

## 2015 - 2040

# **Metropolitan Transportation Plan**







Liberty Consolidated Planning Commission September 10, 2015

April 5, 2016: Amendment #1



#### HINESVILLE AREA METROPOLITAN PLANNING ORGANIZATION

#### A RESOLUTION ADOPTING THE 2015-2040 METROPOLITAN TRANSPORTATION PLAN

WHEREAS, federal regulation for urban transportation planning require that the Metropolitan Planning Organization, in cooperation with participants in the planning process, develop and update the Metropolitan Transportation Plan (MTP) every five years; and

WHEREAS, the Hinesville Area Metropolitan Planning Organization has been designated by the Governor as the Metropolitan Planning Organization (MPO) of the Hinesville urbanized area: and

WHEREAS, the Hinesville Area Metropolitan Planning Organization in accordance with federal requirements for a Metropolitan Transportation Plan, has developed a twenty-year integrated plan for federally-funded highway and transit projects for the Hinesville urbanized area: and

WHEREAS, the MTP is consistent with all plans, goals and objectives of the Hinesville Area Metropolitan Planning Organization and shall be updated at least every five years with revisions to reflect changes in program emphasis and anticipated funding availability; and

WHEREAS, the urban transportation planning regulations require that the MTP be a product of a planning process certified as in conformance with all applicable requirements of law and regulations; and

WHEREAS, the staff of the Hinesville Area Metropolitan Planning Organization and the Georgia Department of Transportation have reviewed the organization and activities of the planning process and found them to be in conformance with the requirements of law and regulations; and

WHEREAS, the locally developed and adopted process for public participation has been followed in the development of the 2040 MTP.

NOW, THEREFORE BE IT RESOLVED, that the Hinesville Area Metropolitan Planning Organization Policy Committee endorses the attached 2040 Metropolitan Transportation Plan for the period 2015-2040; and

**BE IT FURTHER RESOLVED**, that the Hinesville Area Metropolitan Planning Organization Policy Committee finds that the requirements of applicable law and regulation regarding urban transportation planning have been met and authorizes the MPO Executive Director to execute a joint certification to this effect with the Georgia Department of Transportation.

ADOPTED this 10th day of September, 2015 by the Hinesville Area Metropolitan Planning Organization Policy Committee.

SIGNED:

ATTEST:

Mayor Daisy Pray, Policy Committee Chair

AICP; LCPC Executive Director



#### **RESOLUTION OF THE** HINESVILLE AREA METRPOLITAN PLANNING ORGANIZATION APPROVING AN AMENDMENT TO THE FY 2015-2018 TRANSPORTATION IMPROVEMENT PROGRAM AND AN AMENDMENT TO THE 2040 METROPOLITAN TRANSPORTATION PLAN

WHEREAS, the Hinesville Area Metropolitan Planning Organization (HAMPO) has been designated by the Governor of the State of Georgia as the metropolitan planning organization responsible for conducting transportation planning activities in the Hinesville urbanized area, which consists of urbanized Long County, Liberty County, Fort Stewart Military Reservation, the Town of Allenhurst, and the Cities of Flemington, Gum Branch, Hinesville, Midway, Riceboro and Walthourville; and

WHEREAS, the Federal Highway Administration and the Federal Transit Administration have reviewed the organization and activities of the planning process and certified them to be in conformance with the requirements of law and regulations; and

WHEREAS, HAMPO, in accordance with federal requirements for a Transportation Improvement Plan, has developed a four-year integrated plan of federally-funded highway and transit projects for HAMPO Metropolitan Planning Area; and

WHEREAS, the 2015-2018 Transportation Improvement Plan (TIP) is consistent with all plans, goals, and objectives of HAMPO and was adopted by the HAMPO Policy Committee on August 14, 2014; and

WHEREAS, the 2040 Metropolitan Transportation Plan (MTP) is consistent with all plans, goals, and objectives of HAMPO was adopted by the HAMPO Policy Committee on September 10, 2015; and

WHEREAS, the locally developed and adopted process for public participation has been followed in the development of the TIP and MTP amendment; and,

WHEREAS, HAMPO proposes to add two bridge projects, PI #: 0013750; SR 119 at Taylors Creek 3 Mi. NW of Hinesville and PI #: 0013719; SR38/US84@ Doctors Creek 3 Mi. E of Ludowici to the TIP and MTP.

NOW, THEREFORE BE IT RESOLVED that the Hinesville Area Metropolitan Planning Organization Policy Committee approves this amendment to the Transportation Improvement Program for the FY 2015-2018 and approves this amendment to the 2040 Metropolitan Transportation Plan.

CERTIFICATION, I hereby certify that the above is a true and correct copy of the Resolution adopted by the Hinesville Area Metropolitan Planning Organization Policy Committee on November 19, 2015.

Mayor Daisy Pr mmittee Chair

ATTEST:

Jav 19, 2015 date

ICP; LCPC Executive Director



## PREFACE

As a result of the 2000 Census, the Hinesville Area Metropolitan Planning Organization (HAMPO) was established as a federally designated transportation planning agency to address transportation planning within the urbanized portions of Liberty and Long Counties. According to federal law, the transportation planning process must be carried out by MPOs for designated urbanized areas that exceed a population of 50,000, as well as the area expected to become urbanized within the next 20 years. HAMPO is staffed by the Liberty Consolidated Planning Commission (LCPC) and operates under the leadership of a Policy Committee comprised of elected officials and other decision makers from each participating jurisdiction, the Georgia Department of Transportation, and other state and federal agencies. A Technical Coordinating Committee and Citizens Advisory Committee provide valuable input to the Policy Committee on transportation issues.

As the designated MPO for Liberty County and Urbanized Long County, the HAMPO is responsible for overseeing long range transportation planning within the MPO planning area. The ultimate goal of this planning process is to create an effective public policy framework for mobility and development together with a set of priority transportation investments that will address the area's current and long-term needs and visions.

