ridership data is displayed in Figure 34 and Figure 35 shows the paratransit service area.

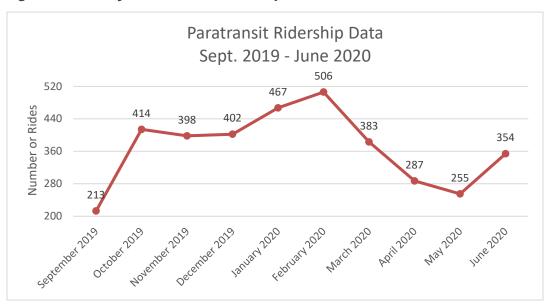
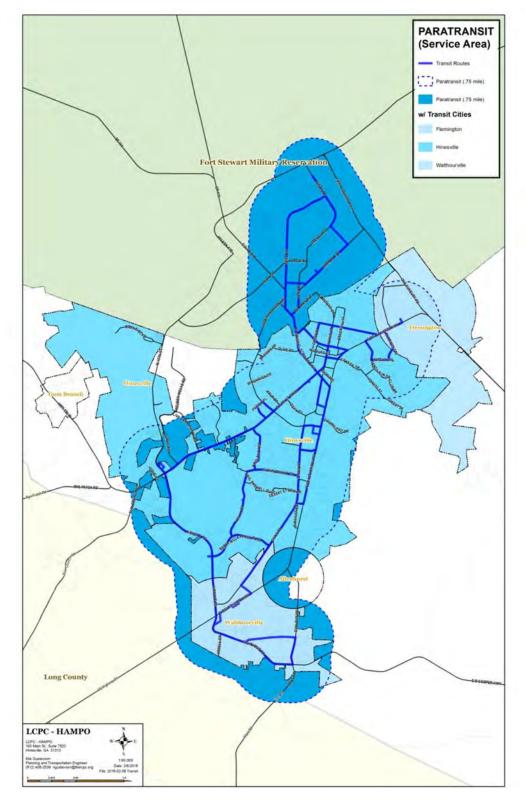


Figure 34: Liberty Transit ADA Ridership



Figure 35: Liberty Transit ADA Paratransit Service Area

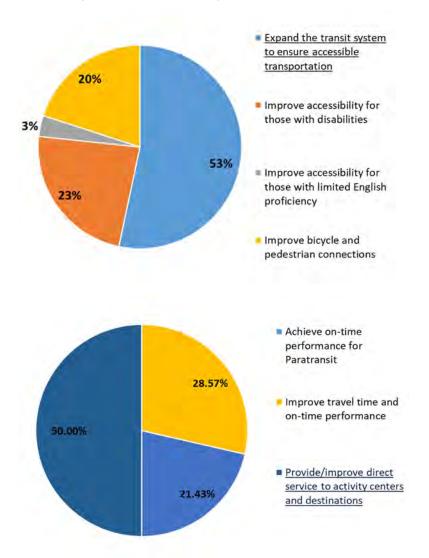






The TDP also included a survey, administered both on-board and online, that yielded insights regarding desired system and service investments. Figure 36, from the TDP report, reflect respondents' priorities for the system.

Figure 36: Liberty Transit TDP Survey Responses



The Goals, Objectives, and Performance Measures for the TDP formed the foundation for the recommendations and prioritization of investments for the system. Table 22 provides a detailed description of the goals, objectives, and performance measures.



Table 22: Liberty Transit TDP Goals, Objectives, and Performance Measures

Table 22: Liberty Transit TDP God		
 Expand ridership through strategic system modifications and targeted outreach. 	 Use engagement and marketing strategies to build ridership within existing service area. 	 Performance Measure Increase unlinked passenger trips by 10% over base year value.
 Explore partnerships with municipalities in the HAMPO urbanized area to expand transit service where transit supportive densities have been identified. Coordinate with local planning agencies to identify opportunities for service expansions to support new transitoriented developments and employment destinations. 	Use regularly updated development data and 2020 Census data to identify service expansion opportunities and evaluate for transit service potential.	Demonstrate minimum household and employment density thresholds for new service expansions in the urbanized area.
Goal	Objective	Performance Measure
Complete shelter installation efforts and procure additional shelters for prioritized stop locations within the service area.	 Improve service satisfaction by providing comfortable and safe bus stop conditions for riders. 	 Install all remaining shelters housed in storage prior to FY 2020. Define remaining infrastructure needs and establish implementation timeline and funding strategies by FY 2020.
 Identify opportunities for regional transit partnerships to provide connectivity of surrounding urban areas. 	 Establish regional transportation connections allowing expanded mobility options. 	 Define key targets for regional mobility and engage with surrounding providers by FY 2020.





- Identify key nonmotorized infrastructure improvement projects within the transit service area and implement utilizing 5307 transit capital funding.
- Improve first and last mile connectivity to transit services, by implementing bicycle and pedestrian infrastructure projects.
- Annual report demonstrating current status of defined projects, % complete, and anticipated completion date. Active projects should demonstrate progress towards completion.

- Identify strategies to reduce system operating costs and improve service efficiencies.
- Reduce operating costs through improved ridership performance, and contractual rates per service hour/mile.
- Identify operating vehicles appropriately sized for demand to reduce maintenance and insurance costs.
- Improve Operating Cost / Unlinked Passenger Trip performance by 25% over base year value.

The TDP recommends a variety of improvements for Liberty Transit, including service/operational enhancements and non-service-related improvements such as technology investments and policy modifications. Improvements were categorized as short term (1-2 years) mid-term (2-5 years) and long term (5-10 years). A general summary of the recommended improvements includes:

- Revision of all schedules for regular timepoint intervals
- Route reconfigurations to streamline service and eliminate underperforming segments
- Transition less densely populated service areas and Fort Stewart from fixed route service to demand responsive service
- Enhance marketing and outreach activities
- Improve on-line accessibility
- Ensure coordination with community and peer organizations
- Enhance monitoring and reporting activities including performance targets and municipal management protocols
- Invest in enhanced technology such as Automated Passenger Counters (APCs)
- Conduct technical studies needed to advance the systems goals
- Continue transit supportive infrastructure investments through installations of sidewalks and bus shelters
- Procure new transit fleet to replace existing buses that have exceeded their useful life

















• Continue coordination with Chatham Area Transit for regional urban transit service expansion to neighboring metropolitan areas

Long County does not currently operate any fixed route or paratransit services but does participate in the rural Coastal Regional Coaches program for areas outside of the HAMPO UZA.

The use of Transportation Performance Management (TPM) provides agencies with a framework for incorporating performance data into making decisions regarding transportation investments to meet the goals and objectives established for the region. This approach provides accountability and added transparency to the transportation planning process. The requirements for establishing and utilizing TPM in the Metropolitan Planning Organizations began in the Moving Ahead for Progress in the 21st Century (MAP- 21) and were further expanded in the subsequent FAST Act.

Transit Performance Management

The FAST Act prescribed the national goals for performance management to be included in transportation plans at the state and local levels. The states and MPOs are required to coordinate to develop measures and targets for transportation plans in all areas of transportation including public transportation.

Transit agencies are also required to develop transit asset management targets for transit state of good repair and MPOs must incorporate the performance targets into the MTPs and the TIPs for their regions. The GDOT drafted the "Georgia Department of Transportation Group Transit Asset Management Plan" (TAM Plan) to assist the small urban and rural transit agencies to comply with the federal regulations.

The Liberty Transit elected to participate in the State's TAM Plan and HAMPO subsequently agreed to incorporate the performance targets from the TAM Plan into the MTP and TIP documents as shown in Table 23.

Additionally, MAP-21 and the FAST Act granted the Federal Transit Administration (FTA) the authority to establish and enforce a comprehensive framework to oversee the safety of transit bus systems throughout the United States. On July 19, 2018, the FTA promulgated its final rule 49 C.F.R. Part 673 - Public Transportation Agency Safety Plan (PTASP) which requires recipients of FTA Chapter 5307 funds to develop and implement a safety plan based on Safety Management Systems (SMS) principles and methods.

As a designated sub-recipient of 5307 funding and transit service provider, the City of Hinesville / Liberty Transit has committed to implementing a systematic and comprehensive safety program. Their stated objective is to ensure leadership will visibly demonstrate its commitment to safety by monitoring hazards, enforcing and supporting safety programs, and promoting an open and transparent environment to discuss and address safety issues.





While the PTASP has not been endorsed by the FTA at the time of the MTP publication, it is anticipated that the Appendix of this report will be updated to incorporate the authorizing resolution as required by the C.F.R Part 673.

Table 23: Transit Asset Management Performance Targets

Tuble 25. Transit Asset Management Performance Targets					
Asset Category / Class	Total Number	Useful Life Benchmark / 3.0 TERM Rating*	Number Exceeding ULB /3.0 TERM Rating*	% Exceeding ULB / 3.0 TERM Rating*	FY 2019 Targets
Rolling Stock	775		96	12.4%	
BU- Bus (35'-40')	82	14 years	8	9.8%	15%
BU- Bus (29'-30')	54	12 years	21	38.9%	35%
CU-Cutaway bus	539	7 years	52	8.8%	10%
MV-Minivan	1	8 years	1	100%	50%
SB-School bus	33	15 years	8	24.2%	50%
VN-Van	12	8 years	6	50%	50%
Equipment	55		23	42.6%	
Automobile	18	8 years	11	61.1%	55%
Truck and other Rubber Tire Vehicles	31	10 years	11	35.5%	55%
Equipment > \$50,000	6	14 years	N/A	N/A	N/A
Facilities	83		7	8.4%	
Administration	62	N/A	2	3.2%	25%
Maintenance	11	N/A	5	45.5%	25%
Passenger/Parking Facilities	10	N/A	0	0%	10%

^{*}TERM scale is used for asset condition assessment for facilities. There are 5 ratings (1-5) where 5 is in excellent condition and 1 is in poor condition.















3. Bike/Ped

The provision of an effective and efficient network of bicycle and pedestrian facilities can improve the safety, transportation, and recreation opportunities within an area. Additionally, bicycle and pedestrian facilities are an important step in the creation of complete streets and encouraging the use of transportation alternatives.

Following the adoption of the 2040 MTP, the Non-motorized and Transit Operations Plan was completed in 2017. The Non-Motorized Plan outlines recommended projects and organizes them by their applicable municipality. During the development of the HAMPO Non-Motorized Plan, an important step early in the process was to inventory the existing bicycle and pedestrian facilities and conditions in the area to establish a baseline. Similar to many small urban communities throughout the US, the HAMPO region has traditionally focused on planning for, and improving, the vehicular transportation network, while the non-motorized transportation infrastructure lagged in focus and investment.

As a key element of the Non-Motorized Plan, an inventory and analysis of existing infrastructure was conducted, and critical gaps identified. This inventory began with the collection and analysis of available data, including GIS data, aerial satellite imagery, and studies and plans that were already completed for the HAMPO region.

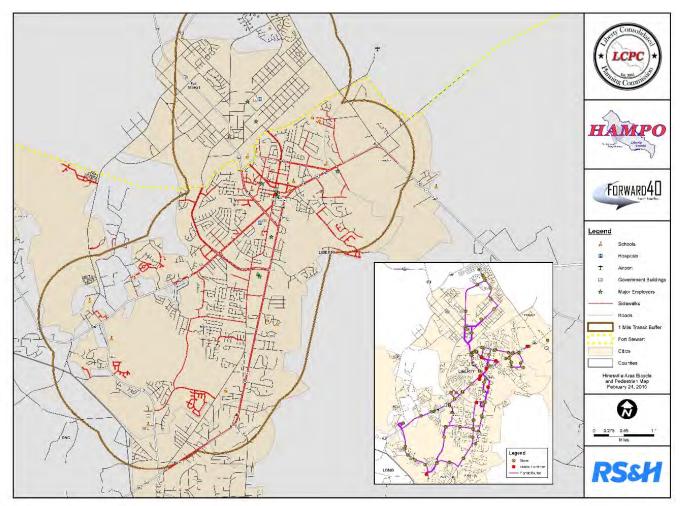
The existing data was compiled and overlaid on satellite imagery to identify existing infrastructure and gaps in the bicycle and pedestrian facilities network. During the development of the 2040 MTP, origins and destinations for trip ends were identified for the HAMPO region and were utilized in the non-motorized analysis to inform where critical connectivity gaps between activity centers were located. The existing and planned service area and route structure for the Liberty Transit urban fixed route system was also a primary factor used to identify critical non-motorized facility gaps in providing access to transit stops. All transit stops were screened to determine if adequate pedestrian facilities were available within ¾ of a mile or connecting major trip generators and attractors, such as employment, community service and multifamily housing centers.

The existing conditions and gap analysis revealed that the majority of existing facilities are primarily located in the Hinesville urbanized area and within Fort Stewart. Long County has very few identified sidewalks and the majority are located within the City of Ludowici. The City of Hinesville has identified the need to improve bicycle and pedestrian infrastructure, especially in the older, disadvantaged portions of the city. The City did not require installation of sidewalks during the development process prior to 1999, and a high percentage of the bus stops that serve housing areas developed within this timeframe are either without sidewalks or have sidewalks that are substandard. Figure 37 shows the Liberty Transit service area and existing non-motorized infrastructure within the HAMPO urbanized area.





Figure 37: Existing Bike/Ped Facilities







Other existing infrastructure includes rural non-motorized facilities, designated primarily along state routes, throughout the planning region, including SR 196/Leroy Coffer Highway and US 17. US 17, located on the eastern side of Liberty County, serves portions of the unincorporated areas of the county, the City of Midway, the City of Riceboro, and is a designated Georgia State

Bicycle Route. US 17 is also a primary component of the Coastal Georgia Greenway (CGG) trails plan that was endorsed by the GDOT Coastal Georgia Regional Bicycle and Pedestrian Plan as the top priority bicycle facility in the region. The Coastal Georgia Greenway is envisioned as a 155-mile trail system suitable for a variety of nonmotorized users, which will connect South Carolina to Florida through Georgia's six coastal counties and is a component of the larger East Coast Greenway. The regional plan encouraged local governments to identify locations where sidewalks or shared paths may be developed along the US 17 corridor to advance the development of the CGG network.



In addition to the Coastal Georgia Regional Plan, the City of Midway and City of Riceboro have adopted master plans that include recommendations for bicycle and pedestrian facilities where multimodal gaps are present. These recommendations have all been incorporated into the

HAMPO non-motorized facilities analysis as components of the regional bicycle and pedestrian network.

The Non-Motorized Plan built on the findings of the existing conditions and gap analysis and incorporated citizen and stakeholder input, socioeconomic equity analysis, existing and future transit accessibility analysis, and ultimately the development of a comprehensive list of projects and strategies.







Non-Motorized Plan Recommendations

The proposed network of non-motorized facilities for the HAMPO region is composed of several different types of facilities that were developed by identifying service areas such as schools, parks, residential areas, and business centers and connecting them with sidewalks, multipurpose paths, bicycle facilities, and trails.

The determination of appropriate facilities was based on location within or outside of the urbanized area of the HAMPO region, available right of way, safety and security, and anticipated use based on existing and anticipated land uses.

Figure 38, found in the HAMPO 2017 Non-Motorized Plan, provides a geographical view of the proposed improvements, by type, within the HAMPO region.

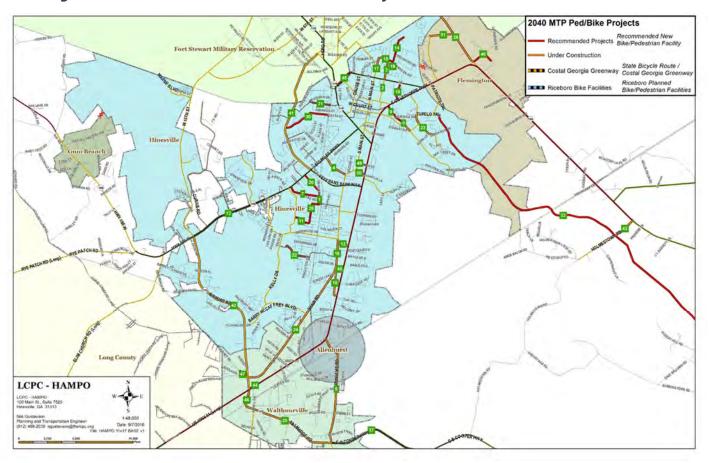


Figure 38: HAMPO 2017 Non-Motorized Plan Projects

Table 24 lists the bicycle and pedestrian facilities included in the Non-Motorized Plan. It should be noted that this list only includes standalone bicycle and pedestrian facility projects and does not include roadway projects where a multimodal cross section is recommended. The list also excludes projects recommended by the Coastal Georgia Greenway, as these projects were included in a separate standalone section of the report.





September 2020 HAMPO 2045 MTP

Table 24: Non-Motorized Plan Project List

	Project Type	From	То	Location
1	New Facility	McDowell Rd	Varnedoe St	Hinesville
2	New Facility	Existing sidewalks south of Martin St	Existing sidewalks north of E Mills Ave	Hinesville
3	New Facility	Lakeview Drive	E General Stewart Way	Hinesville
4	New Facility	E G Miles Parkway	South Main St	Hinesville
5	New Facility	W Oglethorpe Hwy	Talmadge Rd	Allenhurst / Walthourville
6	New Facility	Bacon Rd	Existing sidewalks W of Brett Dr	Hinesville
7	New Facility	E G Miles Parkway	Bacon Rd	Hinesville
8	New Facility	Fraser St	Gray Fox Rd	Hinesville
9	New Facility	W Oglethorpe Hwy	Forest St	Hinesville
10	New Facility	East General Stewart Way	East Oglethorpe Hwy	Hinesville
11	New Facility	Pineland Avenue	Varnedoe St	Hinesville
12	New Facility	Citation Boulevard	Airport Rd	Hinesville
13	New Facility	S Main St	W Oglethorpe Hwy	Hinesville
14	New Facility	Lakeview Dr	Snelson-Golden Middle School	Hinesville
15	New Facility	N Main St	Martin Rd	Hinesville
16	New Facility	Glenn Bryant Rd	Darsey Rd	Hinesville
17	New Facility	Olmstead Dr	Lakeview Dr	Hinesville
18	New Facility	Darsey Rd	W Oglethorpe Hwy	Hinesville
19	New Facility	Lakeview Dr	Jacks Hill Rd	Hinesville
20	New Facility	EG Miles Parkway	Bacon Rd	Hinesville
21	New Facility	Existing sidewalks W of Cherrydale St	Existing sidewalks on Madison Dr	Hinesville
22	New Facility	Existing sidewalks on Debbie Dr	Desert Storm Dr	Hinesville
23	New Facility	Tupelo Trail	Gray Fox Rd	Hinesville / Walthourville
24	New Facility	Darsey Rd	Airport Rd	Hinesville
25	New Facility	W Oglethorpe Hwy	Dunlevie Rd	Walthourville
26	New Facility	Bacon Rd	Honey Ridge Lane	Hinesville
27	New Facility	Dunlevie Rd	State Hwy 119	Walthourville
28	New Facility	US Hwy 84	Cay Creek	Midway
29	New Facility	East Oglethorpe Hwy	Liberty Elementary School	Midway
30	New Facility	Veterans Parkway	Azalea St	Hinesville
31	New Facility	Interstate 95	Fort Morris Rd	East Liberty County
32	New Facility	US Hwy 17	US Hwy 84	Midway













33	New Facility	Holmestown Rd	Cay Creek Rd	Central Liberty County
34	New Facility	Barrington Ferry Rd	US Hwy 17	Riceboro
35	New Facility	Sandy Run Rd	E B Cooper Hwy	Riceboro
36	New Facility	Barrington Ferry Rd	US Hwy 17	Riceboro
37	New Facility	Barrington Ferry Rd	Rail-To-Trail Connector	Riceboro
38	New Facility	US Hwy 17	S Liberty County Line	Riceboro
39	New Facility	Hines Rd	Fort Stewart Boundary	Flemington
40	New Facility	Old Sunbury Rd	Arts Center Rd	Flemington

Post Planning Actions

Since the adoption of the 2040 MTP, municipalities within the HAMPO region have continued to work collaboratively with GDOT and local funding partners to invest in the multimodal transportation system. These investments have been funded through a variety of programs including local Transportation Special Purpose Local Option Sales Tax (SPLOST), Transportation Alternatives Funding (TAP), GDOT Quick Response funding, Title 49 U.S.C. Section 5307 Urbanized Area Formula Program, and local general funds.