The Hinesville Area Metropolitan Planning Organization is committed to the principle of affirmative action and prohibits discrimination against otherwise qualified persons on the basis of race, color, religion, national origin, age, physical or mental handicap, or disability, and where applicable, sex (including gender identity and expression), marital status, familial status, parental status, religion, sexual orientation, political beliefs, genetic information, reprisal, or because all or part of an individual's income is derived from any public assistance program in its recruitment, employment, facility and program accessibility or services.

The Hinesville Area Metropolitan Planning Organization is committed to enforcing the provisions of the Civil Rights Act, Title VI, and all the related requirements mentioned above. The Hinesville Area Metropolitan Planning Organization is also committed to taking positive and realistic affirmative steps to ensure the protection of rights and opportunities for all persons affected by its plans and programs.

The opinions, findings, and conclusions in this publication are those of the author(s) and not necessarily those of the Department of Transportation, State of Georgia, or the Federal Highway Administration.

This document was prepared in cooperation with the Georgia Department of Transportation and the Federal Highway Administration.



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## AMENDMENTS:

No. 1: April 5, 2016

On November 19, 2015 the Policy Committee approved adding two bridge projects to the TIP and MTP:

- N402 PI #: 0013750; SR 119 at Taylors Creek 3 Mi. NW of Hinesville, and
- N403 PI #: 0013719; SR38/US84@ Doctors Creek 3 Mi. E of Ludowici.

See page iv for the authorizing resolution and pages 75 to 77 for the amended project schedule and maps. Project details are in the 2015-2018 Transportation Improvement Plan as amended November 19, 2015.

## INTRODUCTION

The Long Range Transportation Plan (LRTP) was recently renamed the Metropolitan Transportation Plan (MTP) by the federal legislation Moving Ahead for Progress in the 21<sup>st</sup> Century (MAP-21). This 25 year MTP, with a planning horizon of 2040, 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. The HAMPO boundary, which includes all of Liberty and the urbanized portion of Long County, is shown below.

The Liberty Consolidated Planning Commission and HAMPO determined that there were significant changes in land use and mobility options within the study area that have occurred since the adoption of the 2035 LRTP which warranted a comprehensive approach to the 2040 MTP update. These changes include the development of the new Comprehensive Planning Regulations by the Georgia Department of Community Affairs (DCA), the implementation of Liberty Transit fixed route transit system in Hinesville, Fort Stewart and Flemington, the implementation of the Coastal Regional Coaches rural transit system, facility and employment expansions at industrial ports and manufacturing facilities within Liberty County, significant population growth in Long County, and the changing mission and deployment status of Fort Stewart military base.

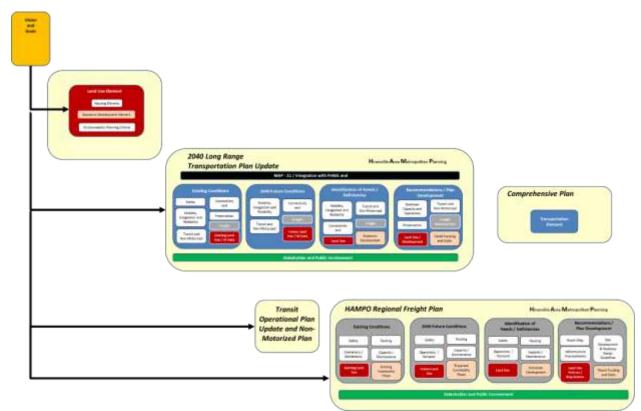




The desire and need to define how these significant changes will impact the growth and development of Liberty and urbanized Long Counties and the supporting transportation infrastructure led to the development of an integrated planning approach called *"Forward 40" Progress through Planning*. The Forward 40 study includes the following study components:

- Consolidated Countywide Comprehensive Plan Update Liberty County
- 2040 Metropolitan Transportation Plan Update
- Transit and Non-Motorized Plan
- HAMPO Regional Freight Plan

The integrated approach to this planning effort establishes a single set of goals and objectives to facilitate coordinated land use and transportation initiatives. A common stakeholder committee was also developed to ensure consistency throughout the planning process. Another significant benefit of the integrated planning approach is the ability to aggregate resources for the planning process rather than repeating data collection, existing conditions analysis, socioeconomic modeling, outreach and committee coordination for each study individually. The figure below demonstrates how the integrated planning approach components function.



The MTP component of the Forward 40 study contains recommendations for various types of surface transportation including streets and roadway projects, bicycle and pedestrian facilities, and transit system improvements. The MTP is required to demonstrate its financial feasibility by defining the anticipated revenues from local, state and federal sources projected over the planning horizon and ensuring that these financial resources adequately cover the proposed projects cost.



The plan is divided into horizon years, or "cost bands," of either five or ten years. Within each of the cost bands, the project costs and anticipated revenues must be identified by the year of expenditure, or dollars that are adjusted for inflation from the present time to the expected year of construction. For the HAMPO 2040 MTP, the cost bands are:

Band 1: 2015 – 2020 Band 2: 2021 – 2030 Band 3: 2031 – 2040 Illustrative: Beyond 2040

By conducting a financial analysis and demonstrating financial feasibility, or fiscal constraint, the MTP meets the federal long range planning standards, and presents a list of projects for implementation through the plan's horizon year. In addition, those projects for which funding is not anticipated to be available are also captured in an unfunded project list, or Illustrative/Vision Plan.

## Moving Ahead for Progress in the 21<sup>st</sup> Century (MAP-21) Regulation

Since the adoption of the HAMPO 2035 LRTP, the federal regulatory and transportation planning landscape has changed due to the July 2012 passage of Moving Ahead for Progress in the 21<sup>st</sup> Century (MAP-21), the federal transportation funding authorization legislation. Compliance with MAP-21's new and revised planning provisions is required for new and updated plans. These provisions are described more fully in the joint regulation issued by the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) (23 U.S.C., Section 134 (h)).

MAP-21 emphasizes key points to be incorporated into the MTP. These points include the establishment of a transparent and accountable framework for identifying multimodal capital projects and project prioritization, establishment of a sound multimodal planning process, and the incorporation of the eight planning factors that remained consistent from the previous legislation (SAFETEA-LU):

- 1. Support the economic vitality, especially by enabling global competitiveness, productivity and efficiency
- 2. Increase the safety of the transportation system for motorized and non-motorized users
- 3. Increase the security of the transportation system for motorized and non-motorized users
- 4. Increase the accessibility and mobility of people and freight
- 5. Protect and enhance the environment, promote energy conservation, improve quality of life, and promote consistency between transportation improvements and economic development patterns
- 6. Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight
- 7. Promote efficient system management and operation
- 8. Emphasize the preservation of the existing transportation system

The goals and objectives established for the Forward 40 integrated plan and 2040 MTP are consistent with the eight federal planning factors.



In addition, MAP-21 specifies that the MTP should include the identification of transportation facilities (all modes) that should function as an integrated metropolitan planning system, with emphasis on those facilities that serve the important national and regional interests.

MAP-21 also identifies that scenario based planning is a key element for analysis for transportation planning, with an assessment of how the preferred scenario has improved the system performance and overall mobility.

MAP-21 focuses on a performance driven planning process that includes established, consistent, and relevant performance targets that can be assessed to track progress towards the identified goals and targets. Operational and system management studies are a key element in this focus on performance and should examine the wide range of various strategies to address congestion, improve mobility, and develop a sustainable multimodal transportation system. The seven performance goals for MTP outlined in MAP-21 include an emphasis on:

- Safety
- infrastructure conditions
- congestion reduction
- system reliability
- freight movement and economic vitality
- environmental sustainability and
- reduced project delivery delays.

The metropolitan transportation planning process is required to document performance measures and targets established by the MPO that support the seven national performance goals and are coordinated with the Georgia Department of Transportation (GDOT) and with public transportation providers. In general, the performance standards are established at the national level, then at the state level, and then at the MPO level. The Federal Highway Administration (FHWA) has also developed a recommended approach for developing performance measures referred to as SMART: specific, measurable, agreed upon, realistic, and time-bound. In addition, the GDOT is in the process of developing its performance measures and targets, which will then be considered by the MPO for incorporation into its own process for measuring and evaluating performance. Through incorporation of the SMART planning principals and focused coordination with GDOT, HAMPO is well positioned to develop performance measures that can be incorporated into its next MTP update.

The HAMPO 2040 MTP has been developed in accordance with the new federal regulatory framework (23 CFR Part 450) ensuring compliance. Upon adoption, this plan will replace the HAMPO 2035 Long Range Transportation Plan, also called the Sustainable Mobility Plan, adopted October 15, 2010.

## FORWARD 40 PLANNING FRAMEWORK

In order to effectively plan for the future of the HAMPO region, it is critical to identify the goals and objectives that the community hopes to advance, as well as the planning partners that will work together to establish a framework for the success of the plan. This chapter will focus on the framework established through a cooperative planning process, as well as the roles and responsibilities of the local, state, regional and federal planning partners.



## Agency Coordination and Committee Structure

Since 1962, federal law has mandated that metropolitan transportation plans and programs be developed through a continuing, cooperative and comprehensive (3-C) planning process. The GDOT, the FHWA, Federal Transit Administration (FTA), and other providers of transportation services are integral partners in the planning activities of HAMPO. These planning partners work collaboratively in the development of plans and programs that address the transportation needs of the region and meet the requirements of the metropolitan planning process governed by federal law.



HAMPO is operated under the leadership of a Policy Committee. The committee is made up of the chief elected and appointed officials from all of the municipalities within the HAMPO region of Liberty County and a portion of Long County, as well as executives from the local, state, and federal agencies concerned with transportation planning. It serves as the forum for cooperative transportation decision-making and establishes transportation related policies in support of the area's overall goals and objectives. The committee reviews and approves all HAMPO programs and studies and provides guidance and direction for the development of prioritized transportation plans. Policy Committee members are shown in the following table.

Representing	Voting Members		
Mayor, City of Walthourville	Daisy Pray, Chairman		
Mayor, City of Flemington	Sandra Martin, Vice Chair		
Chairman, Liberty County Development Authority	Allen Brown		
Chairman, Long County BOC	Dwight Gordon		
Mayor, City of Hinesville	James Thomas		
Chairman, Liberty County BOC	Donald Lovette		
Mayor, City of Midway	Dr. Clemontine Washington		
Commissioner, Liberty County BOC	Gary Gilliard		
Chairman, Liberty Consolidated Planning	Jack Shuman		
Commission			
Councilmember, City of Hinesville	Jason Floyd		
Mayor, City of Gum Branch	Kathy Todd		
Chair, Liberty County Board of Education	Lily Baker		
Mayor, Town of Allenhurst	Thomas Hines		
Mayor, City of Riceboro	William Austin		
Georgia Department of Transportation	Thomas McQueen		
Representing	Non-Voting Members		
Hinesville City Manager	Billy Edwards		

#### HINESVILLE AREA METROPOLITAN PLANNING ORGANIZATION – POLICY COMMITTEE



Liberty County Administrator	Joey Brown
Executive Director, LCPC	Jeff Ricketson
Director, CORE MPO	Tom Thomson
Chair, HAMPO Citizens Advisory Committee	Richard Fowler
Garrison Commander, Fort Stewart	Colonel Kevin Gregory

The chief elected official of each municipality appoints a representative to the Technical Coordinating Committee (TCC) for their respective jurisdictions. The TCC is made up of key government and agency transportation staff members who are involved in technical aspects of transportation planning. They are tasked with review and evaluation of all transportation studies and provide recommendations to the Policy Committee. The TCC is entrusted with providing technical guidance and direction to HAMPO. Information to assist this committee is provided by professional transportation staff and input provided by citizens. Members of the TCC are shown in the table below.