Examples of these investments includes:

- S Main St: Sidewalk Construction
- E.G Miles Parkway / SR 119: Safety Analysis and Sidewalk Construction
- US 84 @ Walmart traffic signal: ADA Audit and Crosswalk Construction

Additional non-motorized facilities have been implemented throughout the HAMPO region in conjunction with highway and include the following:

- Veterans Parkway Widening Phase I and II: Multipurpose bicycle and pedestrian paths and crossings
- 119/Airport Road Widening: Multipurpose bicycle and pedestrian path and sidewalk with raised center islands
- 196 East/Leroy Coffer Highway Widening: Rural non-motorized shoulder facilities





HAMPO and partner agencies continue to identify multimodal transportation needs within the region and work collaboratively to identify viable funding opportunities for these investments.

Ongoing initiatives include:

- Ryon Avenue Realignment / Main Street Multimodal:
 The design phase of this project is currently underway with a combination of local SPLOST and GDOT TAP funding. The project includes upgrades to the existing multimodal network, including ADA enhancements, lighting, and the installation of sidewalks concurrently with the realignment of Ryon Avenue.
- TSPLOST Multimodal Initiatives: The voters of Liberty County and Long County approved a Transportation Special Purpose Local Option Sales Tax (TSPLOST) in 2020. The preliminary project lists presented by Liberty County includes a number of multimodal enhancements including 15th Street sidewalks, US 84 / SR 38 sidewalks, signal and median upgrades for ADA accessibility, and safety, and Safe Routes to School infrastructure. Funding for these projects will begin in October 2020 and will be collected for a five-year period.
- Liberty Transit Supportive Infrastructure (Sidewalks):
 With the recent completion of the South Main Street
 sidewalk installation, the City of Hinesville is working with
 the Liberty Transit Steering Committee and HAMPO to
 prioritize the construction of additional last mile gaps
 impacting access to the transit system. With the recent
 authorization of the Coronavirus Aid Relief and Economic
 Security (CARES) Act, the City of Hinesville has leveraged
 funding for these ongoing investments and issued a
 Request for Qualifications (RFQ) for Engineering Services
 in June 2020. Figure 39shows the Liberty Transit approved
 sidewalk gap locations considered a high priority for
 transit connectivity.

FUNDING STRATEGY SPOTLIGHT

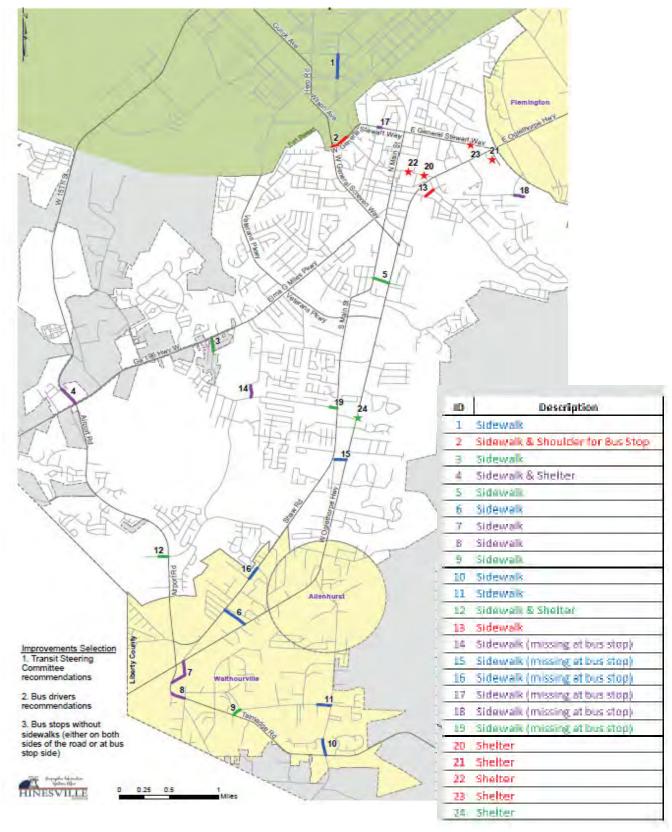
establishes the
"Associated Transit
Improvement" project
qualifications and
eligible project
elements. Bicycle and
pedestrian paths within
a certain distance from
a transit stop or station
are eligible capital
projects and qualify as
associated transit
improvements.

City of Hinesville /
Liberty Transit
successfully partnered
with FTA and GDOT
Intermodal to prioritize
sidewalk and shelter
installation projects
within the transit service
area. This partnership
has increased safety for
non-motorized travel
and has resulted in
increased transit
ridership.





Figure 39: Liberty Transit Supportive Infrastructure Projects







4. Freight

Strategically located between the Ports of Savannah and Brunswick, as well as Jacksonville and Charleston, the HAMPO area is ideally positioned to support port related warehousing and distribution, as well as other freight movements. In addition to its strategic location between ports, the HAMPO area is also home to significant freight generators and attractors, including the major military installation of Fort Stewart. This significant freight activity and the freight related industries are critical components of the both the local and state economy and support the state's position in the global economy.

Freight related activities have significant impacts on the transportation system. With the warehousing and distribution and manufacturing activities within the HAMPO area, and with the continued expansion of the port facilities, the truck and freight related impacts will only grow in the future.

HAMPO Regional Freight Plan

Recognizing the need to address these impacts, HAMPO undertook the development of a freight plan specifically for the region. The plan, adopted in 2017, was developed within the framework of the Georgia Statewide Freight and Logistics Plan developed by the Georgia Department of Transportation.

The HAMPO Regional Freight Plan included an analysis that identified how the region's transportation networks are being used for the handling of freight, how these uses are evolving, and the impacts for the region's priorities regarding goods movement. The plan included a technical, data-driven assessment for the HAMPO freight network to determine the demand on the system. The plan focuses on the physical movement of goods, the relation of the region's major industries to the freight system, and opportunities for improvement.

In addition to the Statewide Freight and Logistic Plan, the study was consistent with several other studies including:

- GDOT Georgia State Rail Plan
- HAMPO 2040 Metropolitan Transportation Plan
- HAMPO 2035 Sustainable Mobility Plan
- HAMPO US 84 Comprehensive Corridor Study

Freight Profile

The National Highway Freight Network was identified as part of the FAST Act and is the focus for strategically appropriating federal funding resources and policies for the improvement of the designated freight network. I-95 is the only facility within the HAMPO region included in the national freight network. In addition to the federally designated freight network, GDOT has also designated strategic state corridors that are critical to efficient freight mobility. In the HAMPO





region, these corridors include US 84/SR 38 and I-95. US 84 is also designated as part of the Governor's Road Improvement Program (GRIP), which is focused on economic development, connectivity, and truck access. These routes and the statewide freight network are shown in Figure 40.

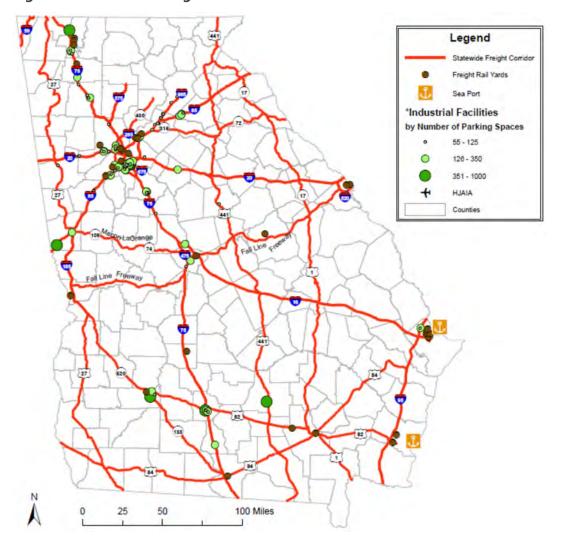


Figure 40: Statewide Freight Network

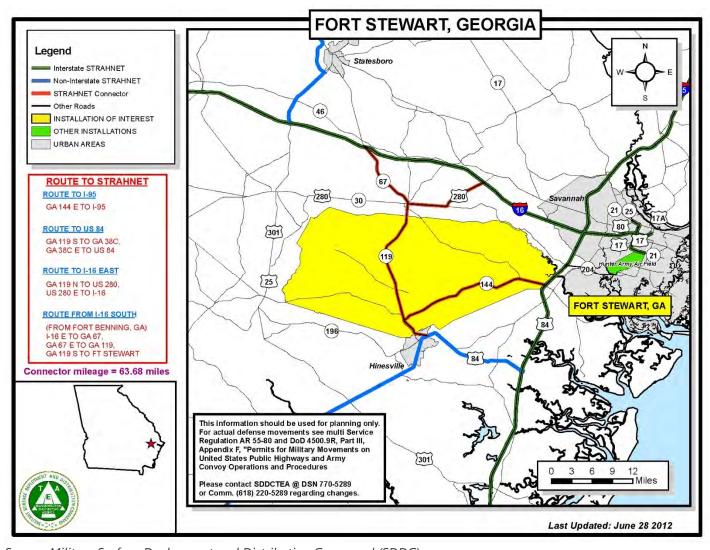
Source: GDOT, Georgia Statewide Freight and Logistics Plan

The Strategic Highway Network (STRAHNET), also federally designated, includes those routes critical to the mobilization of military troops and equipment. In addition to I-95 and US 84, SR 144, and SR 119 are also included in the STRAHNET. The STRAHNET is shown in Figure 41 and Figure 43 displays the designated freight networks, as well as the STRAHNET facilities.





Figure 41: HAMPO STRAHNET Facilities



Source: Military Surface Deployment and Distribution Command (SDDC)

Fort Stewart maintains 7 access control points ²including the following:

- Gate 1: VCC (Open 24 Hours)
- Gate 2: Olmstead Drive (Closed)
- Gate 3: Old Sunburry Road @ GA Hwy 144 E (Open 24 Hours)
- Gate 4: Vanguard Road @ GA Hwy 144 E (Open 24 Hours)
- Gate 4C: Old Sunbury Rd @ G. Hwy 144 E (Closed)
- Gate 5: Gulick Avenue @ GA Hwys 119/144 E (Open 24 Hours)
- Gate 7: West 15th Street (Closed)
- Gate 7C: West 15th street (Open 5:00 A.M. 5:00 PM)
- Gate 8: Veterans Pkwy (Open 5:00 AM 5:00 PM)

² Source: https://libertycounty.org/fort-stewart-haaf-gate-hours/









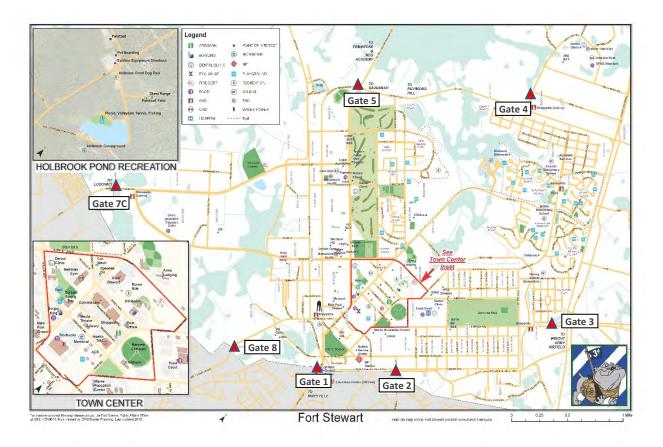




• Gate 9: WAAF (Open 24 Hours)

Figure 42 shows the Fort Stewart road network along with the 7 active gates located within the HAMPO study area. Gate 8 located at Veterans Parkway is the designated truck entrance for the installation.

Figure 42: Fort Stewart Road Network and Access Gates





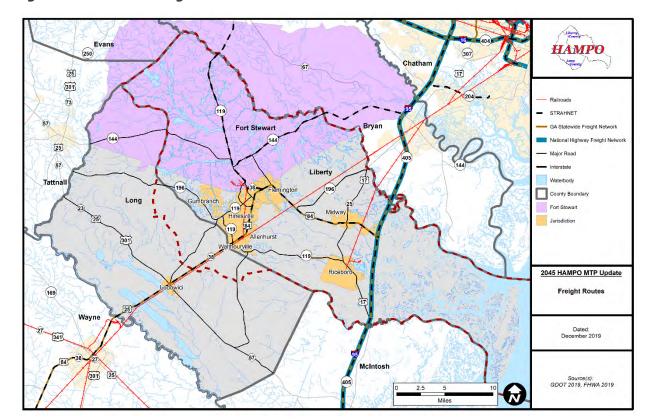


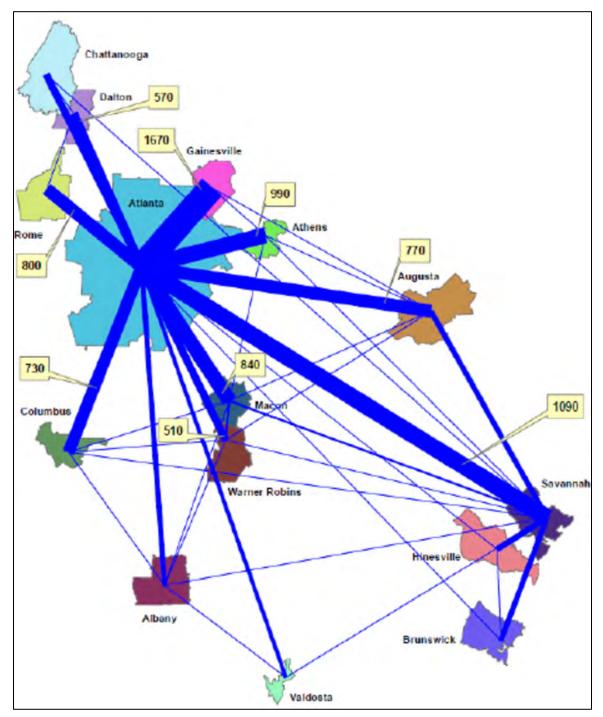
Figure 43. HAMPO Freight Network

According to the Statewide Freight and Logistics Plan, no routes in the HAMPO area are included in the top 50 facilities for truck movements in the state. The Statewide Freight and Logistics Plan also analyzed the inbound and outbound truck tonnage for each county. In 2013, there were between 500,000 and 1,000,000 million tons of freight moved both inbound and outbound for Liberty County. In addition, GDOT also assessed the truck flows between the urban areas within the state. For HAMPO, according to both the state and regional freight plans, the largest flows occur between HAMPO and Savannah, with the movement of 63% of the total tonnage inbound to HAMPO and 48% of the total outbound tonnage. The flows between the urban areas in the state are shown in Figure 44.





Figure 44: Estimated Freight Flows Between Urban Areas



Source: GDOT



The HAMPO Regional Freight Plan included an analysis of commodity flows following the FHWA's Freight Analysis Framework (FAF) and found that the highway system is the major mode for moving freight in the HAMPO region. According to the FAF, trucking accounts for the majority of freight flows in the HAMPO region by both total tonnage (88 percent) and value (89 percent). The plan further details that trucking was followed by rail carload as a freight mode in the HAMPO region. Rail carload service in the region is limited. There are no major private sector rail yards and few spurs connecting shippers to the broader rail system located within the MPO region. Rail accounted for an estimated 10 percent of total tonnage (669,000 tons) and five percent of total value (\$339,000,000).

The FAF analysis further demonstrated that freight flows are nearly balanced by direction for the HAMPO region, with approximately 50 percent of total freight flows (3,458,000 tons) inbound to the region and approximately 47 percent of total flows (3,305,000 tons) outbound. Approximately three percent of total flows (198,000 tons) are estimated to move internally within the HAMPO region.

The majority of freight flows inbound to the HAMPO region (63 percent or 2,177,000 tons) are estimated to originate in the Savannah region of Chatham, Bryan, Effingham, and Bulloch Counties. Much of this traffic consists of trucks originating from the Port of Savannah and the distribution clusters that surround the port complex. After the Savannah region, Georgia counties outside the Savannah and Atlanta regions are responsible for approximately 12 percent (421,000 tons) of freight tonnage into the Hinesville region. The states of Florida and South Carolina are also top trading partners for the HAMPO region.

The Savannah region accounts for the largest share of freight flows outbound from the HAMPO region. About 48 percent of total tonnage (1,576,000 tons) leaving the Hinesville area is bound for the Savannah region. Given that many of the major freight-intensive industries in the HAMPO region export much of what they produce, much of this tonnage is accessing the port facilities. Approximately nine percent of total tonnage (292,000 tons) outbound from the HAMPO region is bound for the Atlanta region, with approximately seven percent of tonnage (231,000 tons) headed for other counties in Georgia. Altogether, Georgia receives over two-thirds of outbound flows by tonnage from the HAMPO region. Portions of South Carolina and Florida also receive significant shares of freight tonnage from the Hinesville region.

Truck Volumes

The GDOT Traffic Analysis and Data Application (TADA) tool provides recent traffic information on sites located throughout the state. Data was accessed from the tool for the freight corridors identified in the Statewide Freight and Logistics Plan, the Regional Freight Plan, and the STRAHNET. The available data included traffic volumes and truck percent from 2016 through 2018. The traffic data is shown in Table 25.





Table 25: Freight Corridors - Traffic and Truck Percentage

Freight Route		2016		2017		2018
I-95						
Near McIntosh County Line	51,500	20%	54,100	20%	53,300	22%
US 84						
West of I-95	7,390	9%	7,720	10%	7,700	9%
At Flemington	28,900	7%	29,100	7%	31,400	7%
West of General Screven Way	30,700	6%	30,900	7%	30,700	7%
Near Long County Line	10,200	15%	10,300		10,500	9%
US 17	US 17					
Near I-95	25,200	8%	25,900	8%	26,700	8%
North of Midway	5,820	7%	6030	8%	5,820	7%
South of Riceboro	3,130		2,670	17%	2,860	
GA 144						
West of I-95	7,570	8%	7,620		7,560	8%
GA 196						
Near US 84	18,000	11%	18,100		19,000	10%
West of Hinesville	3,230	15%	3,270	12%	3,320	12%
GA 119						
Near Bryan County Line	2,090	9%	2,150		2,280	11%

As shown in the data above, the designated freight corridors in the HAMPO area carry significant freight traffic, with truck percentages ranging from a low of 7% to 12% on GA 196 west of Hinesville, excluding I-95. Freight traffic on the state routes has even more significant impacts due to the lower amount of traffic with the higher truck percentages.

The National Performance Management Research Data Set (NPMRDS) is an analytical tool that utilizes INRIX data to assess the performance of the highway system. The NPMRDS includes routes on the National Highway System and a scan for the year 2018 was run specifically

















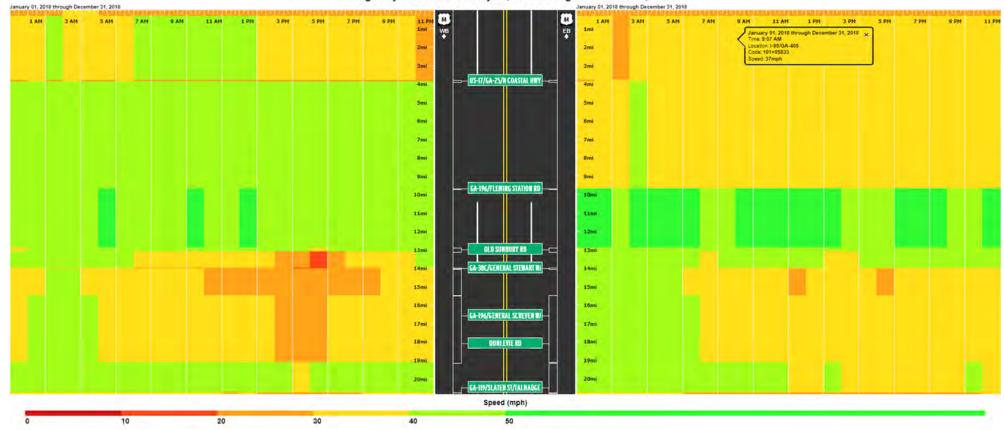
focusing on truck travel speeds. This analysis provides important insight into the time of day truck traffic may experience delays, as well as the locations along US 84. The graphic found in Figure 45 highlights that trucks experience delays, particularly in Hinesville during the morning and evening peaks with speeds ranging from between 10 miles per hour and 30 miles per hour. Off peak hours display speeds ranging from 40 miles per hour to 50 miles per hour or higher.



Figure 45: NPMRDS Analytics: Truck Speeds on US 84

Speed for US-84 using NPMRDS from INRIX (Trucks) data

Averaged by 1 hour for January 01, 2018 through December 31, 2018







Major Freight Generators and Attractors

The HAMPO region is home to freight intensive land uses that include manufacturing and warehousing/distribution. These types of uses are typically the highest freight attractors and generators. Fort Stewart is also a significant freight generator due to the movement of troops, supplies and equipment.

There are several industrial parks within the region that include manufacturing and warehousing/distribution uses, each of which located near either US 84 or I-95. In addition to these industrial parks, there are other freight intensive industries within the HAMPO area. Table 26provides the list of these freight intensive uses

Table 26. Freight Intensive Lane Uses

INDUSTRIAL PARKS			
Himaniilla Tachmalamu Dauk	CTech Metal Finishing	Electroplating Operations	
Hinesville Technology Park	Florapharm Tea-USA	Tea Manufacturing/Distribution	
	Elan Technology	Glass/Ceramic Insulation Manufacturing	
	Hugo Boss	Apparel Manufacturing	
Midway Industrial Park	International Greetings	Gift Wrap Manufacturing/Distribution	
	Truss Mart	Custom Roof Trusses	
	Alcoa Forgings and Extrusions	Metals Manufacturing/Distribution	
Tradeport East Business	Target	Regional Distribution Center	
Center	Tire Rack	Regional Distribution Center	
	Pactra International	Hankook Tire Distribution Center	
Walthourville Industrial Park	Walrich Plastics	Plastic Manufacturer	





OTHER INDUSTRIES			
SNF Holding Company	Riceboro	Chemical Manufacturing	
DS Smith	Riceboro	Paper/Packaging Manufacturing	
LaFarge North America	US 84 @ SR 196	Concrete Supplier	
Martin Marietta Aggregates	Flemington	Quarry	
BMC Supply	SR 196	Building Supplier	

In addition to these manufacturing centers and the major distribution centers, the HAMPO region is also home to a significant number of logistics and supply chain companies. These companies, typically on a smaller scale, are found throughout the area. The list below is a representative list, rather than all-inclusive of these freight-based companies.

Allen Stokes Trucking	C A Sittle, Inc	J & J Transport
	,	•
Enterprise Transport	C McAvenna Transport	Mkt Logistics
Angel's Pride Trucking	Carter J Trucking	Mickel's Trucking
P&A Logistics	DeLoach Trucking	Miness Transport
Fletch Transportation	Wright Enterprises	Butler Trucking
Associated Freight Haulers	G C Specialized Carriers	MTC Logistics
Atlantic Trucking	Howard and Sons Logistics	
Blackshear Enterprises	Twin Trucking	

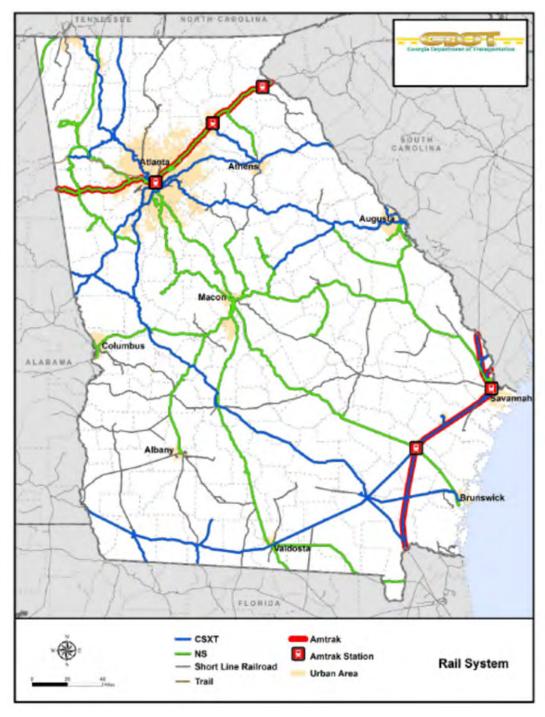
Rail

The rail system within the State of Georgia includes two Class I railroads and 29 short line railroads. The largest rail owners are CSX Transportation (CSXT) and Norfolk Southern (NS), who combined, own over 3,600 miles of rail. The short-line railroads and the state own just over 1,000 miles of rail. These railroads are concentrated only on freight movement and currently, there is no intercity rail connections within the state.

The Class I rail lines within the state of Georgia are shown in Figure 46 and the Short Line Railroads are found in Figure 47.



Figure 46: Georgia Class I Rail Lines

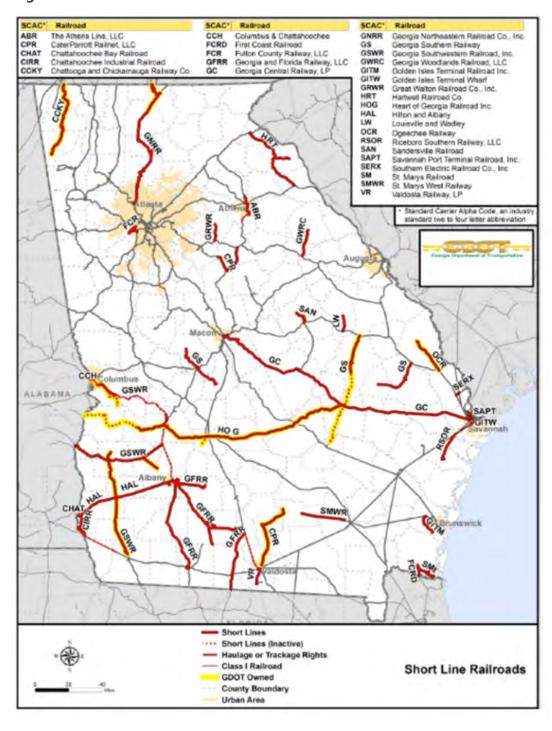


Source: GDOT





Figure 47: Short Line Railroads



Source: GDOT

The HAMPO area is served by one Class I railroad, owned, and operated by CSX, which owns two thirds (66.6 percent) of the rail lines in the region. The line connects to the port of Savannah, as well as to













Jacksonville, providing access to the CSX railyard in Waycross. This line carries approximately 28 trains per day, according to the Regional Freight Plan.

The HAMPO region is also served by the Riceboro Southern Railway, a subsidiary of the Genesee & Wyoming railroad. This short-line railroad intersects with CSX in Bryan County, adjacent to Liberty County to the north, allowing access to the Port of Savannah and the remainder of the CSX network. The DS Smith and SNF manufacturing facilities in Riceboro, as well International Greetings in Midway, have spur lines connecting to the Riceboro Southern Railway. With those connections, the primary commodities transported on the short line rail are chemicals and paper/packaging. The Riceboro Southern Railway carries one to two trains per day.

The Department of Defense also has a rail line serving Fort Stewart, which is approximately six miles in length. Commodities on this line are restricted to military equipment and supplies. According to the Regional Freight Plan, the Department of Defense rail line carries approximately four trains per day.

The Federal Railroad Administration (FRA) maintains detailed rail-highway crossing information at the county level. According to the FRA data, there are a total of 26 at-grade rail crossings on the CSX line in the HAMPO area. Of these 26 crossings, 22 are located in Liberty County, however the crossings do not occur along the most congested roadways within the region, limiting auto delay due to train traffic. The trains along this line typically have speeds of approximately 79 miles per hour.

The Department of Defense line has 12 at grade crossings. Unlike the CSX line, the Department of Defense line intersects with many of the major roadways, including US 84, SR 119, and SR 196. Although the line carries lower volumes, the impacts to the roadways are greater and the train speeds are approximately 20 miles per hour. The Riceboro Southern Railway has four at grade crossings along US 84 and Lake George Road. The train speeds are typically less than 10 miles per hour, however, with the much lighter train traffic of one to two per day, vehicular delays are minimal.

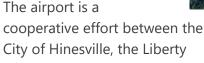
The majority of rail crossings within the HAMPO region are at-grade with the exception of the US 84 / SR 38 grade separated overpass located North West of SR 196 E / Leroy Coffer Highway in McIntosh.



5. Aviation

Wright Army Airfield was originally constructed in 1942 and known as the Camp Stewart Army Airfield. The airport historically served as training grounds for armor and anti-aircraft artillery units for the Department of Defense.

In 2007, the Liberty County Board of Commissioners, the city of Hinesville and the Liberty County Development Authority partnered to construct a new 13,825 square-foot terminal that houses both military and civilian operations. The joint facility was rebranded as Midcoast Regional Airport at Wright Army Airfield.





Source: mcra.us

County Board of Commissioners, the Liberty County Development Authority, and the United States Army, acting under a Joint Management Board (JMB).

The airport is a joint use facility where the Military (US Army) and the Civilians (General Aviation) operate within a class D airspace. One side of the airport is dedicated to General Aviation aircraft with FBO facilities, Hangars, and aircraft ramp parking. As a general aviation airport, there is no commercial or air cargo service at MidCoast Regional Airport.

Recent capital investments in the airport include the 2018 runway extension from 5,007 to 6,500 feet and upgrading the pavement to meet Unified Facilities Criteria. The improvements increases the airport's capabilities to land larger aircraft and supports joint training across military services.

F. Safety

Safety is an integral part of understanding and analyzing the transportation network. HAMPO has committed to following the GDOT safety performance metrics for this update, therefore, an analysis of the existing conditions has been created to help identify opportunities for improvement. Crash locations and severity data has been gathered from the Georgia Accident Reporting System (GEARS), which is a repository for crash reporting statistics across the state. The number and type of crashes can





be further identified within the HAMPO planning area along with the ability to identify higher crash areas. An analysis over the period between 2014 and 2018 allows for five years of accident reporting and the identification of concentrations or trends within the network. Over the five-year period, there were 9,932 vehicle crashes reported within the HAMPO boundary.

These accidents have been further broken out into the following categories:

- Fatal Crashes 56
- Injury Crashes 2426
- Bicycle and Pedestrian Crashes 67
- Property Damage Only (PDO) 7,450

Figure 48 shows all crash locations that occurred within the HAMPO region between 2014 and 2018 as a heat map where red indicates areas with the highest concentrations of total crashes.

Evans HAMPO (307) Chathan 17 301 Low 25 Liberty Gumbranch County Boundary Fort Stewart (119) 2045 HAMPO MTP Update Vehicle Crash Density Dated: Feb 2019 341 84 38 27 McIntosh 301 25 Source(s): GEARS 2019 341

Figure 48: Vehicle Crash Density

Source: Gears 2014 - 2018 Data





The crash data was further analyzed to isolate crashes where injuries or fatalities occurred, and a map created to identify areas where crash severity is greater than the regional and state average. Vehicle injuries and fatalities are shown in Figure 49.

T Evans HAMPO 250 17 301 Vehicle Crashes Injury Crash County Boundary Fort Stewart 2045 HAMPO MTP Update Vehicle Crash Locations Wayne Dated: Feb 2019 38 27 McIntosh 301 25 Source(s): GEARS 2019 341

Figure 49: Vehicle Injury and Fatality Crash Locations

Intersection Crashes

Intersections crashes were analyzed within 100 feet of the intersection midpoint. This 100 foot buffer allows for the collection of crashes both within the intersection itself and the area immediately surrounding it. Though the actual size of each intersection can vary substantially, 100 feet has been chosen as a baseline review for the MPO scale. Individualized intersection analysis may be necessary to determine conditions at specific intersections in the future. Table 27 depicts the intersections with higher numbers of crashes.













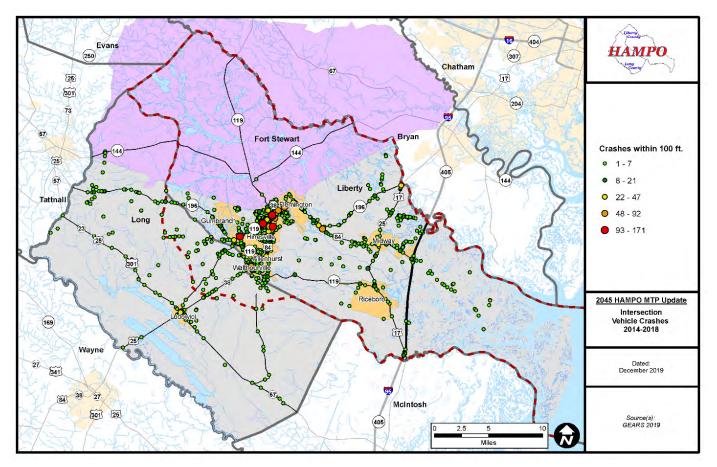
Table 27: High Crash Intersections

Intersection	Number of Crashes
SR 196/Airport Rd (SR 119)	171
EG Miles Pkwy/Veterans Pkwy	139
EG Miles Pkwy/ E General Screven Way	135
Veteran Pkwy/W Oglethorpe Hwy (US 84)	108
E Ogle Thorpe Hwy (US 84)/ Sandy Run Dr	92
Veterans Pkwy/ S Main St	89
E MLK Jr Dr/ W Oglethorpe Hwy (US 84)	86
E Oglethorpe Hwy/Leroy Cotter Hwy	75
E Oglethorpe Hwy (US 84) General Stewart Way	73
W Oglethorpe Hwy (US 84) / E General Screven Way	64

As described above, a 100 foot buffer was implemented to separate intersection and roadway segment crashes. As a result of this analysis, the following intersections have the highest numbers of crashes over the five-year period. Figure 50 depicts the density of crashes intersections throughout the planning area where red indicates 93 - 171 crashes, orange identifies intersections with 48 - 92 crashes, yellow indicates 22 - 47, and green 8 - 21 crashes.







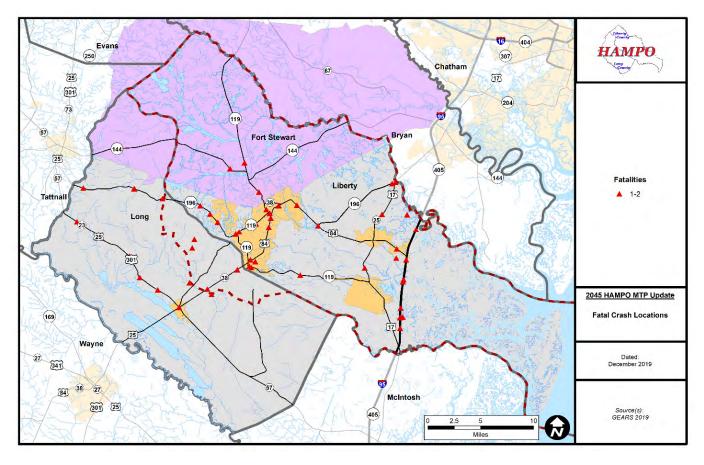
Top Intersections with Fatal Crashes

Over the five year analysis period, one location at the intersection of East Oglethorpe Highway and Sandy Run Drive, experienced two fatal crashes. The other fatality crash locations were dispersed throughout the planning area. The location of all fatal crashes throughout the planning area are shown in Figure 51.





Figure 51: Fatal Crash Locations



Top Intersections with Injury Crashes

There are several intersections in the HAMPO region that have high numbers of injury crashes over the five-year period and these intersections typically align with the intersections with the higher overall crashes. Table 28 depicts the top ten intersections with injury crashes.

Table 28: High Injury Intersections

Intersection	Number of Crashes
SR 196/Airport Rd (SR 119)	49
EG Miles Pkwy/Veterans Pkwy	41
EG Miles Pkwy/E General Screven Way	35
Veteran Pkwy/W Oglethorpe Hwy (US 84)	31
E Ogle Thorpe Hwy (US 84)/Sandy Run Dr	29
E MLK Jr Dr/W Oglethorpe Hwy (US 84)	27















EG Mile Pkwy/Deal St	25
Veterans Pkwy/S Main St	24
E General Screven Way/W Oglethorpe Hwy	19
(US84)	
EG Miles Pkwy/Pineland Ave	19

Source: GEARS 2014 - 2018 Crash Data

Roadway Segment Safety Analysis

In addition to the number of crashes located within 100 feet of intersections, an analysis was conducted to determine the number of crashes along the roadway segments. This analysis was conducted by excluding the crashes within the 100 foot buffer of the intersections, while accounting for the crashes within 50 feet of the roadway centerline. A 50 foot centerline buffer was used to account for varying roadway widths and data variability from the reporting sources.

Similar to the intersection analysis, the corridor analysis was conducted to determine the those with higher injury and fatal crashes. An understanding of the severity of the crashes provide information for prioritizing future improvements, as well as identifying areas where roadway conditions may need additional/individualized analysis.

The total number of crashes along each of the corridors was developed using the available census road network data. Using this information, the number of crashes over the five-year period (2014-2018) can be seen for the roadway segments throughout the region. The results generally show that the higher numbers of crashes are located along the roadways with larger daily traffic and higher speeds. Table 29 depicts the top ten crash corridors over the five-year period.

Table 29: High Crash Roadway Segments

High Crash Segments	Total Crashes
US 84/SR 38 (I-95 to Liberty/Long County line)	1,031
SR 196 (Liberty/Long county line to Leroy	923
Coffer Hwy/SR 96) SR 119 (US 17 to Liberty/Bryan County line)	607
W Oglethorpe Hwy/US 84/SR 96 (Fraser St to Liberty/Long county line)	515
Oglethorpe Hwy (Fraser St to McIntosh Rd)	404





Elma G Miles Rd/SR 196 (W Gen Screven Way to W of Cove St)	302
I-95/SR 405 NB (Full segment within Long County)	228
W Gen Screven Way (N of Bultman Ave to S Main St)	198
I-95/SR 405 SB (Full segment within Long County)	126
Ocean Hwy/SR 25/US 17 (McIntosh County to Martin Rd)	123

In addition to identifying the high crash segments, segments with high numbers of crashes resulting in injuries were also identified. The top ten injury crash locations from 2014 – 2018 are shown in Table 30.

Table 30: High Crash Injury Segments

High Injury Segments	Injury Crashes
US 84/SR 38 (I-95 to Liberty/Long county line)	287
SR 196 (Liberty/Long county line to Leroy Coffer Hwy/SR 96)	231
SR 119 (US 17 to Liberty/Bryan County line)	168
W Oglethorpe Hwy/US 84/SR 96 (Fraser St to Liberty/Long county line)	123
Oglethorpe Hwy (Fraser St to McIntosh Rd)	110
Elma G Miles Rd/SR 196 (W Gen Screven Way to W of Cove St)	75
W Gen Screven Way (N of Bultman Ave to S Main St)	53
I-95/SR 405 NB (Full segment within Long County)	52
E Oglethorpe Hwy (Glebe Plantation Rd to S Bypass Rd)	36
I-95/SR 405 SB (Full segment within Long County)	32

Crash Rate Analysis

As part of the overall crash analysis for HAMPO, a crash rate analysis was conducted to determine the region's consistency with statewide averages. Crash rate information is gathered to relate the number of

















crashes along a corridor to the AADT number of that corridor. Generally, higher vehicle volumes will lead to increased numbers of crashes, therefore a crash rate analysis is needed to identify corridors and intersections with disproportionate numbers of crashes. Crash rates based on 100 million vehicle miles traveled and uses the following formula:

The variables in this equation are:

R = Roadway Departure crash rate for the road segment expressed as crashes per 100 million vehicle-miles of travel,

C = Total number of roadway departure crashes in the study period

V = Traffic volumes using Average Annual Daily Traffic (AADT) volumes

N = Number of years of data

L = Length of the roadway segment in miles

Source: https://safety.fhwa.dot.gov

Crash Rate Comparison

The State of Georgia maintains five-year averages for fatality and serious injury on the functionally classified roadway network. Overall, HAMPO is performing better than the statewide five-year averages as shown in Table 31.

Table 31: Georgia and HAMPO Crash Rates

Performance Measure	2013	2014	2015	2016	2017	GA 5-Year Ave.	HAMPO 5- Year Average
Fatality Rate (Per HMVMT)	1.081	1.045	1.213	1.283	1.242	1.173	0.167
Serious Injury Rate (Per HMVMT)	19.261	18.854	20.84	20.068	19.76	19.757	11.661

Source: Georgia Highway Safety Improvement Program: 2018 Annual Report

A comparison can be made as the information relates to the functional classification of each roadway. Table 32 shows the relationship between the injury and fatality crash rates using the functional classification to separate the data. Using this information, the crash rates within HAMPO are generally lower than the statewide averages apart from urban principle arterials and urban minor collectors.





Table 32: Crash Rates by Functional Classification

Functional Classification	Georgia Fatality Rate (Per HMVMT 5-year AVG)	Georgia Injury Rate (Per HMVMT 5-year AVG)	HAMPO Fatality Rate (Per HMVMT 5- year AVG)	HAMPO Injury Rate (Per HMVMT 5- year AVG)
Rural Principal Arterial (RPA) - Interstate	1.63	27.57	0.0799	1.0398
Rural Principal Arterial (RPA) - Other	1.92	32.31	0.0417	1.8359
Rural Minor Arterial	2.95	51.17	0.5339	5.78
Rural Major Collector	3.61	62.03	0.4254	21.2195
Urban Principal Arterial (UPA) - Interstate	0.44	7.46	0	3.3477
Urban Principal Arterial (UPA) -	1.04	17.58	0.0833	18.5403
Urban Minor Arterial	1.03	17.39	0.2731	17.1238
Urban Minor Collector	0.89	14.87	0.06473	24.4016

Source: Georgia Highway Safety Improvement Program: 2018 Annual Report; GEARS 2019 Analysis; GDOT AADT data

The results of the crash rate analysis for the HAMPO roadway network are shown in Figure 52, which depicts the total crashes regardless of crash type. Hinesville exhibits the highest concentration within the region.