HINESVILLE AREA METROPOLITAN PLANNING ORGANIZATION – TECHNICAL COORDINATING COMMITTEE (TCC)		
Representing	Voting Members	
Liberty County	Joey Brown, Chairman	
City of Hinesville	Billy Edwards, Vice Chair	
Georgia Department of Transportation, District 5	William Murphy	
Long County BOC	Dwight Gordon	
City of Walthourville	Daisy Pray	
City of Midway	Dr. Clemontine Washington	
Liberty County BOE	Dr. Valya Lee	
Hinesville Public Works	Guan Ellis	
City of Gum Branch	Kathy Todd	
Georgia Department of Transportation Planning	Morgan Simmons	
City of Flemington	Paul Hawkins	
Hinesville City Engineer	Paul Simonton	
Liberty County Development Authority	Ron Tolley	
GDOT Central Office Transit	Eileen Washington	
Liberty Consolidated Planning Commission	Jeff Ricketson	
Liberty County Engineer	Trent Long	
Master Planning Division, Fort Stewart	Kyle Wemett	
City of Riceboro	William Austin	
Representing	Non-Voting Members	
Director of Planning, Coastal Regional Commission	Allen Burns	
Federal Highway Administration (FHWA)	Olivia Lewis	
Federal Transit Administration (FTA)	Robert Buckley	
Liberty Transit General Manager	Theodis Jackson	

## HINESVILLE AREA METROPOLITAN PLANNING ORGANIZATION – TECHNICAL



Operations Manager, Liberty County Board of Education

John Lyles

The Citizens' Advisory Committee (CAC) advises the Policy Committee on matters of public opinion from individual citizens and citizen groups regarding planned changes to the HAMPO plans and programs, as well as study findings and recommendations. The Citizens' Advisory Committee ensures that citizen participation in the transportation planning process will be incorporated and is accomplished in accordance with the HAMPO Participation Plan.

HINESVILLE AREA METROPOLITAN PLANNING ORGANIZATION – CITIZENS ADVISORY COMMITTEE (CAC)			
Representing	Voting Members		
City of Gum Branch	Richard Fowler, Chair		
City of Flemington	Dr. Tim Byler, Vice Chair		
Town of Allenhurst	Carl Easton		
City of Hinesville	Cassidy Collins		
City of Hinesville	Cort Nordeoff		
City of Midway	Cynthia Gates		
City of Hinesville	Jodee Carlen		
City of Riceboro	Modibo Kadalie		
City of Walthourville	Neleen Lewis		
City of Hinesville	Richard Olson		
Armstrong State University	Ron Collins		
Fort Stewart	Sean Conner		
Savannah Technical College Terrie Sellers			

The Liberty Consolidated Planning Commission (LCPC) is the organization that staffs and maintains all administrative functions for the Hinesville Area MPO. Through this position the LCPC provides a comprehensive approach to transportation and land use planning and ensures coordination with peer agencies and organizations throughout the region.

In addition to the Coastal Regional Commission, the MPO works closely with the Coastal Region MPO (CORE). Staff from CORE are non-voting members of HAMPO; conversely, HAMPO representatives are non-voting members of CORE. CORE staff regularly participate in the HAMPO Policy Committee

meetings. Coordination on specific planning efforts also occurs for planning efforts that have a more regional impact such as transit and freight initiatives.



### Planning Emphasis

In addition to the eight federal planning factors, HAMPO has identified areas of planning emphasis focused specifically on issues that have gained national prominence. While the FHWA has recognized the importance of these issues, they are not yet specifically addressed within the framework of the federal planning regulations. These areas of emphasis include:

#### Complete Streets

All people, regardless of age, ability, income, race, or ethnicity, should be provided safe, comfortable, and convenient access to community destinations and public places. Complete Streets, coined by Smart Growth America and the National Complete Streets





Coalition, are designed to enable safe access for all users with all abilities, whether walking, driving, bicycling, or accessing public transportation. While there are many approaches to the design and



operation of a "complete street", typical amenities include various combinations of sidewalks, bicycle lanes or wide paved shoulders, bus lanes, accessible bus stops, safe crossing opportunities, median islands, pedestrian signals, curb extensions, narrower travel lanes, roundabouts/traffic circles,

and other livable community features such as trees for shade. These amenities vary based on urban and rural applications and community needs and desires. The availability of non-motorized transportation options also has positive impacts for health and quality of life for the HAMPO community. Considerations when planning for transportation projects include the promotion of active transportation and ensuring that the necessary facilities are in place to enhance the safety of pedestrians and bicyclists.

The Hinesville Area MPO has taken action through the MTP planning process to advance bicycle and pedestrian improvements to promote safe transportation alternatives and close pedestrian facility gaps within the fixed route transit service area. The HAMPO Policy Committee also adopted a complete street policy in April 2015 and has forwarded recommendations to each of the local governing bodies within the HAMPO study area for their consideration. A copy of the Complete Streets policy can be found in Appendix A and additional information regarding HAMPO bicycle and pedestrian planning initiatives are detailed in the Non-Motorized Plan, which is incorporated in this MTP.