Figure 52: Roadway Crash Rates

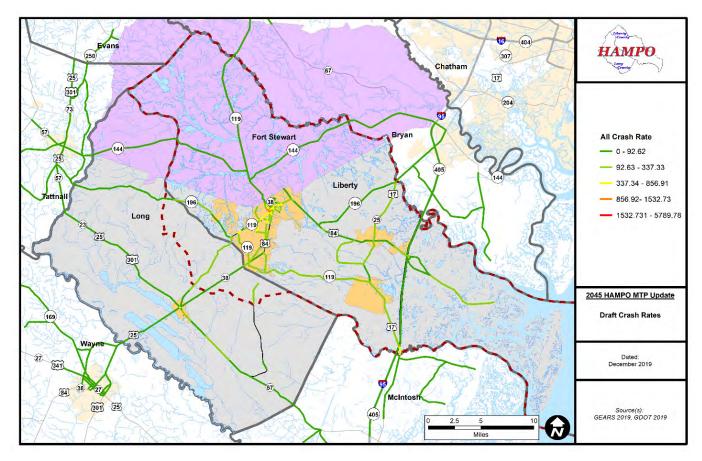


Figure 53 displays the injury crash rates. These crashes are comprised of those that cause bodily harm vehicular occupants and pedestrians.. The city of Hinesville has the highest concentrations of injury crashes, with the majority within the urban core of the city.





Figure 53: Injury Crash Rates

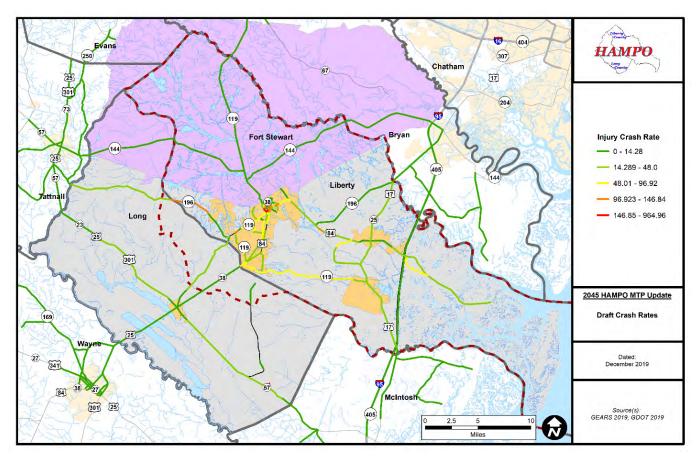
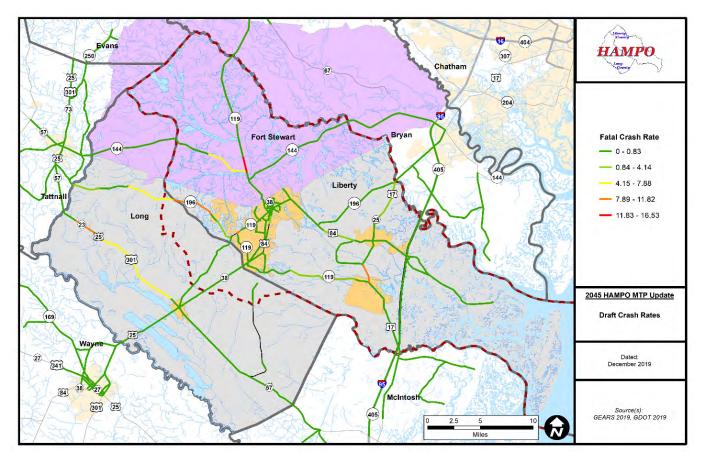


Figure 54 shows fatality crash rates for the HAMPO region. The regional data for HAMPO, when aggregated, does not have a high fatal crash rate, however there are some corridors where this rate is relatively high. Those corridors include GA 119 in Fort Stewart approaching GA 144, GA 196 entering Liberty County from Long County, and N. Coastal Hwy (Ocean Hwy) north of GA 119.



Figure 54: Fatality Crash Rates



Bicycle and Pedestrian Crashes

Another important element of the crash analysis was the identification of bicycle and pedestrian crashes. There were 27 bicycle and 40 pedestrian crashes with motor vehicles over the five-year period. Of these 67 total crashes, 47 resulted in injuries and six resulted in a fatality. Figure 55 depicts the location of the bicycle/pedestrian crashes, showing that the majority were within the urbanized areas of Hinesville and Flemington.





Figure 55: Bicycle and Pedestrian Crashes

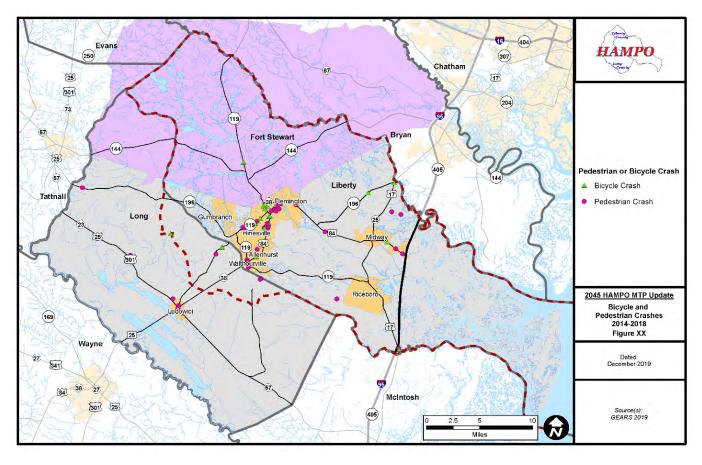


Table 33: Fatal Bicycle and Pedestrian Crash Locations Table 33 depicts the approximate location of the fatal bicycle and pedestrian crashes that occurred between 2014 and 2018.

Table 33: Fatal Bicycle and Pedestrian Crash Locations

Crash Location	Crash Type	Number of Fatalities
US 301S/SR 57/N	Pedestrian	2
McDonald St at US 84/SR		
38/Cypress St		
SR 119 (Ft Stewart) N of	Bicycle	1
SR 144		
US 84/SR 38/W	Pedestrian	1
Oglethorpe Hwy N of		
Ralph Quarterman Dr		





US 84/SR 38/E Oglethorpe	Pedestrian	1
Hwy at Charlie Butler Dr		
US 84/SR 38/SR	Pedestrian	1
196/Oglethorpe Hwy at		
Spires Dr		

Crash Conditions and Trends:

A key element in a safety analysis is to develop a more thorough understanding of the types of crashes that are occurring within the region. By understanding the trends of crash locations, type of crash, and conditions at the time of collision, potential improvements, recommendations can be made to address these issues. A regional overview has been provided in Table 34 and Table 35.

Table 34: Regional Trends: Manner of Collision

Manner of Collision	Percentage of			
	Crashes			
Rear End	35.22%			
Angle	26.93%			
Not A Collision with Motor	22.10%			
Vehicle				
Sideswipe-Same Direction	9.73%			
Head On	3.92%			
Sideswipe-Opposite	2.10%			
Direction				

Table 35: Regional Trends - Crash Conditions

Light Condition	Percent of Crashes
Daylight	70.17%
Dark/Not Lighted	13.54%
Dark Lighted	13.09%
Dusk	1.89%
Dawn	1.31%

Crash Locations within 0.75 miles of Schools

An additional analysis was conducted to determine how many crashes were occurring near existing schools within the HAMPO region. A buffer area of 0.75 miles was generated to quantify the crash information as it relates to the schools. It should be noted that this information is meant to act as a

















high-level look at the crashes located nearby schools; to determine direct causes and specific remedies for any conditions will require individualized studies. The crash analysis resulted in the following information:

Total Crashes: 2905 total crashes

Fatal Crashes: 7
 Injury Crashes: 642
 Total Bike Ped Crashes: 15

• Fatal Crashes: 3

o Frank Long Elementary and Lewis Frasier Middle Schools (1 fatality)

Liberty County High School (1 fatality)

Long County Middle and Walker Elementary Schools (1 fatality)

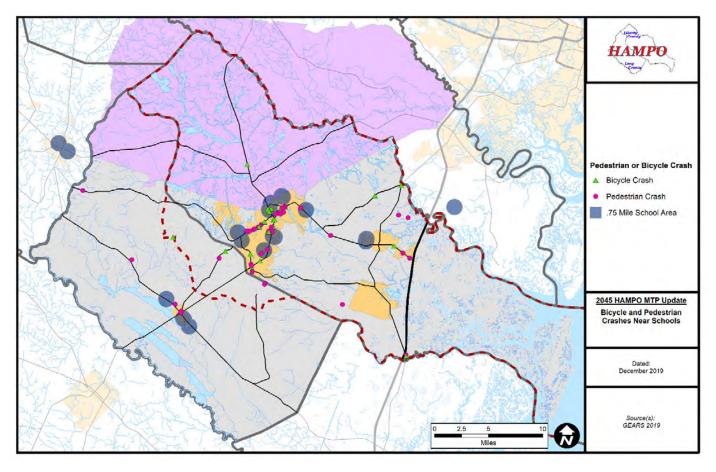
• 9 Injury bike/ped crashes: 5 pedestrian and 4 bicycles

- Long County Middle School and nearby to Walker Elementary School (1 pedestrian crash)
- o Frank Long Elementary and Lewis Frasier Middle Schools (2 bicycle and 1 pedestrian)
- Lyman Hall Elementary School (2 pedestrian crashes)
- o Bradwell Institute and Button Gwinnett Elementary School (3 crashes within Bradwell's buffer with 2 bicycle and 1 pedestrian) and 2 within Button Gwinnett's buffer (2 bicycle crashes)

Figure 56 shows the bicycle and pedestrian crash locations in comparison to the 0.75 mile school zone buffers.







Roadways with Crashes: Potential Additional Considerations

Through this analysis, several roadways were identified that may need additional consideration for safety enhancement projects. There are five locations, shown in Table 36, that should be considered for additional projects within the study area. These roadways were identified due to higher than average crash rates located within their termini.





Table 36: Safety Project Locations

Potential Project Location	Reason for inclusion
SR 119/SR 196 Elma G Miles Pkwy	Above average segment and
(Retirement Cir to Strickland Rd)	intersection crashes
SR 119/W Gen Screven Way (Fort	Above average segment and
Stewart to US 84)	intersection crashes
SR 119/Airport Rd Intersection with US	Above average intersection crashes
84/SR38	
SR 119/Airport Rd Intersection with SR	
196/Elma G Miles Pkwy	
Pineland Ave between SR 119/196 and	Above average segment crashes
Glenn Bryant Rd	

IV. Public and Stakeholder Engagement

HAMPO understands how important community and stakeholder input is to the development of the Metropolitan Transportation Plan. The input and feedback received from the community at-large was vital to the formation and the updating of the MTP. HAMPO developed a Public Participation Plan (PPP) that provided a framework for the MPO community participation process. The PPP for this plan update included improved opportunities for engaging with minority and limited English proficient populations, as federally mandated by the Title VI program, while remaining compliant with the HAMPO Participation Plan.

For the MTP Update, HAMPO had three goals for the public engagement process:

- **Educate** the HAMPO planning area residents and stakeholders about the transportation planning process, highlighting the MTP Updating process.
- **Share** the technical assessment and analysis of the current transportation infrastructure, including safety concerns, operational issues, traffic congestion, etc.
- **Seek input** from the community on what transportation projects should be included in the MTP and their prioritization preferences for implementation of the recommended projects.

During the development of the Metropolitan Transportation Plan update, a combination of online and in-person outreach strategies were incorporated into the process to obtain input and feedback from stakeholder committees and the general public.

A. Online Engagement

Online engagement was integrated into the public engagement process through three outreach strategies: a project website, online survey, and online mapping.

















Project Website

The project website was launched at the beginning of the MTP update and updated regularly with information and events. The HAMPO MTP webpage is located on the Liberty Consolidated Planning Commission's website and served as a centralized location for residents and stakeholders to access documents associated with the plan, view meeting schedules, and read previous and related plans.

Having a website dedicated to the MTP is vital for including underrepresented populations and those with mobility limitations who cannot attend stakeholder committee meetings or public workshops. This approach forms an inclusive framework where more of the community can participate and allows for a broad distribution of information regarding the process of updating the MTP.. The website also has a text-to-speech button for the visually impaired to meet the Title VI regulations. The image below of the HAMPO MTP webpage displays the text to speech button.



2. Online Survey

Early in the MTP updating process, an online survey was launched to gather feedback from the public regarding issues, opportunities, and investment priorities for incorporation into the 2045 MTP. This















survey was advertised in the local newspapers and circulated via social media and email communication to HAMPO stakeholders and engaged members of the public. A concerted effort was made to reach individuals in the community through a collaborative distribution effort with the Liberty County School Board and their affiliates.

The City of Hinesville Government Facebook profile posted a notification alerting its followers to the Transportation Plan Survey and where to fill out the survey. With no cost involved and the City's Facebook being open and available for anyone to view, this helped spread the survey to a broader, more diverse online audience.

The survey launched on March 14, 2019 and was available for responses for 90 days. Respondents were able to fill out this survey via computer or mobile phone, and quick access was

TRANSPORTATION

What is driving your transportation funding?
Please go to the link below to take the HAMPO survey or go to the HAMPO website for more information.

CLICK HERE FOR SURVEY

Pass this email along to anyone you feel might be interested!

HAMPO Project Webpage: http://thelcpc.org/hampo-plans-and-documents/

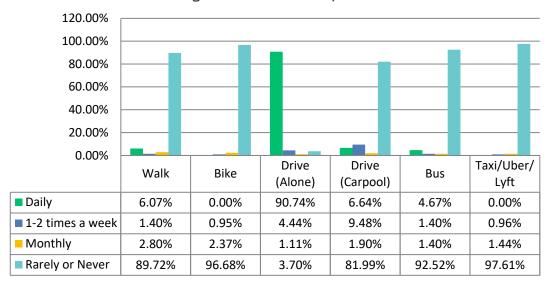
published in the form of a QR code that was affixed to all outreach and notification materials. 275 people responded to the 19-question survey, with an average of 262 respondents for each question.

The questions and the results of the survey are listed below.



Figure 57: HAMPO Public Survey - Commute Modes

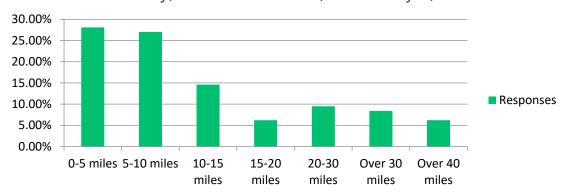
How often do you commute to work/school by the following modes of transportation?



The majority of respondents to this question stated that they drove alone to work daily (over 90%). Over 80% of respondents answered that they rarely or never took any other mode of transportation (walk, bike, carpool, bus, and car share service).

Figure 58: HAMPO Public Survey - Commute Distance

Approximately how many miles do you travel (one-way) to work/school? (select only 1)



Over 50 percent (55%) of respondents traveled between 0 and 10 miles one-way to work or school, with over 14% traveling between 10 to 15 miles. One-way trips to work or school longer than 15 miles were











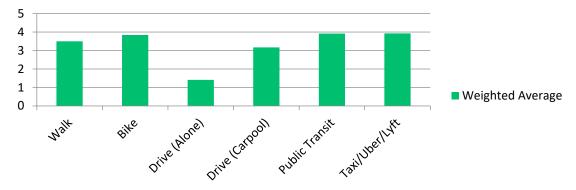




traveled by 30% of respondents. Approximately 6% of respondents answered that they traveled one-way over 40 miles.

Figure 59: HAMPO Survey - Personal Trip Modes

How often do you use the following modes of transportation to places other than work / school? (Shopping, visiting friends, etc.)



Approximately 71% of respondents stated that they drove alone daily to get to places other than work or school. For modes except drive (alone) and drive (carpool), at least 70% of the respondents stated that they never took those modes of transportation.

When asked what factors most influence the mode selected, 37% of respondents selected Flexibility/Convenience, while nearly 20% selected Accessibility.



Figure 60: HAMPO Survey - Mode Choice Factors



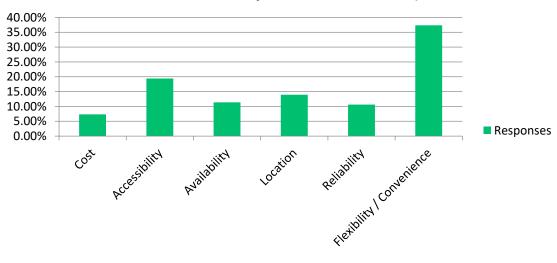
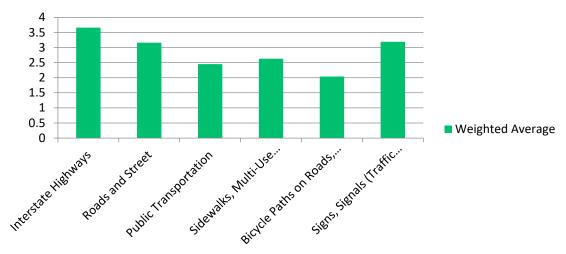


Figure 61 shows that overall, respondents feel that the HAMPO transportation network and infrastructure in of good – excellent quality.

Figure 61: HAMPO Survey - Infrastructure Quality Ratings

Thinking about existing modes of transportation, rate on a scale of 1 to 5 their current quality. (1 is poor, 5 is excellent)

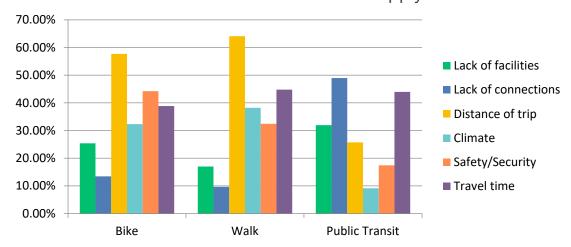




When asked why respondents rarely use modes of transportation other than vehicles, the primary response was distance of trips for bicycling and walking. lack of connections and travel time were the primary responses relating to transit.

Figure 62: HAMPO Survey - Multimodal Challenges

If you rarely bike, walk, or use public transit, please choose all the reasons that apply.

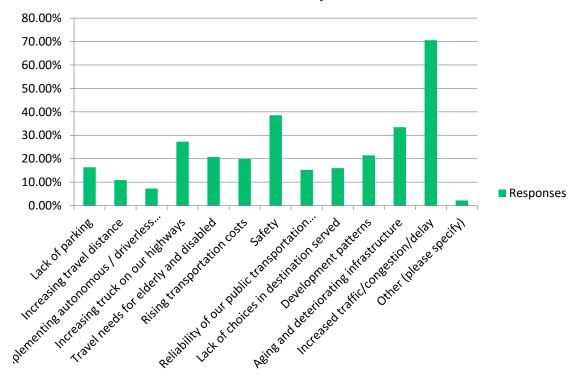


When asked "What do you think is the biggest transportation challenge or issue in the region?" responses ranged from "lack of public transportation options", to "cost", as well as "sidewalks and the bicycle-unfriendly infrastructure". The three most popular responses were "congestion", "safety", and "traffic".



Figure 63: HAMPO Survey - Future Transportation Challenges

In your opinion what will be the three (3) MOST significant transportation challenges in our region in the next 25 years?

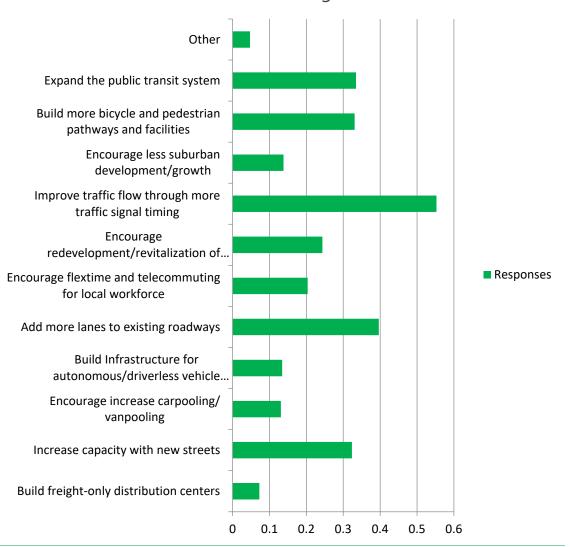


Respondents were then asked to provide their opinion on the most appropriate or preferred methods to address these transportation challenges. The highest response was in favor of operational enhancements such as signal timing, followed by roadway widening. Multimodal enhancements were also favored, including expanded transit services and construction of bicycle and pedestrian infrastructure.