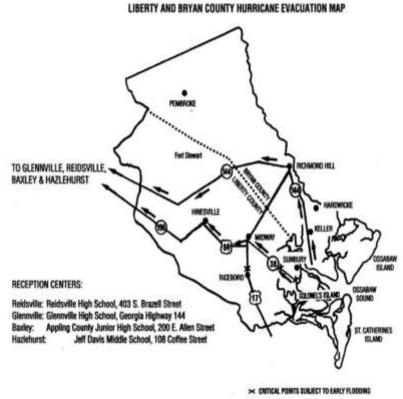
Climate change and the resulting impacts to sea level rise, water resources, and storm frequency/severity have gained national attention since the 2035 plan update. FHWA has responded to the increased focus at a federal level by completing research and providing best practices for MPOs to develop polices and strategies to mitigate these impacts from climate change. Due to Liberty County's proximity to the coast, these impacts have become a focused area of emphasis in all aspects of community planning and development. HAMPO recognizes the need for a coordinated planning approach and the importance of gaining a thorough understanding of potential environmental impacts to the transportation network.

The MPO has engaged in direct coordination with the Liberty Regional Water Resources Council to gain a comprehensive understanding of the limitations of future development scenarios based on potable water resources. The Environmental Protection Division (EPD) has designated Liberty County as a "red zone", limiting withdrawal to the current permitted capacity and prohibiting the digging of additional groundwater wells. The development of the future socio-economic scenarios for the 2040 MTP examined the existing water resources for both Liberty and Long Counties and sought guidance from the water resource council on areas of growth and growth densities based on these resources.

During the development of the MTP, the MPO also coordinated directly with the Liberty County Emergency Management Agency (LCEMA) to ensure that transportation evacuation infrastructure needed in response to threats from hurricanes, tropical storms and other weather emergencies were considered during the project list development and prioritization efforts. Evacuation routes are shown in the figure below.



#### WHERE AND HOW TO GO EVACUATION ROUTES AND DESTINATIONS



Source: Liberty County

The MPO's focused efforts on climate change and the potential impacts to the transportation system also play an important role in public education initiatives. As additional information regarding impacts of climate change become available at the national and state level, HAMPO will continue to identify strategies for public information and mitigation implementation at a local level.

**WACUATION ROUTE** 

#### Safety and Security

As population increases and roadways become more congested, implementing safety and security measures becomes an even more significant consideration. HAMPO has identified safety and security as one of its goals in this 2040 MTP to ensure future investments in the transportation network safely incorporate and accommodate all modes including motorized vehicles, bicyclists and pedestrians.

In order to gain a better understanding of existing safety concerns within the study area, the MPO obtained GDOT crash data for years 2011 – 2014 to assess the volumes, locations and severity of these accidents. Table 1 shows crash volumes by type, while Figure 1 shows the geographic locations of these accidents. As shown in the table, the total number of crashes within the study area were decreasing on an annual basis until 2014 when the number of accidents increased at a rate of 12% compared to 2013. Consistent with the increase in accidents seen in 2014, the number of injury and fatality accidents also increased from 2013 to 2014.



#### Table 1. Crash Data

	Total Crashes	Injuries	Fatalities
2011	1,582	722	10
2012	1,451	667	11
2013	1,277	539	6
2014	1,443	690	9

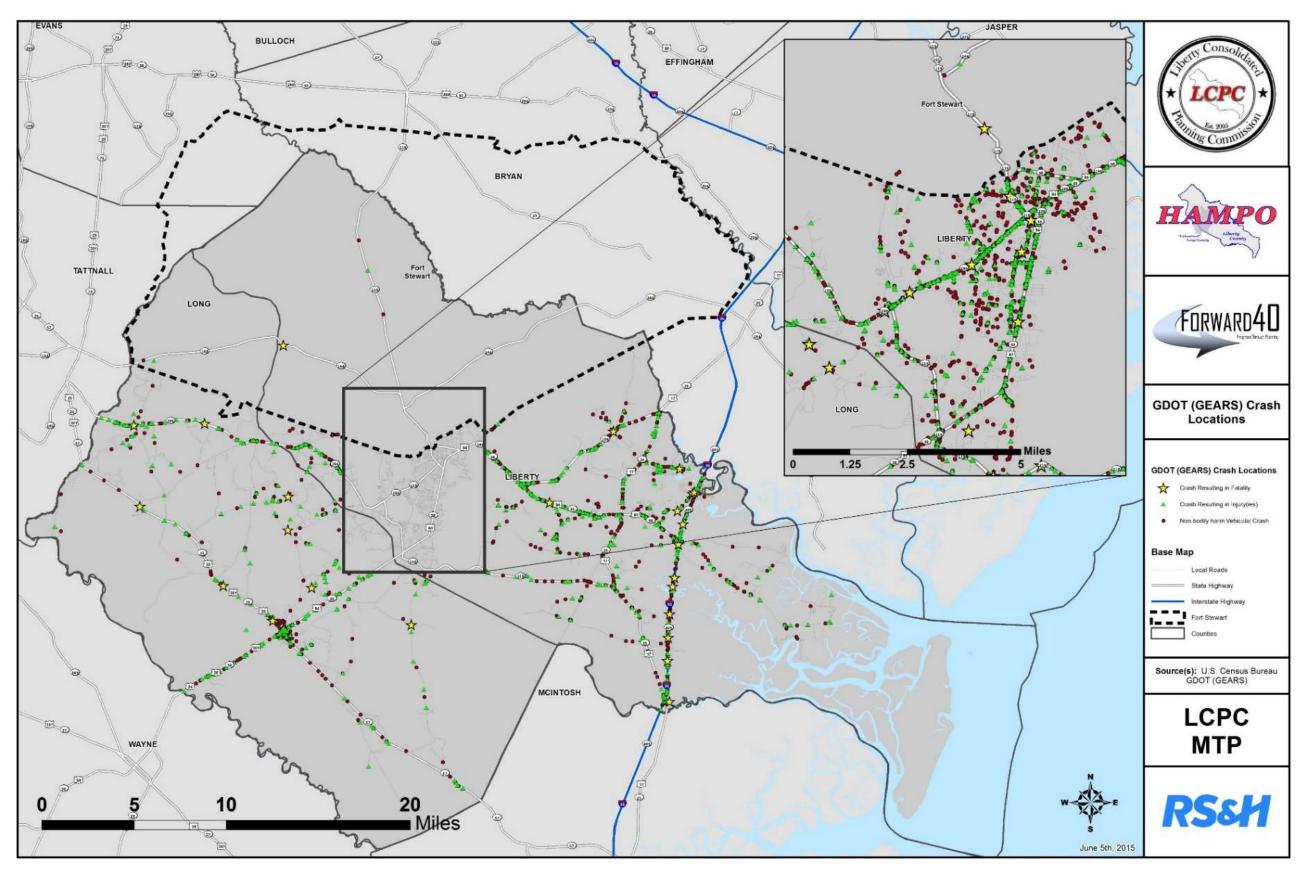
The most significant contributing factors associated with these accidents include motorists following too closely, striking objects, changing lanes improperly, and impaired or distracted driving.