Figure 64: HAMPO Survey - Methods and Priorities

In your opinion what would be the top three (3) ways to address challenges between transportation and land use strategies?

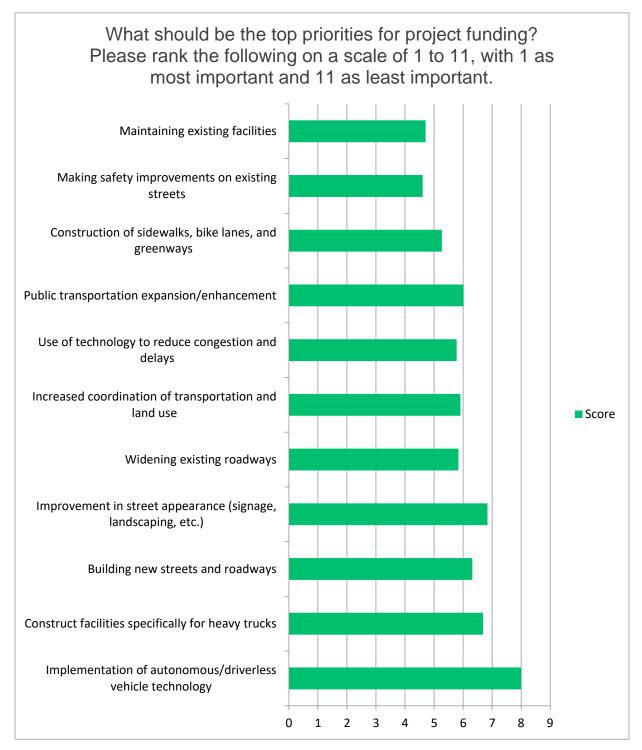


Respondents were then asked to identify their funding priorities for the region. With an average ranking of 4.71 "Maintaining Existing Facilities" and "Making Safety Improvements on Existing Streets" were the most favored priorities. "Implementation of Autonomous Vehicle Technology" was the least favored investment priority for the region.





Figure 65: HAMPO Survey - Funding Priorities



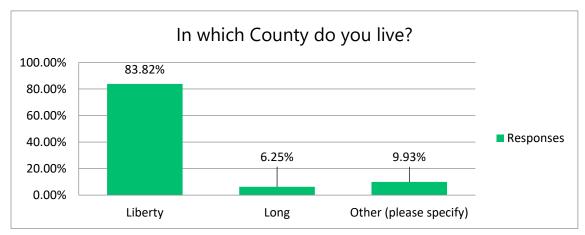
The majority of survey respondents live in Liberty County (83.82%) which is consistent with the population within the HAMPO Region.





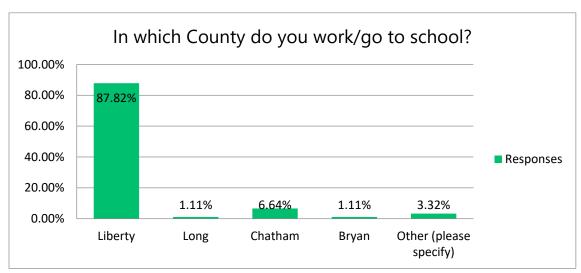


Figure 66: HAMPO Survey - County of Residence



To gain a more detailed understanding of the respondent's home location, they were asked to provide their mailing zip code. This question yielded over 26 zip codes with the highest response concentration located in zip code 31313 comprising the dense urban core within the HAMPO planning area. As shown in Figure 67, the majority of respondents live and work in Liberty County.

Figure 67: HAMPO Survey - Work Location



Identifying the demographics of the survey respondents provides data that allows a comparison to the representative population in the community. While the majority of respondents were age 35 - 54, responses were received from all age groups includes those under 18 and 65+.



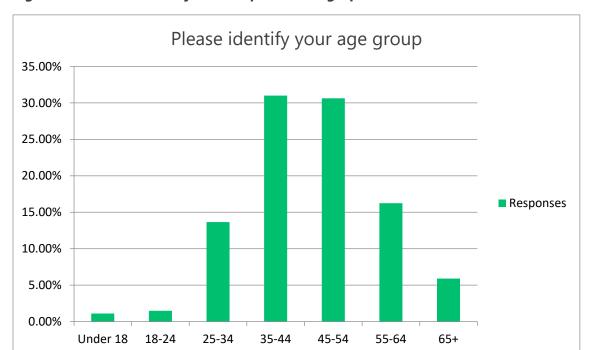


Figure 68: HAMPO Survey - Participant Demographics

3. WikiMapping

The incorporation of the online mapping software "WikiMapping" provided a platform to gather more specific input from the community regarding current conditions and ideas for future transportation improvements. The user interface allows participants to add points or lines to the map to identify areas of concern, such as congestion, potential safety issues, and maintenance needs. Users can also identify suggested improvements, such as new roadways, pedestrian and bike facilities, and other intermodal enhancements.



Image Source: wikimapping.com





During community outreach events where internet access was not readily available, 'mini-flyers' were provided to encourage the community to visit the WikiMapping website at their convenience.

The use of interactive mapping increases accessibility of the MTP update to a broader cross-section of the community and allows an opportunity for the public to actively participate at their convenience and on their own schedule.

The responses received through the WikiMapping platform were then mapped and analyzed for incorporation into the MTP. The most consistent comments received through this platform includes:

- Problem Areas: US 84 Flemington/Hinesville
- High Priority Need: Hinesville Bypass East Phase II
- New Roadway: Flemington Connector from Sandy Run to US 84
- Bicycle and Pedestrian Enhancements: Fraser and Sandy Run

Figure 69 shows the mapped recommendations gathered from the public.

Design your OWN transportation improvements map online!

This is your opportunity to share your ideas about where improvements are needed for roads, intersections, sidewalks, transit, etc.

Share your input now on our interactive map! https://bit.ly/2MLQM80

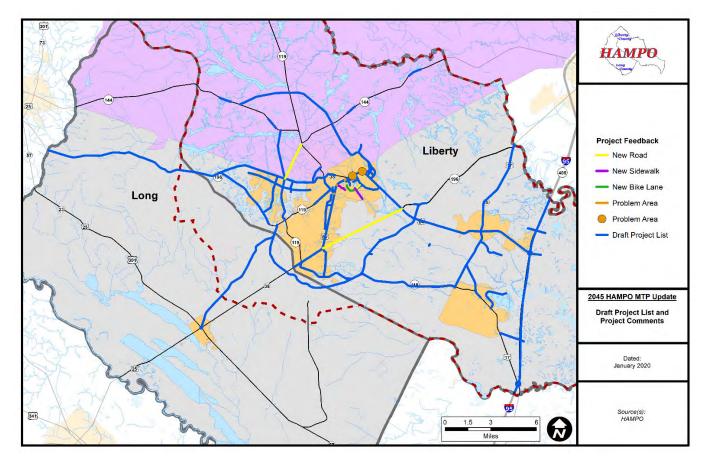


The Hinesville Area Metropolitan Planning Organization (HAMPO) is in the process of updating its Long Range Transportation Plan (LRTP), also known as the Metropolitan Transportation Plan (MTP), which will provide a "roadmap" for transportation investments through the year 2045.

www.thelcpc.org/hampo 912.408.2030



Figure 69: WikiMapping Results



B. Meetings and Workshops

4. Community Workshops

Connecting to the public through public workshops and community events was vital for engaging with residents in the HAMPO region. A series of in-person engagement opportunities were programmed and structured to "meet people where they are" by integrating outreach into existing community events. This approach proved beneficial for three reasons:

- Does not require a separate time commitment to give in-person input.
- Provides an opportunity to reach community members who may not normally participate in transportation planning.
- Creates a conversational and engaging atmosphere.

Two primary outreach events were hosted during the MTP planning process. These events were held during existing community events in Hinesville and in Riceboro. These locations were selected to ensure accessibility to concentrations of Title VI and Environmental Justice communities, as well as ease of access for the general public.

















Outreach Event 1: Farmers Market / Concert in the Park, Downtown Hinesville

Thursday, October 24, 2019 4:00 p.m. – 6:00 p.m.

This workshop focused on identification of existing transportation issues, goals and objectives, and investment priorities. This drop-in event was held in a storefront next to the Hinesville City Hall and adjacent to a community event, which brings artists and vendors together in a social atmosphere.

Participants were asked to provide their feedback in two primary exercises. The first was a mapping exercise to identify existing issues or concerns as well as provide ideas for new facilities that may be needed to enhance the transportation network. Sandwich board signs were produced by the City of Hinesville and placed at the community event to advertise the meeting.

To convey the challenges of fiscal limitations and identify investment priorities, participants were asked to participate in a funding prioritization exercise. Each participant was given 10 "HAMPO" dollars to spend in the following categories:

- Safety improvements
- Transit Expansion
- Transit Amenities
- Bike Ped improvements
- Operational improvements
- Construction
- Maintenance
- Add capacity

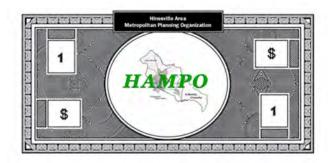


What is Driving Your Transportation Investments?

Come Join the Conversation!









Participants could spend all ten HAMPO dollars in one place or spread it among various categories. This exercise was important and helpful in explaining challenges with limited funding while facilitating discussion regarding community investment strategies and goals. This workshop also showed what the community feels is essential with regard to the inclusion of transportation projects within the MTP update.

This exercise was used at the public workshop in Hinesville, and repeated in a pop-up meeting format in Riceboro.



Outreach Event 2: Ricefest, City of Riceboro

Saturday, November 9, 2019

9:00 AM - 2:00 PM

Ricefest is an annual celebration hosted by the City of Riceboro every November to celebrate the heritage of rice farming and the Gullah Geechee culture of the community. The celebration culminates in a day-long festival with vendors, food, live music, and a parade. This event is attended by more than 30,000 visitors and attracts people from across the region. The project team set up a vendor tent and talked with over 250 individuals throughout the day, discussing the purpose of the Metropolitan Transportation Plan and what transportation changes residents would like to see in the HAMPO region. Participants completed the 'HAMPO Dollars' exercise and were given opportunities to draw concerns on a regional transportation map or provide written and/or verbal comments. The following photographs demonstrate the various input strategies and participant interaction.











Compiling the information from both the City of Hinesville and City of Riceboro 'HAMPO Dollars' exercises showed the top priority residents preferred was for Roadway Construction, followed closely by Maintenance. The full ranking is shown in Figure 70.



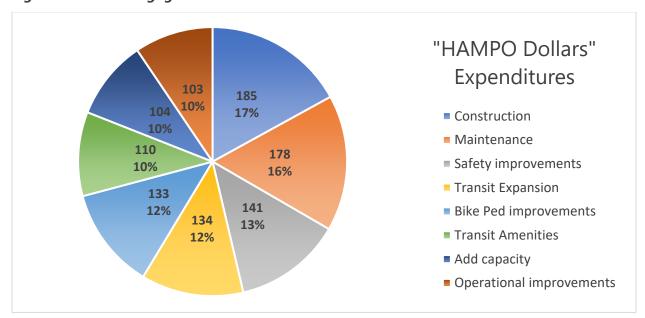


Figure 70: Public Engagement Results

5. Community Presentations

To continue the approach of "bringing the meeting to the people", a series of community presentations were scheduled to engage with members of the public and key stakeholders. Three presentations were provided including:

- Rotary Club Guest Speaker: September 16, 2019 (50 members)
- 2019 Liberty Countywide Planning Retreat Presenter: April 29, 2019 (42 participants)
- 2020 Liberty Countywide Planning Retreat Presenter: March,11, 2020 (49 of participants)

These key stakeholder groups were selected to ensure a broad cross section of decision makers and community leaders were informed about transportation issues in the region and aware of the federal MPO planning process as a prerequisite for funding. These strategic engagements included elected officials and key staff from all HAMPO local government agencies.

At these speaking engagements, PowerPoint presentations were developed to inform the participants about the MTP planning process, ongoing and upcoming activities, and opportunities for input and feedback. Each presentation included interactive opportunities for participants to engage with the presenter and offer feedback.

Poll Everywhere

Poll Everywhere is an engagement software that is embedded into presentations and provides a platform for participants to answer poll questions in real-time via mobile telephone text messaging.









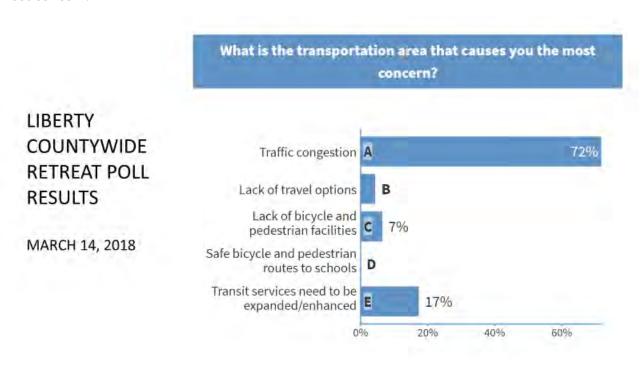








This polling platform was used to engage with the audience and provided them with the opportunity to share their opinions on goals, objectives, and priorities and see the responses of their peers. This tool not only provided valuable feedback to the planning team, it also built consensus among community leaders and officials. The following is a response summary slide showing that 72% of participants at the Countywide Planning Retreat believe that traffic congestion is the area of transportation that causes the most concern.



Information gathered from these interactive polls was combined with the feedback received at the public workshops, pop-up meeting, and survey responses; and used in the prioritization process to constrain the MTP project list, ensuring that the business community, officials, and community support service departments had an opportunity for input.

C. Public Comment Period

The final step in the public and stakeholder engagement process is the publication of the Draft 2045 HAMPO Metropolitan Transportation Plan for a 30-day public comment period. This period began on August 1, 2020 and concluded on September 1, 2020. In order to ensure the public was aware of this opportunity for comment, notices were published in the local newspaper, the Coastal Courier, and hard copies were placed at key community service headquarters including the Liberty Consolidated Planning Commission, City of Hinesville, Liberty County Annex, and the Public Library.





These draft documents were accompanied by a comment log, as well as a QR code, website address, and telephone contact information ensuring adequate opportunity and a range of methods to register comments. Comments received during this comment period were incorporated into the final report and a comment log is included in the Appendix documenting all comments and how they were addressed.

V. Plan Development

A. Technical Subcommittee

A key element of the HAMPO 2045 MTP development was the participation of a Technical Subcommittee which was formed during the initial stages of the project and comprised of the following members:

- Jeff Ricketson LCPC / TCC Voting Member / PC Secretary
- Joey Brown Liberty County / TCC Chairman / PC Non-voting Advisory
- Kenny Howard City of Hinesville / TCC Vice Chairman / PC Non-voting Advisory
- Trent Long TR Long Engineering / TCC Voting Member
- Paul Simonton Simonton Engineering / TCC Voting Member
- GDOT Planning TCC and PC Voting Members
- GDOT Intermodal TCC and PC Voting Members
- FHWA TCC Non-voting Advisory
- Kyle Wemett Fort Stewart HAAF / TCC Voting Member
- Paul Hawkins City of Flemington Mayor / TCC and PC Voting Member
- Chuck Scragg Long County / TCC and PC Voting Member

The subcommittee met at key milestones during the planning process to screen technical analysis results, provide input into the planning process and provide recommendations to the HAMPO CAC, TCC, and PC pertaining to technical aspects of the planning process. These milestones are as follows:

- January 8, 2020
 Review of Existing Conditions and Operational and Safety Analysis results
- February 25, 2020
 Concurrence with Goals, Objectives, and Performance Measures and methodology for performance-based project analysis and prioritization
- 3. March 26, 2020
 Review of preliminary performance-based project assessment and prioritization tool outputs and modifications where issues and errors were identified
- 4. April 14, 2020
 Workshop format meeting to review updated prioritized project list and finalize fiscal constraint recommendations for MPO Committee consideration
- 5. July 2, 2020



Review of TSPLOST referendum funding and incorporation into adopted MTP cost constrained prioritized project list.

Due to COVID19 social distancing and gathering restrictions, the March, April, and July subcommittee meetings were held virtually via Zoom Teleconference and were open for public participation.

The Technical Subcommittee played an integral role in the development of the performance based, cost constrained, multimodal HAMPO MTP, and will continue to meet following adoption of the plan to ensure short term implementation and funding strategies are carried forward. This committee will work closely with local government and oversight funding agencies to ensure that Transportation Improvement Program (TIP) eligible TSPLOST projects are properly documented and coordinated for seamless implementation.

B. Project Identification

The development of the unconstrained list of projects for the MTP was a multifaceted effort and relied on a variety of sources. The previous 2040 MTP was utilized as a foundation, providing a starting point for the project identification effort. The project list was updated to remove those that were already completed, had already received funding authorization, or were no longer feasible due to land development conflicts or other community changes. The following projects were identified as completed or authorized and removed from the draft 2045 MTP list.

Authorized / Completed 2040 MTP Projects:

- Flemington Curve Safety/Access Management Authorized
- Taylors Creek Bridge Replacement Authorized
- Veterans Pkwy Phase II Complete
- Russell Swamp Bridge Replacement Complete
- SR 119 / Airport Rd Widening Complete
- Barrington Ferry Rd Improvements Complete
- General Stewart Extension East Complete
- SR 38 / US 84 Safety and Access Management 5 segments between Patriots Trail and Ralph Quarterman (MTP projects 319, 321, 320, 318, 322)

The HAMPO planning team also worked closely with GDOT Planning and District representatives to identify any known or anticipated changes to projects in the adopted HAMPO TIP to ensure the draft MTP list's accuracy. The needs and deficiencies identified within the HAMPO region based on the operational and safety performance data and public and stakeholder feedback were compared to the





existing project list to determine if a project was already identified and if the recommended improvements solved the issue. For those deficiencies and needs that did not already have a project identified, a recommended improvement was identified, and the new project incorporated into the draft unconstrained list. The following chart provides an example of this analysis as it was applied for the 2015 Base Year LOS screening. The same analysis was also utilized in for the future year conditions.

Table 37: HAMPO 2015 Base Year LOS Project Analysis

Road Name	From	То	LOSD	LOSE	LOSF	HAMPO Project	Primary Project Type
US 84/SR38	US 17	Isle of Wight Rd.			x	309, 310, 311	Access Management
Islands Highway	I-95	Sunbury Rd. (Tradeport)			X	226	Widening
US 17	Luke Rd.	Bryan County Line			×	227	Widening
US 84/SR 38	Ralph Quarterman	Baker Ln			X	322	Access Management
SR 196 / EG Miles Pkwy	15th St.	Pineland Ave			x	None	Intersection Improvements / Access Management
SR 119 / EG Miles Pkwy	Mahoney Rd.	Veterans Pkwy			x	302	Access Management
Veterans Pkwy	SR 119 / EG Miles Pkwy	Fort Stewart Gate			х	None	Widening Completed 2018
US 84/SR38	Fraser Dr	Ralph Quarterman	x	x		319, 320, 321	Safety / Access Management
US 17	US 84/SR 38	Luke Rd.		X		227	Widening
15th St.	SR 196 / EG Miles Pkwy	Fort Stewart Gate		X		201	Widening
SR 119 / EG Miles Pkwy	Pineland Ave	Mahoney Rd.		X		302	Access Management
US 84/SR 38	Isle of Wight Rd.	1-95	x			309, 308	Access Management
US 84/SR 38	Holmestown Rd	Old Sunbury Rd.	X			313, 314, 315, 316, 317	Access Management
Old Sunbury	US 84 / SR 38	Joseph Martin Rd.	x			None	Flemington Loop Compromised by Land Development
US 84/SR 38	SR 119 / Talmadge Rd.	MPO's West Boundary	x			323	Access Management
Elim Church Rd.	SR 196 / EG Miles Pkwy	MPO's West Boundary	x			303	Multimodal Enhancements; Project Update Required
Pineland Ave	SR 196 / EG Miles Pkwy	Glenn Bryant Rd.	x			None	Extend Limits of 302 or New Access Management
SR 119 / EG Miles Pkwy	Veterans Pkwy	Deal St.	x			302	Access Management
SR 119 / W. General Screven Way	Gause St.	SR 119 / EG Miles Pkwy	x			302	Access Management
38 C / General Stewart Way	Memorial Drive	SR 119 / W. General Screven Way	x			255	Widening

All identified projects were compiled into a project list which included project descriptions, limits, length, type, location, existing vs proposed lane counts, and key comments; but did not include project cost estimates. The development of the HAMPO 2045 project list occurred concurrently with the development of the draft TSPLOST improvement program list, which allowed for seamless integration of potential TSPLOST projects into the MTP.