These local accident trends are consistent with the increasing accident rates throughout the State of Georgia. In response to the anticipated increase in annual traffic death rates for the State, the Georgia Department of Transportation has partnered with the Governor's Office of Highway Safety and the Georgia Department of Public Safety in the development of the DriveAlert ArriveAlive campaign. Information about statewide accident statistics and accident prevention can be found at www.dot.ga.gov/DS/SafetyOperation/DAAA.





Figure 1. Crash Location





While the occurrence of accidents is distributed throughout the study area, the number of accidents is directly tied to travel volumes and population densities. In general, the more people you have traveling within a given area the greater the saturation of traffic accidents. In the HAMPO area, the presence of injury and/or fatality accidents are more prominent along I-95 and major arterial highways including US 84, 196/EG Miles Parkway, SR 119, US 17, General Screven Way, and General Stewart Way.

The HAMPO 2040 MTP made safety and security a primary factor in the project prioritization process to ensure that future transportation investments advance the MPO goals to provide a safe and dependable transportation network for all users. Projects that had larger volumes of crashes and more instances of injury or fatalities were given higher priority. Projects that have an integral safety component include various access management projects throughout the HAMPO region. These projects include the implementation of channelized medians, intersection upgrades, and improvement to non-motorized facilities. Areas identified for these improvements include US 84 through the entire HAMPO study area, 196/EG Miles Parkway from General Screven Way to Pineland Avenue, General Screven Way from US 84 to Fort Stewart Gate 1, and South Main Street from Darsey Road to Deen Street.

In addition to highway improvements, significant emphasis has been placed on the safety and security of non-motorized transportation users. All planned highway improvement projects were screened for opportunities to incorporate non-motorized facilities and a gap analysis was performed to identify locations within the urbanized area that pose safety concerns for bicyclists and pedestrians. During public workshops and through surveys, citizens were asked to provide input on the safety and security of the local transportation network and to identify specific areas of concern for the purpose of project identification. In general, the areas of greatest concern expressed by citizens were an overall lack of non-motorized facilities and crossing opportunities at major arterial highways. Areas of focused comment were US 84, General Screven Way, SR 196/EG Miles Parkway, and South Main Street. Additional information is detailed in the Non-Motorized chapter of the MTP.

#### **Regional Freight Movement**

In recent years, the movement of goods within the freight shipping industry has become an area of significant focus at the federal and state level. In 2010, the Georgia Department of Transportation completed the Statewide Freight and Logistics Plan, demonstrating their commitment to gain a comprehensive understanding of Georgia's existing freight assets and identify opportunities for future investments.

Ensuring the continued success of the growing freight-based industry within the HAMPO region is a critical area of emphasis for local planning initiatives. The vast majority of freight volume within the HAMPO planning area is carried by truck via I-95 and US 84. Other major routes for freight movement within the study area include SR 119, US 17 and SR 144. The Liberty County Development Authority promotes the growth and expansion of the five local industrial centers including Tradeport East and Tradeport West located on US 84 with direct access to I-95.

The primary function of the largest tenants of these locations is distribution, and is tied to the Port of Savannah. With the current positive growth trends of the port facilities, the freight distribution traffic associated with the Tradeport facilities mirrors those growth trends. Additional freight generators within the study area include manufacturing plants located primarily in Riceboro, Georgia with direct



access to US 17 and SR 119. While CSX has rail infrastructure that carries freight-based shipping within the study area, their primary function within the HAMPO region is pass through.

To ensure consideration of the movement of freight-based goods in the MTP planning process, various industrial, manufacturing, and shipping representatives were invited to serve on the Stakeholders Advisory Committee and provide insight within their respective industries. In addition to these coordination efforts, the MPO incorporated freight traffic volumes in the prioritization process to ensure improvements that supported the movement of goods were given priority. This approach is consistent with the 2040 MTP goals to promote economic development and advance projects that support freight movement. HAMPO has also committed to a coordinated freight planning initiative with the CORE MPO to gain a more thorough understanding of existing freight supportive infrastructure and commodity flows and to identify deficiencies that prohibit the flow of commerce within the respective study areas. Additional information on freight planning in the HAMPO region is detailed in the Freight chapter of the MTP.

#### Goals and Objectives

As a primary component of the MAP-21 planning framework, MTPs are required to incorporate the eight federal planning factors and demonstrate how these will be addressed by the MPOs.

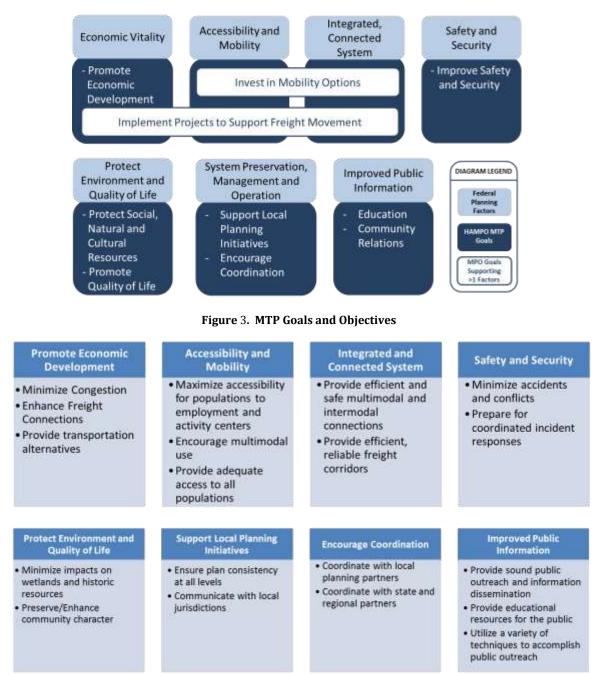
The goals and objectives identified for the HAMPO 2040 MTP were developed using the 2035 Long Range Transportation Plan goals, and are consistent with the eight federal planning factors. The Forward 40 stakeholders committee and HAMPO committees voted unanimously to maintain the planning goals and objectives approved in the 2035 plan to ensure consistency and a continuation of the advancement of the plan objectives. These goals provide the framework for the development of the plan. By identifying these goals and objectives, the MPO is providing a platform to establish standards that will help meet the mobility needs of people and goods throughout the planning area and region. Following are the goals and objectives for the HAMPO 2040 MTP:

- 1. Promote economic development
- 2. Invest in mobility options
- 3. Support local planning initiatives
- 4. Promote quality of life
- 5. Encourage coordination
- 6. Improve safety and security
- 7. Protect social, natural and cultural resources
- 8. Implement projects to support freight movement
- 9. Improve public information

Figure 2 demonstrates how the 2040 MTP goals relate to the federal planning factors, while Figure 3 details the objectives identified for each of the Federal Planning Factors.







These goals and objectives were developed in cooperation with stakeholders and members of the public and are targeted to ensure that the transportation system helps the HAMPO region attain their overall vision for the future.



## **EXISTING CONDITIONS AND REGIONAL TRENDS**

The HAMPO study area is comprised of Liberty County and the urbanized areas of Long County. Liberty County is located along the South Georgia coast and is home to the cities of Hinesville, Walthourville, Midway, Riceboro, Flemington, Allenhurst and Gum Branch. Long County, located along the southwest boundary of Liberty County, is a fast growing community with the single incorporated municipality of Ludowici. Although the MPO's jurisdiction incorporates only the urbanized area of Long County, the MTP study area incorporates all of Liberty and Long Counties. This approach ensures a comprehensive approach to the transportation recommendations for the HAMPO region.

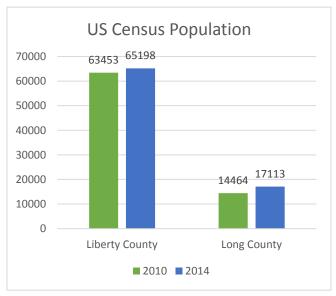
Growth in the HAMPO study area is driven by proximity to the interstate, major ports, rail lines, and Fort Stewart/Hunter Army Airfield (HAAF), the largest military installation and strategic projection platform east of the Mississippi River. The employment base and transportation system has been the backbone of growth in the region and will continue to shape how area residents, employees, and visitors live and work.

In order to assess and evaluate the current trends, performance and deficiencies of the region's transportation system, a detailed inventory and analysis of existing conditions was conducted. This analysis included an appraisal of socioeconomic data, the roadway network, bicycle and pedestrian facilities, transit service, railroads, trucking, port facilities, airports, and safety, as well as needs and strategies identified through other planning efforts.

#### Population

The population of Liberty and Long Counties has continued its upward growth trend over the last five year period. The global economic downturn resulted in a deceleration of projected growth in Liberty County, while Long County has experienced exponential growth despite the recession.

In 2010, the US Census reported the population of Liberty County to be 63,453 with a 2014 population estimate of 65,198, a 2.7% increase over the four-year period. The City of Hinesville's 2010 Census population of 33,437 has experienced an estimated 2.4% population increase over the same four-year period. Liberty County, along with all of the incorporated municipalities, unsuccessfully contested the 2010 Census population 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

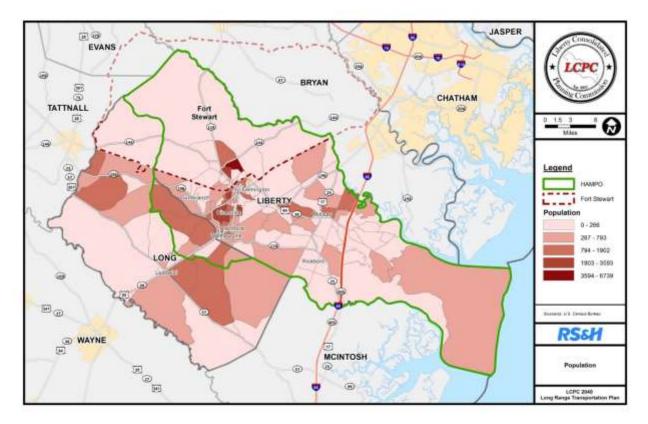


recognized within the framework of the HAMPO 2040 MTP update.

The 2010 Census population for Long County was 14,464 with a 2014 population estimate of 17,113, a 15.2% increase. This significant increase in population for Long County is concentrated within the urbanized area directly adjacent to the Liberty County boundary. One of the primary factors that has



fostered this population increase in Long County is affordable residential development within close proximity to major employers located in Liberty County. The HAMPO 2010 urbanized area population is 51,456. Figure 4 shows the 2010 population densities at the Census tract level and demonstrates that concentrations of population are found within the City of Hinesville, the urbanized areas in Long County, and inside Fort Stewart's cantonment area. The largest concentration of population within the study area can be seen along SR 144 within the Fort Stewart Military Base's newly constructed 4<sup>th</sup> Infantry Brigade headquarters (4<sup>th</sup> IBCT).