The draft project list was reviewed by HAMPO staff, the Technical Subcommittee, MPO committee members, and the HAMPO Technical Subcommittee. The HAMPO Policy Committee adopted the unconstrained project list on February 12, 2020 and subsequently transmitted to the GDOT modeling division for incorporation into the TDM.

The unconstrained list includes a total of 77 projects and the project types are shown in Table 38.

















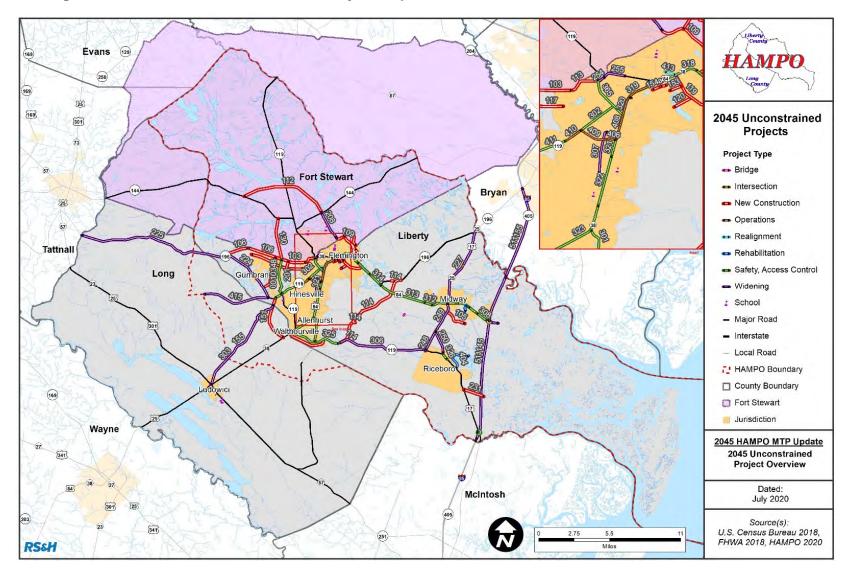
Table 38: 2045 MTP Unconstrained Projects by Type

Project Type	Amount
Access Management / Safety	17
Bridge Replacement	1
Intersection Improvements	10
ITS	1
Mix: Widening, Access Improvements	1
Multimodal Safety Enhancements	3
New Construction	19
Non-Capacity Widening	1
Operational: Signal Upgrade	3
Realignment	2
Reconstruction	3
Widening	16
Total	77

The projects contained in the unconstrained list are displayed in the map in Figure 71.



Figure 71: HAMPO 2045 Unconstrained Project Map







C. Performance-Based Planning

According to FHWA, performance-based planning and programming is a strategic approach that uses performance data to inform decision-making and outcomes. When implemented effectively, performance management can improve project and program delivery, inform investment decisions, focus staff on leadership priorities, and provide greater transparency and accountability.

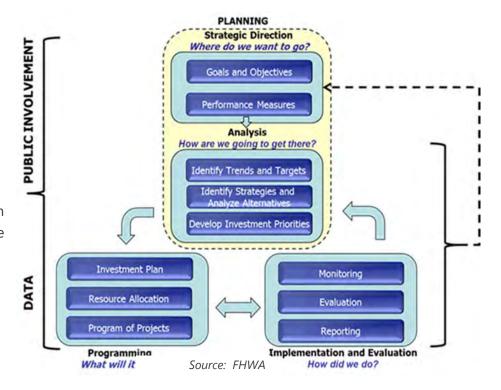
A typical planning process consists of specific steps, including an analysis of existing conditions, a review and update of goals and establishing objectives, developing, and finalizing a project list, completing a financial analysis, prioritizing, and financially constraining the project list, and developing the plan documentation. This process includes stakeholder and public engagement at every step. Due to the performance-based planning requirement in the FAST Act, this process is augmented to ensure a performance-based approach is followed. Three primary elements are included in the new performance-based planning process for MTP development, which include:

- Identifying the measures of effectiveness
- Identifying the data to be utilized in assessing these metrics
- Performance-based prioritization process that reflects the goals and objectives of the MPO

This planning process also adds a performance management and monitoring element after project

implementation to determine if the project achieved the stated goals and objectives. The following graphic developed by the FHWA shows the relationship of the performance-based planning process to project programming and post implementation monitoring.

HAMPO worked collaboratively with oversight agencies, MPO committee members, subcommittees, stakeholders, and the public to establish a project identification, assessment, and prioritization process that fulfills the FAST Act performance-based planning requirements. This multifaceted



process included the development of a "Performance-Based Project Assessment and Prioritization Tool".







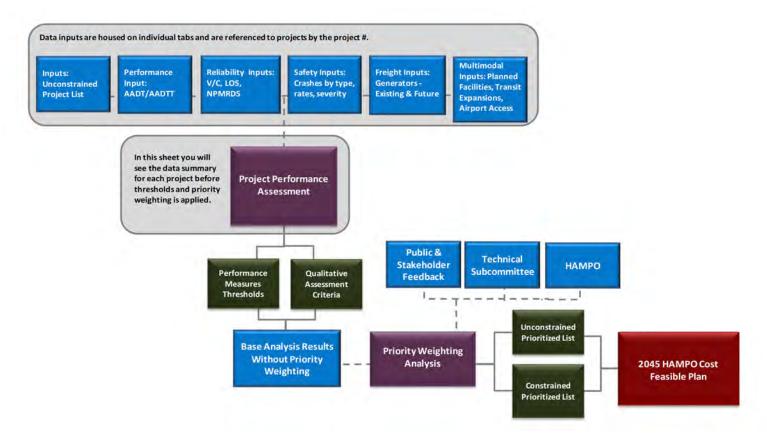




This excel based tool is built on the framework established by the adopted 2045 MTP goals, objectives, and performance measures and utilizes available data to assess and prioritize potential transportation projects for the MPO region.

Figure 72 shows a flow chart of the HAMPO Performance Based Assessment and Prioritization Process and Tool

Figure 72: HAMPO Performance Based Planning Process



The project assessment tool, which incorporated each of the identified performance measures supporting the goals and objectives established by the MPO, provided the ability to assess and prioritize each HAMPO project. The assessment utilized a data-based, quantitative approach, using data such as crash rates and level of service, as well as a more qualitative approach when specific data was not readily available, such as support of, or access to tourist activities and attractions.

These projects were assessed within the context of the category using GIS. If the project met the performance measure, it received a "yes"; if it did not meet the criteria it received a "no"; and the third category was "somewhat" meeting the criteria. These categories included freight mobility and access to generators and attractors, impacts to environmental and cultural resources, and as previously mentioned, access to tourist attractions. The qualitative assessment included points assigned to each of





the criteria ratings to provide an assigned score. More detailed information on the tool and project assessment can be found in the Appendix. The performance assessment, as aligned with the goals and objectives and the type of analysis is shown in Table 39.

Table 39: Performance Assessment Criteria

GOALS / OBJECTIVES	PERFORMANCE ASSESSMENT	QUANTITATIVE / QUALITATIVE
System Preservation and Maintenance System Management and Operation Reliability and Resiliency Economic Vitality: Freight	Bridge Sufficiency Rating Average Annual Daily Traffic Percentage of Trucks Level of Service Volume to Capacity Ratio	Quantitative: GDOT Data
Safety and Security	Total Vehicle Crashes Crash Rate Total Bike/Ped Crashes Injury and Fatal Bike/Ped Crashes Injury and Fatal Vehicle Crashes Rate of Fatalities Rate of Injuries	Quantitative: GDOT Data
Economic Vitality: Freight Economic Vitality: Defense Safety and Security: Defense Access	Supports Freight Movement Supports Defense Access to Fort Stewart/HAAF	Qualitative: Yes = 2 No = 0 Somewhat = 1
Travel and Tourism	Supports Access to Tourist Attractions	Qualitative: Yes = 2 No = 0 Somewhat = 1
Accessibility and Mobility	Improved Access to Public Airport Existing or Planned Transit Service Planned Bicycle/Pedestrian Facilities	Qualitative: Project Assessed Yes = 2 No = 0 Somewhat = 1
Environment and Quality of Life Resiliency and Reliability; Reducing Stormwater Impacts	Impacted by Sea Level Rise (NOA) Potential Impact Environmental Resources Potential Impacts to Historic Resources	Qualitative: Project Assessed Yes = 2 No = 0 Somewhat = 1

Once the project performance assessment criteria were established, a priority weighting was applied. The priority weighting, tied to the goals and federal planning factors, came from the public survey ranking,















MPO Committee ranking, Technical Subcommittee ranking, Countywide Retreat ranking, and input received through the priority exercise at the public workshops. The following table shows the various ranking results by source, as well as an aggregate priority weighting factor that was endorsed by the HAMPO Policy Committee.

HAMPO 2045 METROPOLITAN TRANSPORTATION PLAN - PERFORMANCE BASED PRIORITIZATION RANKING

HAMPO 2045 Goals	Public Survey Ranking	Public Workshops Ranking	Technical Subcommittee Ranking	HAMPO CAC Ranking	Countywide Retreat Ranking	Average Ranking	Priority Weighting Factor
Promote Quality of Life and Protect Existing Resources	7	7	3	6	3	5.20	4
Improve Safety and Security	2	3	1	1	1	1.60	8
Invest in a Multimodal System	3	4	6	8	6	5.40	3
Promote Preservation & Management of Existing System	1	2	7	3	7	4.00	6
Invest in Mobility Options	5	1	5	7	5	4.60	5
Promote Ecomomic Development and Support Freight	6	5	2	2	2	3.40	7
Promote Resiliency and Reliability	4	6	8	5	8	6.20	1
Enhance Travel & Tourism	8	8	4	4	4	5.60	2

Rank HAMPO 2045 Goals

1 = Highest Priority 8 = Lower Priority

Safety and security was identified as the top priority, followed by promoting economic development and supporting investments in the freight network. The lowest identified priority was promoting resiliency and reliability. This weighted factor was applied to each of the project performance scores to develop the prioritized project listing.

Once the multiplier had been applied, the 77 unconstrained projects were sorted based on their ranking scores. Projects currently reflected in the 2018 – 2021 TIP were not included in the ranking and prioritization process to ensure these projects continue to progress towards the construction (CST) phase. The Technical Subcommittee reviewed the prioritization tool outputs and supported efforts to identify issues and methodologies for resolution. The prioritized list was them finalized and cost estimates and detailed project sheets were prepared.

VI. Financial Analysis

A. Revenues

In order to develop the federally required financially feasible, or cost constrained plan, a detailed financial analysis must be undertaken. Revenues for funding transportation projects must be identified and balanced with the project costs over the planning horizon. Revenue estimates include funding from all potential sources at the federal, state, and local levels. HAMPO utilized state and federal revenue projections provided by GDOT that estimates the revenues anticipated to be available over the planning horizon based on historic spending data. These revenue projections were provided for both project funding and operational/maintenance funding anticipated to be available on an annual basis





between 2020 – 2045. The revenue estimates for projects is \$183,357,138; estimates over the planning horizon for maintenance total \$37,325,197 for a total revenue estimate of \$220,682,335. The revenue projections, by year from 2020 to 2045, are shown in Table 40.

Table 40: GDOT Funding Projections

2020-2045 Hinesville Funding Projections *

Year	Projects Estimate	Maintenance Estimate	Total Estimate
2020	\$6,210,100	\$1,264,163	\$7,474,263
2021	\$6,272,201	\$1,276,804	\$7,549,006
2022	\$6,334,923	\$1,289,572	\$7,624,496
2023	\$6,398,273	\$1,302,468	\$7,700,741
2024	\$6,462,255	\$1,315,493	\$7,777,748
2025	\$6,526,878	\$1,328,648	\$7,855,526
2026	\$6,592,147	\$1,341,934	\$7,934,081
2027	\$6,658,068	\$1,355,353	\$8,013,422
2028	\$6,724,649	\$1,368,907	\$8,093,556
2029	\$6,791,895	\$1,382,596	\$8,174,491
2030	\$6,859,814	\$1,396,422	\$8,256,236
2031	\$6,928,413	\$1,410,386	\$8,338,799
2032	\$6,997,697	\$1,424,490	\$8,422,187
2033	\$7,067,674	\$1,438,735	\$8,506,409
2034	\$7,138,350	\$1,453,122	\$8,591,473
2035	\$7,209,734	\$1,467,653	\$8,677,387
2036	\$7,281,831	\$1,482,330	\$8,764,161
2037	\$7,354,649	\$1,497,153	\$8,851,803
2038	\$7,428,196	\$1,512,125	\$8,940,321
2039	\$7,502,478	\$1,527,246	\$9,029,724
2040	\$7,577,503	\$1,542,519	\$9,120,021
2041	\$7,653,278	\$1,557,944	\$9,211,221
2042	\$7,729,811	\$1,573,523	\$9,303,334
2043	\$7,807,109	\$1,589,258	\$9,396,367
2044	\$7,885,180	\$1,605,151	\$9,490,331
2045	\$7,964,032	\$1,621,202	\$9,585,234
	\$183,357,138	\$37,325,197	\$220,682,335

^{*} Projection amounts are YOE \$ - (1% inflation per year)

These revenues were supplemented by a historic local match of 20% for project funding, totaling \$42,595,793 for the plan horizon. This funding has historically been sourced from Special Purpose Local



















Option Sales Tax (SPLOST) funding, and spent on Preliminary Engineering (PE), Right of Way (ROW) acquisition, and Utility Relocation (UTL) phases. This long-standing financial partnership has led to the successful advancement of transportation projects in the HAMPO region.

On June 9, 2020 Liberty and Long County voters approved a referendum to levy a \$0.01 Transportation Special Purpose Local Option Sales Tax (TSPLOST) for a five-year period, further enhancing the HAMPO 2045 MTP revenue projections. The estimated funding projections for Liberty County range from \$40 - \$46 million in total revenues. Per legislative requirements, 30% of the revenues must be spent on statewide strategic projects, while the remainder of the funds are distributed to local governments for transportation improvements. An estimate of \$13,086,600 was developed by Liberty County as projected revenues for the 30% Statewide Transportation Improvement Program (STIP) projects.

A preliminary listing of TSPLOST projects was developed to identify the strategic funding partnership to best leverage these funds for regional and local transportation enhancements. Local industries committed to financial contributions for projects of benefit to them, including \$1.5 million in matching funds from Walmart and Interstate Paper.

The GDOT Board also approved a statewide Intelligent Transportation Systems (ITS) project to install broadband cable along interstate corridors. The Interstate 95 segment in the HAMPO region was programmed in the TIP for Preliminary Engineering and supplemental funding was incorporated into the MTP for the \$4,260,000 CST phase.

With all funding sources incorporated, the 2020 – 2045 revenues for the HAMPO region totaled \$239,353,857.

B. Cost Estimation and Year of Expenditure

HAMPO developed planning level cost estimates for each phase of the unconstrained projects, including Preliminary Engineering (PE), Right of Way Acquisition (ROW), and Utility Relocation/Construction (CST). These estimates were developed for the plan's base year, and then project costs were inflated to Year of Expenditure (YOE). HAMPO and GDOT coordinated to determine the annual inflation rate used to develop the YOE costs, which is a 2.5 percent annual inflation.

The unconstrained list of 77 transportation projects total cost estimates are \$1.07 billion for base year 2020 estimates. These projects were stratified into three cost bands which include near term, mid-term, and long-term investment staging. These cost bands provide a logical progression of project implementation by phase over time. The three cost bands utilized are:

Band I: 2020 - 2025
Band II: 2026 - 2035
Band III: 2036 - 2045





The project prioritization process provided the needed information to develop the cost feasible, or cost constrained, project list when comparing the available revenues with the project costs. As previously described, the HAMPO Technical Subcommittee played an integral role in screening the results of the prioritization process and developing the final 2045 cost constrained plan. The HAMPO financially constrained plan includes 41 projects summarized by type in Table 41.

Table 41: HAMPO Constrained Projects by Type

Project Type	Amount
Access Management / Safety	13
Bridge Replacement	1
Intersection Improvements	9
ITS	1
Mix: Widening, Access Improvements	1
Multimodal Safety Enhancements	2
New Construction	3
Non-Capacity Widening	1
Operational: Signal Upgrade	2
Realignment	2
Reconstruction	1
Widening	5
Total	41

The financially constrained project list reflects transportation needs identified through technical analysis and public and stakeholder input. The projects are aligned to support the state's and national goals and performance targets while supporting local transportation priorities.

The financially constrained project list is provided in Table 42 and the corresponding map is shown in Figure 73.



July 2020 HAMPO 2045 MTP

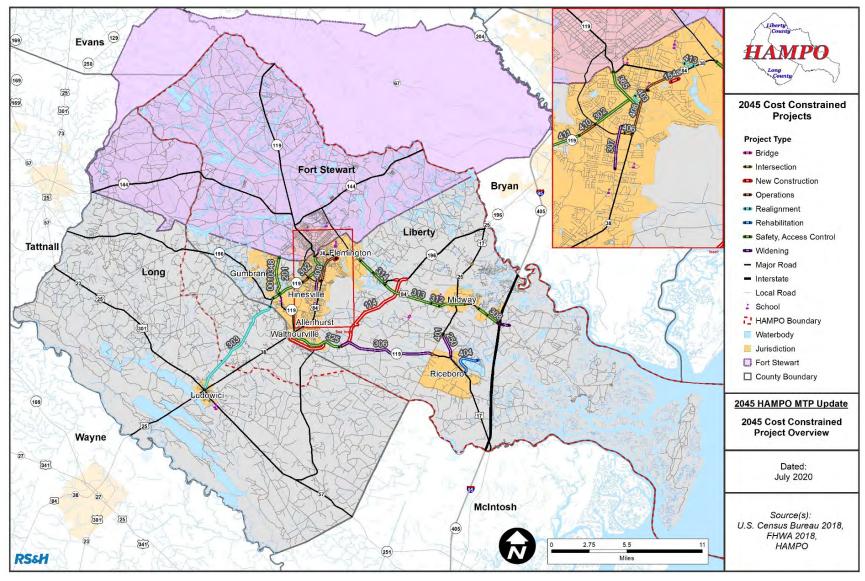
Table 42: HAMPO 2045 Constrained Project List

2045 ID	Droiget Nama	Erom	To	PE	AND 1 (2019-202 ROW	CST	PE	AND 2 (2026-203 ROW	CST	PE	ND 3 (2036-204 ROW	CST
2045 ID	Project Name	From	То	PE	KUW	C)	PE	KUW	ψ.	PE v	KUW	CST
	SR 119 @ TAYLORS CREEK 3 MI NW OF HINESVILLE US 84 Freight Connector: SR 38 BYPASS FROM SR 38/US 84 TO SR					\$ 2,909,762.00						
522570	119	US 84	SR 119			\$ 26,857,185.20						
016567	CR 171/Lewis Fraiser Rd @ Peacock Creek				\$ -	\$ 10,732,931.20	-					
0017411	I-95 FM FLORIDA STATE LINE TO S CAROLINA STATE LINE-ITS EXP	Liberty County at Bryan	Liberty County at McIntosh		s -	\$ 4,260,000.00						
403	Ryon Avenue Realignment and Corridor Improvements	SR 38/US 84/Oglethorpe Hwy		-	\$ 89,303	\$ 2,258,737	-	-	-	-	-	-
410	E.G. Miles Adaptive Signal Upgrades	15th Street	SR 196/Veterans Pkwy	\$ 52,531	\$ -	\$ 525,313	-	-	-	-	-	-
	SR 119/ SR 196 / E.G. Miles Pkwy Access Management and Safety	15th Street	Pineland Avenue	\$ 51,431	\$ -	\$ 514,314	-	-	-	-	-	-
408	US 84 Adaptive Signal Upgrades	Veterans Parkway	General Stewart Way	\$ 52,531	s -	\$ 525,313	-	-	-		-	-
	SR 38 /US 84 Safety and Access Management: TSPLOST Median Project	I-95	Charlie Butler Road	\$ 140,963	\$ 67,744	\$ 1,409,626	-	-	-		-	-
302	SR 196/E.G. Miles Pkwy Access Management: TSPLOST	Pineland Avenue	General Screven Way	\$ 304,789	\$ 609,579	\$ 3,047,895	-	-	-	-	-	-
201	15th Street Multimodal Safety Enhancements:TSPLOST	EG Miles Pkwy	Fort Stewart boundary									
				\$ 76,973	\$ 153,946	\$ 769,729	-	-	-	-	-	-
307	South Main Street Widening: TSPLOST funded intersection improvements at Veterans Pkwy	2nd Street	Kayce	\$ 336,200	\$ 672,400	\$ 3,362,000	-	-	-	-	_	-
	SR 38 /US 84 Safety and Access Management: TSPLOST Intersection Improvements and Median	US 84@Butler Avenue		\$ 51,583		\$ 316,872	_	_	-		-	_
	US 17 @ Limerick Rd. / Freedman Grove Rd Intersection Improvements TSPLOST	US 17 @ Limerick Rd.		\$ 68,447				_	_	_	_	_
406	Intersection Improvements Veterans Pkwy @ Walmart/Lowes	Veterans Parkway @ Walmart/Lowes		\$ 77,746		\$ 777,463		_	_	_	_	_
212	Oglethorpe Hwy/US 84 Safety: TSPLOST Median and	Bacontown Rd	Lewis Frasier Rd	\$ 77,746	\$ -	\$ 777,403	-	-	-	-	-	-
	Sidewalks "Cross-Roads" Intersection Improvements 119/EB Cooper	EB Cooper @ Barrington	Lowe Francis Ru	\$ 168,081	\$ 84,041	\$ 1,680,811	-	-	-	-	-	-
	Highway @ Barrington Ferry Rd. TSPLOST	Ferry Rd		\$ 139,333	\$ 92,888	\$ 1,161,105	-	-	-	-	-	-
	Interstate Paper Road Rehabilitation TSPLOST	US 17	Road end	\$ 259,034	\$ 1,051	\$ 2,590,337	-	-	-	-	-	-
401	Barrington Ferry Rd @ US 17 Intersection Improvement TSPLOST	US 17 @Berrington Ferry Rd		\$ 146,658	\$ 63,038	\$ 1,222,153	-	-	-	-	-	-
319b	Phase II SR 38 /US 84 Safety and Access Management: TSPLOST Intersection Improvements Supporting Lump Sum Safety Funded Median Project	Martin Luther King Jr. @ US 84	Fraiser Drive @ US 84									
	Phase II SR 38 /US 84 Safety and Access Management:	East Memorial Drive @ US		\$ 131,328	\$ 262,656	\$ 1,313,281	-	-	-	-	-	-
	TSPLOST Intersection Improvements Supporting Lump Sum Safety Funded Median Project	84 / SR 38		\$ 14,183	\$ 28,367	\$ 141,834	-	-	-	1	-	-
320b	Phase II SR 38 /US 84 Safety and Access Management: TSPLOST Intersection Improvements Supporting Lump Sum	SR 196 /General Screven										
	Safety Funded Median Project	Way @ US 84 / SR 38		\$ 52,531	\$ 105,063	\$ 525,313	-	-	-	-	-	-
	Phase I SR 38 /US 84 Safety and Access Management: TSPLOST Multimodal Safety Enhancements	Old Sunburry Road	Liberty County High School									
	SR 119/General Screven Access Improvements	US 84	Fort Stewart Gate 1	\$ 84,050	\$ 168,100	\$ 840,500	-	-	-	-	-	-
	SR 119/Talmadge Rd Multimodal Enhancements	US 84	US 84 Freight	\$ 338,562	\$ 169,281	-	-	-	\$ 4,228,174	-	-	-
	-		Connector	\$ 249,436	\$ 155,897	-	-	-	\$ 3,893,887	-	-	-
	Hwy 57 Intersection Upgrade	US 84 @Hwy 57		\$ 61,012	\$ 101,686	-	-	-	\$ 634,962	-	-	-
	Wallace Martin Realignment	US 84/SR 38	South of Tremain Dr. General Stewart Way	\$ 195,925	\$ 391,850	-	-	-	\$ 2,446,832	-	-	-
154a	Sandy Run/Patriots Trail Connector Phase I	Sandy Run Dr	Extension	\$ 82,100	\$ 164,200	-	-	-	\$ 1,025,317	-	-	-
228	US 84 bridge at I-95 Widening	I-95 access	I-95 access	\$ 3,177,932	-	-	-	\$ 1,653,667	\$ 33,073,346	-	-	-
226	Sunbury Rd/Islands Hwy Widening	I-95 ramp	Tradeport Access Road	\$ 708,980	-	-	-	\$ 590,279	\$ 7,378,487	-	-	-
412	SR 196 / E.G. Miles Pkwy Access Management	15th Street	Elim Church Rd.	-		-	\$ 20,671	\$ -	\$ 206,710	-	-	-
309	SR 38 /US 84 Safety and Access Management	Charlie Butler	Peach Street									
				-	-	-	\$ 141,733	\$ 70,866	\$ 1,417,333	-	-	-
0010348	15TH STREET FROM SR 196 TO GATE 7 @ FORT STEWART	EG Miles Pkwy	Fort Stewart boundary				\$ 3,026,639	\$ 6,053,277				\$ 38,74
24.4		05.400	B	-	-	-	\$ 3,020,039	φ 0,033,211	-	-		ÿ 30,7°
314	SR 38 /US 84 Safety and Access Management	SR 196	Brights Lake Rd	-	-	-	-	-	-	\$ 175,294	\$ 84,243	\$ 1,75
250	Coastal Hwy/US 17 Widening	Barrington Ferry Rd	SR 119/EB Cooper									
				-	-	-	-	-	-	\$ 2,438,753	\$ 1,219,376	\$ 24,38
306	SR 119/EB Cooper Hwy Widening	US 84/Hinesville Bypass	Barrington Ferry Rd									
311b	SR 38 /US 84 Safety and Access Management	Butler Avenue	Lewis Frasier Rd	-			-	-	-	\$ 1,305,997		\$ 13,05
				-			-	-	-	\$ 52,422	\$ 104,844	\$ 52
317	SR 38 /US 84 Safety and Access Management	Spires Drive	Old Hines Road	-		-	-	-	-	\$ 257,979	\$ 128,967	\$ 2,57
315b	Phase II SR 38 /US 84 Safety and Access Management: Mutimodal enhancements completed in Phase I.	Brights Lake Road	John Martin							6		
	SR 38 /US 84 Safety and Access Management	Bacontown Rd	SR 196			-	-	-	-	\$ 418,132		\$ 4,18
			US 84 @ SR 301 in	-		-	-	-	-	\$ 378,914	\$ 189,457	-
303	Elim Church Road Upgrade /Multimodal Improvements	SR 196	Ludowici	-		-	\$ 652,805	-	-	-	-	-
114	Hinesville Bypass Phase II (eastern segment)	US 84	SR 119	-		-	\$ 4,321,578	-	-	-	-	-
	st estimates are inflated at 2.5% annually projects are prioritized by band, the numerical order of the			\$ 7,022,339	\$ 3,433,620	\$ 68,312,860	\$ 8,163,426	\$ 8,368,089	\$ 54,305,047	\$ 5,027,490	\$ 1,935,953.00	\$ 85,22
	not dictate the order in which projects will be funded and/or			Total Project Cost		\$ 78,768,819		Cost	\$ 70,836,562	,	Cost	\$ 92,1
				Revenue Est.		\$ 78,768,819	-	Revenue Est.	\$ 70,836,562 \$ 82,762,129		Revenue Est.	\$ 92,1
				Balance		\$ (10,688,207)		Balance	\$ 11,925,567		Balance	\$ (7





Figure 73: HAMPO 2045 Constrained Projects





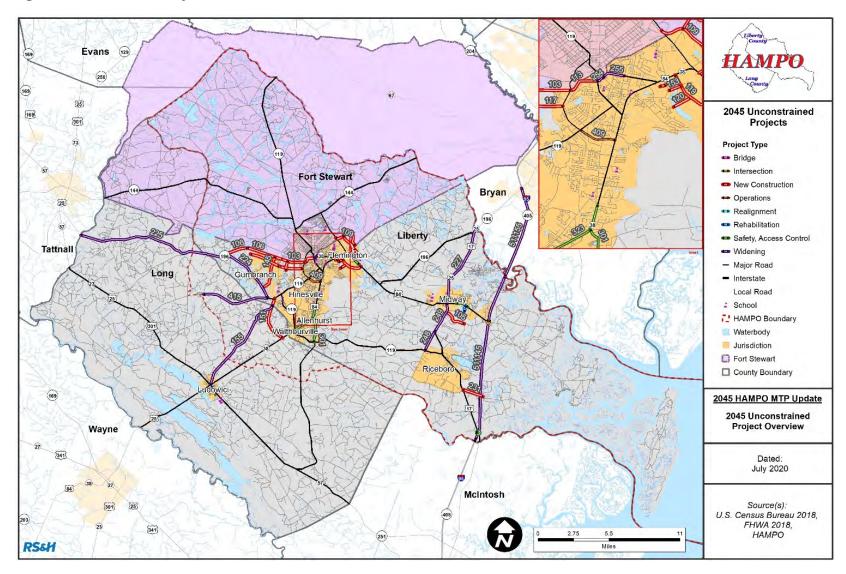


C. Unfunded Projects

Typically, transportation needs are greater than the available financial resources, and this trend is applicable in the HAMPO region. It is critical that projects identified during the MTP process not included in the cost constrained list be maintained in an illustrative element of the plan. This unfunded project list is maintained in priority ranking order as determined through the prioritization and project assessment process. Maintaining this list provides the ability to move projects into the financially feasible list should funding become available. The maintenance of this unfunded list is also an important element in the identification of projects for future plan updates. The unfunded projects are shown in Figure 74 and Table 43.



Figure 74: Unfunded Projects







Tak	ole 43: Unfunded Project List	UNF	UN	DED (Long R	ang	ge)
2045 ID	Project Name	PE		ROW		сѕт
227	Coastal Hwy/US 17 Widening	\$ 7,992,631	\$	7,992,631	\$	79,926,311
224	SR 196 W (from Rye Patch Rd) Widening	\$ 205,272	\$	5,541,254	\$	36,941,690
225	SR 196 W (to US 301) Widening	\$ 8,938,977	\$	13,408,465	\$	89,389,769
255	SR 38C/General Stewart Way	\$ 681,860	\$	1,363,720	\$	6,818,602
409	Veterans Pkwy Adaptive Signal Upgrades	\$ 95,015	\$	-	\$	950,146
231	Hampton Island Road	\$ 1,229,031	\$	1,092,668	\$	12,290,305
415	Rye Patch Road Widening	\$ 4,560,702	\$	9,121,405	\$	45,607,025
511145	I-95 Widening (8 lanes)	\$ 35,536,426	\$	190,029	\$	444,205,322
323	SR 38 /US 84 Safety and Access Management	\$ 428,438	\$	205,901	\$	4,284,377
301	Dunlevie Road Multimodal Safety Enhancements	\$ 145,154	\$	1,459,477	\$	1,814,419
316	SR 38 /US 84 Safety and Access Management	\$ 336,238	\$	336,238	\$	3,362,378
155	Elim Church Road Widening	\$ 6,187,353	\$	12,374,706	\$	61,873,530
151	Hinesville Bypass III	\$ 1,543,513	\$	3,087,025	\$	15,435,127
310	SR 38 /US 84 Safety and Access Management	\$ 300,246	\$	3,002,462	\$	3,002,462
249	Coastal Hwy/US 17 Widening	\$ 1,854,686	\$	1,854,686	\$	18,546,857
355	I-95 Intersection/ Road Improvements	\$ 142,947	\$	47,507	\$	1,429,474
109	Flemington Loop Bypass	\$ 2,486,024	\$	1,270,367	\$	24,860,236
248	Barrington Ferry Rd Widening	\$ 2,413,372	\$	1,206,686	\$	24,133,717
254	SR 38C/General Stewart Way	\$ 382,061	\$	764,121	\$	3,820,607
407	Industrial Road Upgrade	\$ 135,956	\$	-	\$	1,359,562
354	I-95 Intersection/ Road Improvements	\$ 95,015	\$	47,507	\$	950,146
511155	I-95 Widening (8 lanes) .8 miles included in HAMPO MPA	\$ 31,324,435	\$	190,029	\$	391,555,442
113	Central Connector/ General Stewart ext.	\$ 1,940,282	\$	3,880,563	\$	19,402,817
145	Independence Rd (N-S)	\$ 3,945,520	\$	1,895,361	\$	49,319,001
103	Central Connector/ General Stewart ext. 2	\$ 2,448,336	\$	4,896,671	\$	24,483,356
117	15th St/Frank Cochran Connector	\$ 1,324,653	\$	2,649,305	\$	13,246,527
106	Central Connector (W)	\$ 2,971,602	\$	5,943,203	\$	29,716,017
105	Cay Creek Extension	\$ 1,605,295	\$	617,595	\$	16,052,960
119	Flemington Connector / Peacock Creek Rd	\$ 1,052,681	\$	2,105,362	\$	10,526,809
153	Developer Road	\$ 237,537	\$	1,021,703	\$	5,108,517
120	Sandy Run Drive Extension	\$ 479,965	\$	959,929	\$	4,799,647
147	Live Oak Church Rd	\$ 277,477	\$	475,539	\$	4,721,870
414	WAAF / Midcoast Regional Joint Municipal Airport Access Road	\$ 651,608	\$	1,303,215	\$	6,516,077
146	Independence Spine Rd (E-W)	\$ 1,044,884	\$	2,089,768	\$	10,448,840
129	WAAF Access Road	\$ 48,533	\$	-	\$	485,331
154b	Sandy Run/Patriots Trail Connector Phase II	\$ 48,533	\$		\$	485,331
- Note that	sost estimates are inflated at 2.5% annually projects are prioritized by band, the numerical order of the projects will not dictate the	\$ 125,092,254	\$	103,583,021	\$	1,533,770,000
order in wh	ich projects will be funded and/or constructed.		Со	st	\$	1,762,445,275



D. Future Transit Initiatives

The most recent Transportation Development Plan (TDP) adopted in May 2018 provided recommendations grouped into three service scenarios. Those scenarios are summarized as:

- Scenario 1: Cost Neutral Improvements
- Scenario 2: Moderate Service Improvements
 - A: Fixed Route Solutions
 - o B: Alternative Service Model Solutions
- Scenario 3: Premium Service Improvements

The Transit Steering Committee for the TDP adoption process reached a consensus that included a hybrid of Scenarios 1 & 2, with two implementation strategies: implementing cost neutral adjustments from Scenario 1 as soon as possible and applying for supplemental grant funding and preparing municipal budgets for incremental implementation of Scenario 2 improvements. The Hinesville City Council supported this recommendation and chose the hybrid 2B as the preferred alternative.

The preferred alternative includes all of Scenario 1 improvements which were used as the framework for the service recommendations of the TDP, and those recommendations are separated by short-term, mid-term, and long-improvements. The short-term recommendations include improvements that can be made in one-to two years, and those are listed below:

Route 6 Realignment

 Discontinue service on Fort Stewart, supporting concerns of access and security protocol. Service can be reinvestment into the core service areas.

Route 7 Realignment

 Reroute service to stop at the Liberty Regional Medical Center (LRMC). The Liberty Transit system was designed to use the LRMC as a major transfer hub for all routes.

• Route 8 Scheduling Changes

 Relax schedule to achieve better on-time performance. The current schedules do not provide sufficient time to maintain scheduled time-points.

• Route 8 Extension

o Extend service to Walmart Market on US 84 and Melanie Drive.

• Route 8 Realignment

- Reroute service to access Department of Family and Child Services (DFCS) and Diversity Health's future location on Frasier Drive.
- Reroute limited YMCA loop service to serve new Walmart Community Market located on US 84 at General Stewart.

The mid-term recommendations include improvements that are identified to occur within the next two to five years, and those are listed below:





• Route 6 Improved Service

o Close mid-day service gap, eliminating confusing and limited service.

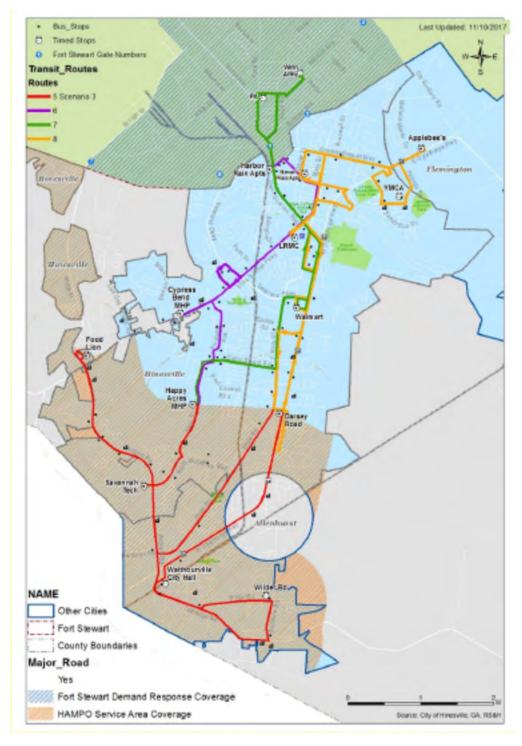
• Route 8 Improved Service

- Convert YMCA loop service from limited service to standard service. This loop provides trips to low-income and minority communities, and connects directly to jobs, services, medical, and grocery destinations.
- o Add a bus to improve frequencies from two hours, to hourly service.
- Serve limited services areas in Walthourville and West-Hinesville with demand response service in lieu of fixed-route. This is done by using the paratransit service structure to provide trips to destinations anywhere in the designated serviced demand response service area. Additional service delivery options could include brokered services to private providers, such as Uber/Lyft, and Coastal Regional Coaches.
- o Maintain Route 7 fixed route service on Fort Stewart until access agreement modifications are needed.

The map in Figure 75 shows the preferred alternative (Scenario 2B) service map, with the updated changes to Routes 6, 7, and 8.



Figure 75: Liberty Transit Proposed Service Map



The preferred alternative also recommended policy and system support investments to enhance the transit agencies efficiency and effectiveness. These recommendations include:

• Enhances Marketing and Outreach Activities and Investments













- Enhance On-line Accessibility
- Community and Peer Agency Coordination
- Enhance Monitoring and Reporting Activities to Include Performance Targets
- Improved Municipal Management Protocol
- Rolling Stock and Capital Equipment
- Technology Investments
- Technical Support and Studies

The following tables show the operating projections and the capital projections for Liberty Transit

Table 44: Transit Operating Funding Projections

	Approved TIP Cost Schedule											ions
		FY 18		FY 19		FY 20		FY 21		FY 22		FY 23
Total Cost	\$	473,626	\$	485,467	\$	497,603	\$	510,043	\$	525,345	\$	541,105
Federal Cost	\$	236,813	\$	242,733	\$	248,802	\$	255,022	\$	262,672	\$	270,553
State Cost												
Local Cost	\$	236,813	\$	242,733	\$	248,802	\$	255,022	\$	262,672	\$	270,553

Federal funding source for each fiscal year is Title 49 USC 5307

Table 45: Transit Capital Funding Projections

	Approved TIP Cost Schedule										TDP Projections		
		FY 18		FY 19		FY 20		FY 21		FY 22		FY 23	
Total Cost	\$	607,439	\$	622,625	\$	638,190	\$	654,145	\$	673,769	\$	693,983	
Federal Cost	\$	85,951	\$	498,100	\$	510,552	\$	523,316	\$	539,016	\$	555,186	
State Cost	\$	60,744	\$	62,262	\$	63,819	\$	65,415	\$	67,377	\$	69,398	
Local Cost	\$	48,595	\$	49,810	\$	51,055	\$	52,332	\$	53,902	\$	55,519	

The funding projections were extrapolated to the year 2045 to demonstrate the anticipated transit operating and capital funding through the plan horizon.





Table 46: Transit 2045 Funding Projections

Fiscal Year	Ор	erating Funding Estimates	 oital Funding Estimates	
2020	\$	497,603	\$ 638,190	TIP
2021	\$	510,043	\$ 654,145	Authorized
2022	\$	528,048	\$ 673,769	
2023	\$	538,608	\$ 687,244	
2024	\$	549,381	\$ 700,989	
2025	\$	560,368	\$ 715,009	
2026	\$	571,576	\$ 729,309	
2027	\$	583,007	\$ 743,895	
2028	\$	594,667	\$ 758,773	
2029	\$	606,561	\$ 773,949	
2030	\$	618,692	\$ 789,428	
2031	\$	631,066	\$ 805,216	
2032	\$	643,687	\$ 821,321	
2033	\$	656,561	\$ 837,747	
2034	\$	669,692	\$ 854,502	
2035	\$	683,086	\$ 871,592	
2036	\$	696,747	\$ 889,024	
2037	\$	710,682	\$ 906,804	
2038	\$	724,896	\$ 924,940	
2039	\$	739,394	\$ 943,439	
2040	\$	754,182	\$ 962,308	
2041	\$	769,266	\$ 981,554	
2042	\$	784,651	\$ 1,001,185	
2043	\$	800,344	\$ 1,021,209	
2044	\$	816,351	\$ 1,041,633	
2045	\$	832,678	\$ 1,062,466	
Total	\$	17,071,835	\$ 1,789,643	

VII. ENVIRONMENTAL IMPACTS

In order to understand the potential impacts of the identified MTP projects to the community and the environment, the 2045 cost constrained project map was overlaid with natural, cultural,















and historic resources. The projects were assessed by their proximity to Title IV and Environmental Justice populations, wetlands, sea level rise, existing greenspace and parks, historical landmarks, and sites in the HAMPO planning area. The HAMPO region's location in coastal Georgia and the prevalence of creeks, rivers, salt marsh and coastlines make the region vulnerable to negative environmental impacts associated with transportation improvements. With this nature of these sensitive resources, many of the areas are under the regulatory jurisdiction of environmental agencies, including the Georgia Department of Natural Resources (DNR). Lands under the jurisdiction of DNR were identified and evaluated to ensure proposed projects are environmentally feasible.

A. Natural Resources

1. Wetlands

The wetlands found in the Coastal Georgia area, including Liberty County, provide many environmental benefits, as well as contribution to the natural beauty of the area. However, these wetlands are also prone to flooding. The largest concentration of wetlands is east of I-95, while some portions of Midway and Riceboro also contain flood prone areas. These low-lying regions often flood and for corridors within these areas, access can be limited or even impossible to navigate during flooding events. Figure 76 shows wetlands and DNR managed lands in the HAMPO planning region.



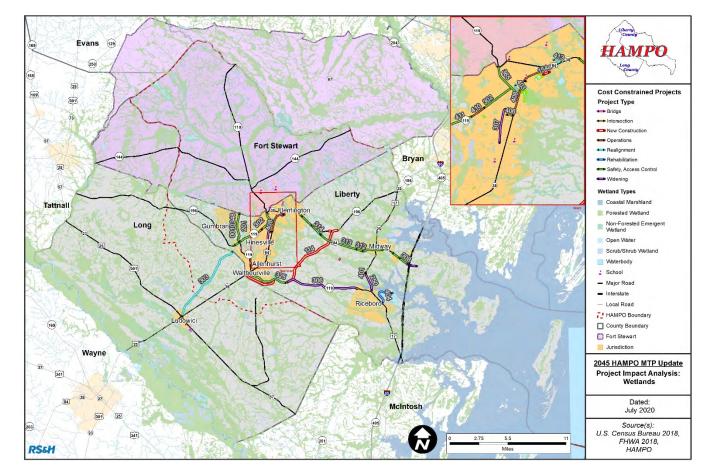


Figure 76: Impacts Analysis - Wetlands

2. Sea Level Rise

The National Oceanic and Atmospheric Administration developed sea level rise scenarios that predict in 2045, Coastal Georgia will have an average of two feet of sea level rise. Projects that are located in areas expected to be impacted by sea level rise were scored based on their ability to mitigate the effects of sea level rise. For instance, roadway projects identified for a flood prone area subject to sea level rise will be considered for raising the roadway elevation to ensure ongoing access to the region. Figure 77 shows a two-foot level increase of sea level in the HAMPO region. Although sea level rise is focused on both sides of I-95, the majority of the impacts are located on the eastern side.



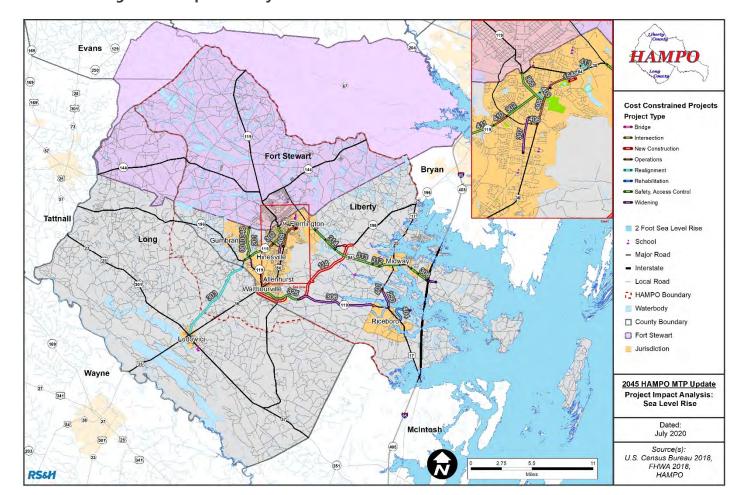


Figure 77: Impacts Analysis - Sea Level Rise

3. Historic Sites

Historical landmarks and sites were reviewed during this MTP update process. Potential impacts from the projects were evaluated to ensure no adverse impacts to those landmarks and sites in the HAMPO region. Historic landmarks in the HAMPO region are displayed in Figure 78.





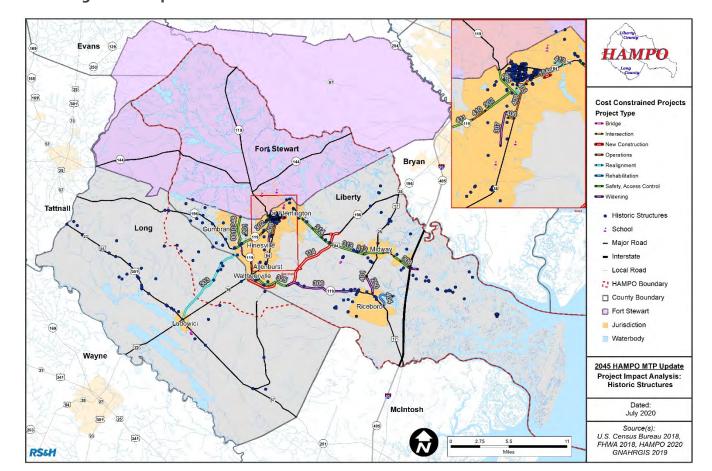


Figure 78: Impacts Assessment - Historic Resources

4. Hurricane Evacuation Routes

Safe and dedicated access to hurricane evacuation routes is vital to the HAMPO region. For thousands of citizens who choose to evacuate during hurricane events, evacuation routes need to be secure, dependable, and able to handle large volumes travelers. Proposed projects along the evacuation routes improve the efficiency of evacuation scenarios, however, it is critical that construction staging be strategically planned to avoid closures due to weather events. The main hurricane evacuation routes in Liberty and Long Counties are on US 84, GA 144, and GA 196. A map of those evacuation routes is found in the figure below.





5. Air Quality

The Environmental Protection Agency (EPA) has not included Liberty or Long County as nonattainment areas, which are geographic areas that do not meet the primary standard for criteria air pollutants.

B. Title VI and Environmental Justice

It is critical to understand how the projects incorporated into the cost constrained project list impact Environmental Justice (EJ) communities, as well as the community and environmental resources within the planning area. The first step in the impact analysis was to overlay the projects with the identified EJ communities and determine if the projects ensured better accessibility and mobility. These communities include minority populations, elderly population concentrations, those living in poverty and those without access to a vehicle. Each of the projects was reviewed to ensure enhanced connectivity, accessibility, and mobility for these populations.

Figure 79 through Figure 83 show concentrations of EJ communities and environmental and community resources overlaid with the projects in the cost constrained list. Projects adjacent to, or within, these communities include new and/or enhanced multimodal projects, as well as a focus on improved safety. Projects include access management, operational improvements, safety enhancements, as well as the incorporation of new or improved bicycle and pedestrian

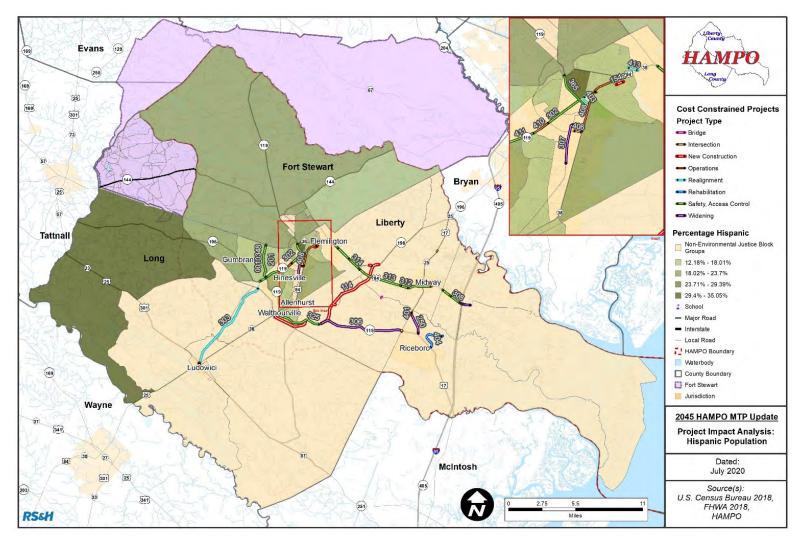




facilities. Each of the projects highlights the commitment of the HAMPO in the provision of a safe, accessible, connected transportation system and the protection and preservation of the sensitive environmental and community resources.













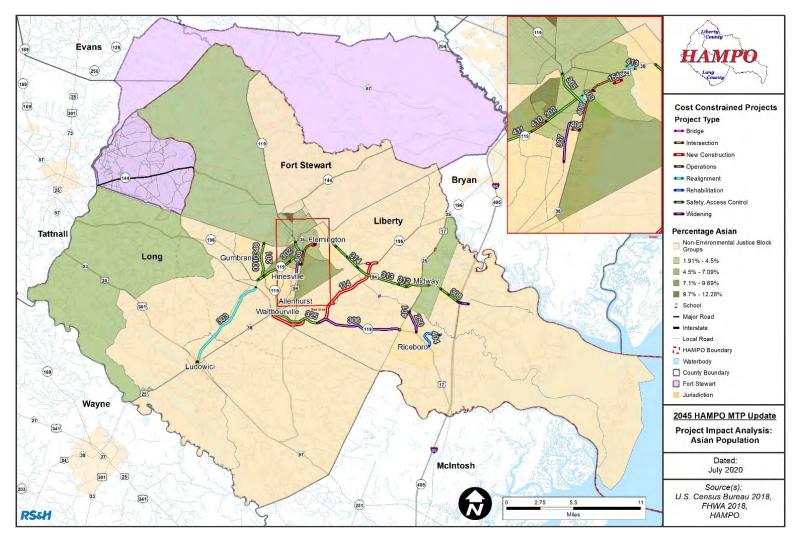
















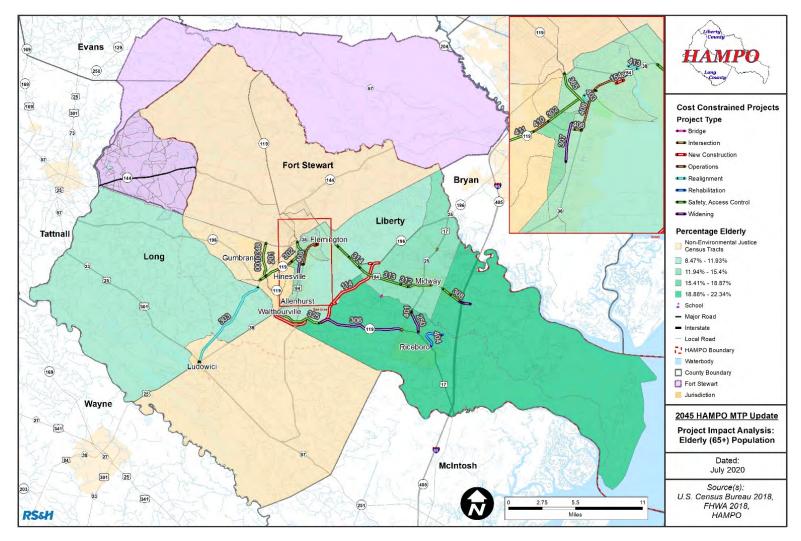














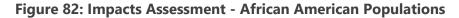


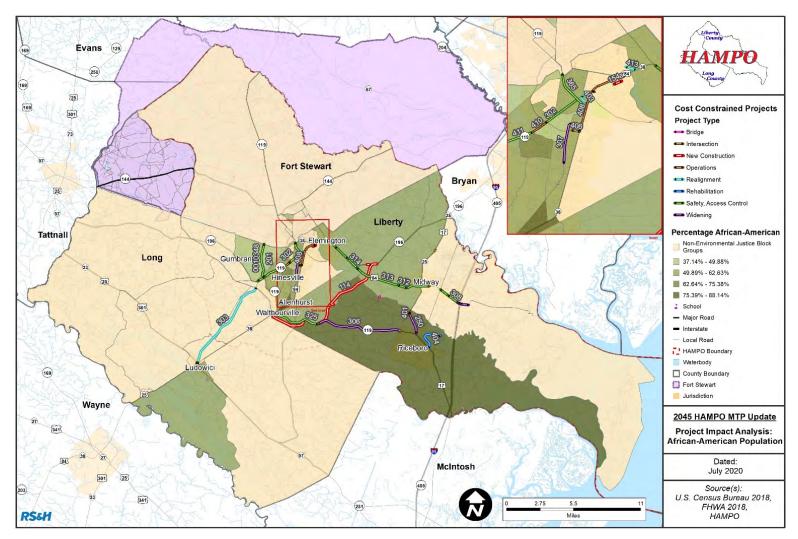
















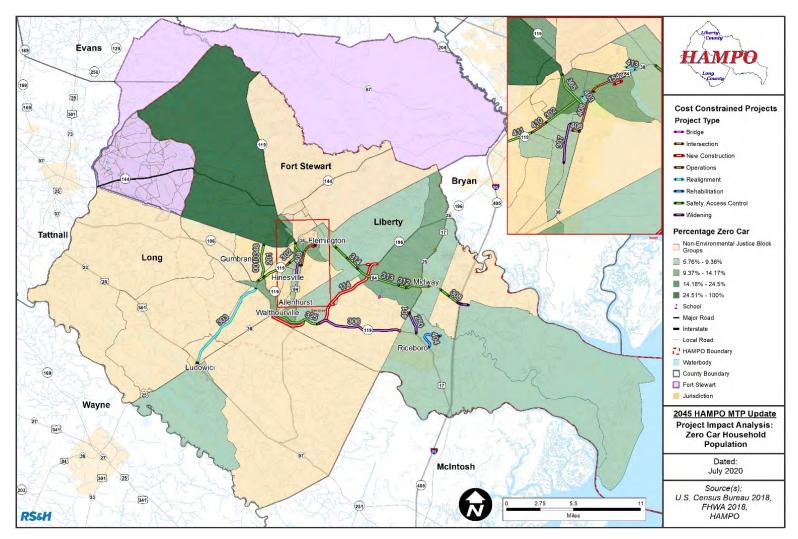


















VIII. Implementation and Monitoring

One of the key steps of the performance-based planning process is assessing and evaluating projects after their implementation. This assessment allows for projects to be reviewed for their effectiveness and determining if they have met their stated goals. Projects that are intended for safety improvements will be assessed to determine if crash rates, injuries, and fatalities have decreased.

Each project was also assessed to show how each project is anticipated to have a positive effect on the identified performance targets. Each of the projects were assessed to ensure that all contributed to the performance targets. The assessment is found in Table 47.

Table 47: Performance Target Project Assessment

2045 ID	Project Name	PM1: Safety	PM2: Pavement and Bridge	PM3: Travel, Freight, Reliability, and Delay		
522570	US 84 Freight Connector: SR 38 BYPASS FROM SR 38/US 84 TO SR 119		~	~		
0016567	CR 171/Lewis Fraiser Rd @ Peacock Creek	~	~			
0017411	I-95 ITS	~		~		
403	Ryon Avenue Realignment and Corridor Improvements	~	~	~		
410	E.G. Miles Adaptive Signal Upgrades	~		~		
411	SR 119/ SR 196 / E.G. Miles Pkwy Access Management and Safety	~		~		
408	US 84 Adaptive Signal Upgrades	~		~		
308	SR 38 /US 84 Safety and Access Management: TSPLOST Median Project	~		~		
302	SR 196/E.G. Miles Pkwy Access Management: TSPLOST	~		~		













2045 ID	Project Name	PM1: Safety	PM2: Pavement and Bridge	PM3: Travel, Freight, Reliability, and Delay
201	15th Street Multimodal Safety Enhancements: TSPLOST	~		
307	South Main Street Widening: TSPLOST funded intersection improvements at Veterans Pkwy	~	~	~
311a	SR 38 /US 84 Safety and Access Management: TSPLOST Intersection Improvements and Median	~		~
405	US 17 @ Limerick Rd. / Freedman Grove Rd Intersection Improvements TSPLOST	~		~
406	Intersection Improvements Veterans Pkwy @ Walmart/Lowe: TSPLOST	~		~
312	Oglethorpe Hwy/US 84 Safety: TSPLOST Median and Sidewalks	~		~
222	"Cross-Roads" Intersection Improvements 119/EB Cooper Highway @ Barrington Ferry Rd. TSPLOST	~	~	~
404	Interstate Paper Road Rehabilitation TSPLOST	~	~	~
401	Barrington Ferry Rd @ US 17 Intersection Improvement TSPLOST	~	~	~
319b	Phase II SR 38 /US 84 Safety and Access Management: TSPLOST Intersection Improvements @ MLK Jr. Dr. Supporting Lump Sum Safety Funded Median Project	~	~	~
319c	Phase II SR 38 /US 84 Safety and Access Management: TSPLOST Intersection Improvements @ East Memorial Dr. Supporting Lump Sum Safety Funded Median Project	~	~	~















2045 ID	Project Name	PM1: Safety	PM2: Pavement and Bridge	PM3: Travel, Freight, Reliability, and Delay
320b	Phase II SR 38 /US 84 Safety and Access Management: TSPLOST Intersection Improvements @ General Screven Way Supporting Lump Sum Safety Funded Median Project	~	✓	~
315a	Phase I SR 38 /US 84 Safety and Access Management from Old Sunbury to Liberty High: TSPLOST Multimodal Safety Enhancements	~		
365	SR 119/General Screven Access Improvements	~		~
325	SR 119/Talmadge Rd Multimodal Enhancements	~		
304	Hwy 57 Intersection Upgrade	~	~	~
413	Wallace Martin Realignment	~		~
154a	Sandy Run/Patriots Trail Connector Phase I	~		~
228	US 84 bridge at I-95 Widening	~	~	~
226	Sunbury Rd/Islands Hwy Widening	~	~	~
412	SR 196 / E.G. Miles Pkwy Access Management	~		~
309	SR 38 /US 84 Safety and Access Management from Charlie Butler to Peach	~		~
0010348	15th Street Widening	~	~	~
314	SR 38 /US 84 Safety and Access Management from SR 196 to Brights Lake	~		~















2045 ID	Project Name	PM1: Safety	PM2: Pavement and Bridge	PM3: Travel, Freight, Reliability, and Delay
250	Coastal Hwy/US 17 Widening	~	✓	~
306	SR 119/EB Cooper Hwy Widening	~	~	~
311b	SR 38 /US 84 Safety and Access Management from Butler Ave. to Lewis Frasier Rd.	~		~
317	SR 38 /US 84 Safety and Access Management from Spires Dr. to Old Hines	~		~
315b	Phase II SR 38 /US 84 Safety and Access Management from Brights Lake to John Martin: Multimodal enhancements completed in Phase I.	~		~
313	SR 38 /US 84 Safety and Access Management from Bacontown Rd to SR 196	~		~
303	Elim Church Road Upgrade /Multimodal Improvements	~	~	
114	Hinesville Bypass Phase II (eastern segment)		~	~

A. HAMPO TIP Systems Performance Report

Publication of the System Performance Report for PM1, PM2, and PM3 and incorporation into the MTP and TIP. The System Performance Report for the performance measures, along with the Policy Committee resolutions, is found in the Appendix. An example highlighting a project from the performance base planning process if found in Figure 84. Performance Based Planning Project Spotlight





Figure 84. Performance Based Planning Project Spotlight

PERFORMANCE BASED PLANNING SPOTLIGHT VETERANS PARKWAY WIDENING



The City of Hinesville partnered with Fort Stewart, Georgia Department of Transportation, and the Federal Highway Administration to fund the Veterans Parkway Widening Project. This project was completed in 2018 which provided an opportunity to assess the effectiveness of this project during this MTP update. The Base Year Travel Demand Model Network utilized roadway and travel data from 2015, prior to the widening project. This resulted in a TDM output recording this roadway as LOS F.

TDM Network #3 "Existing Plus Committed" scenario incorporates projects that have been completed between the base year scenario and current year. This network incorporated the widened roadway conditions on Veterans Parkway, resulting in a model output rating of LOS D for this roadway. The widening project was able to reduce the Volume to Capacity ratio from 1.6 to .7

This example of performance-based planning in the post construction phase of a project will serve as a template for future projects currently under construction in the HAMPO region.