#### Figure 4. Population Density

While the effects of the global economic recession can be seen in recent population statistics, the historic growth trends for the HAMPO region are anticipated to continue. Historic growth trends for both Liberty and Long Counties are demonstrated in Table 2 and the historic trends compared with the projections are displayed in Figure 5.

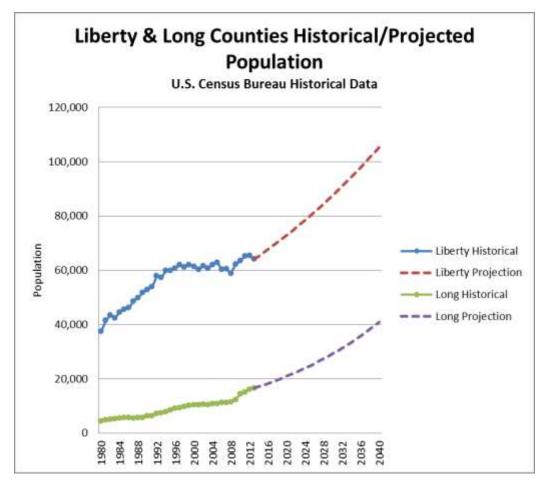
	Liberty County	Long County
1980	37,853	4,524
1990	52,906	6,341
2000	61,448	10,354
2010	63,496	14,448
2014	65,198	17,113

#### Table 2. Historic Growth Trends

Source: US Census Bureau







#### Demographics and Environmental Justice

On Feb 11, 1994, President Bill Clinton signed Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," to focus federal attention on the environmental and human health conditions of minority and low-income populations with the goal of achieving environmental protection for all communities.

There are three fundamental principles of environmental justice:

1. To avoid, minimize, or mitigate disproportionately high and adverse human health and environmental effects, including social and economic effects, on minority and low income populations;

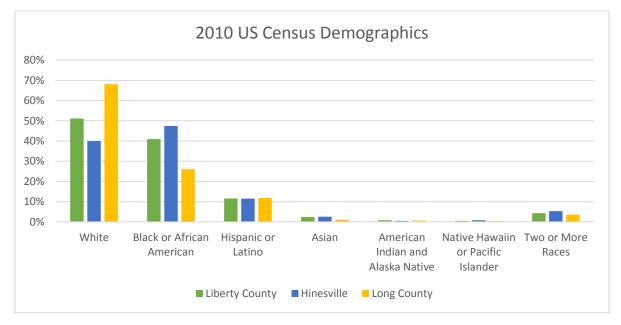
2. To ensure the full and fair participation by all potentially affected communities in the transportation decision-making process; and

3. To prevent the denial of, reduction in, or significant delay in the receipt of benefits by minority and 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 and project funding priorities.



The HAMPO study area is comprised of an extremely diverse population. Figure 6 demonstrates the breakdown of population percentage by 2010 US Census demographic category.



#### Figure 6. HAMPO Demographics

For the purposes of the Title VI analysis, the demographic categories representing at least 5% of the population including Black or African American, Hispanic or Latino and Low Income.

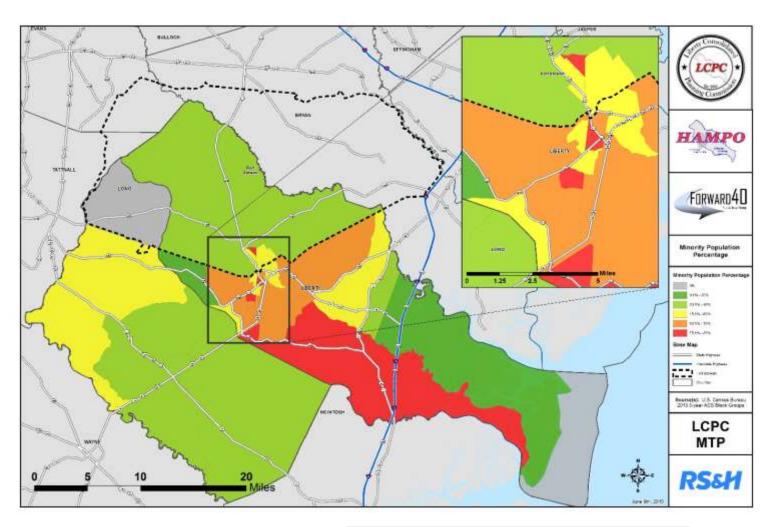
The demographic populations within Liberty and Long Counties have remained relatively consistent from 2000 to 2013. The most significant increase can be seen in the Hispanic community with an increase of 3.4% in both counties. Table 3 displays the changes by percentage in the major populations between 2000 and 2013 in both Liberty and Long Counties. The location of these populations are shown in Figure 7.

Liberty County	2000	2013
White	46.60%	51.10%
African American	42.80%	40.90%
Hispanic	8.20%	11.60%
Long County	2000	2013
White	68.40%	68.10%
African American	24.30%	26.10%
Hispanic	8.40%	11.80%

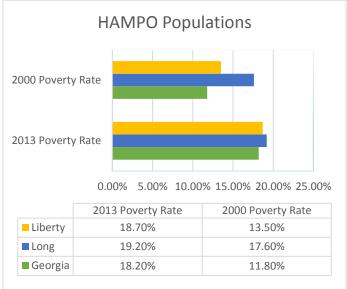
Table 3.	Population	Grouns h	y Percentage
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#### Figure 7. Minority Populations



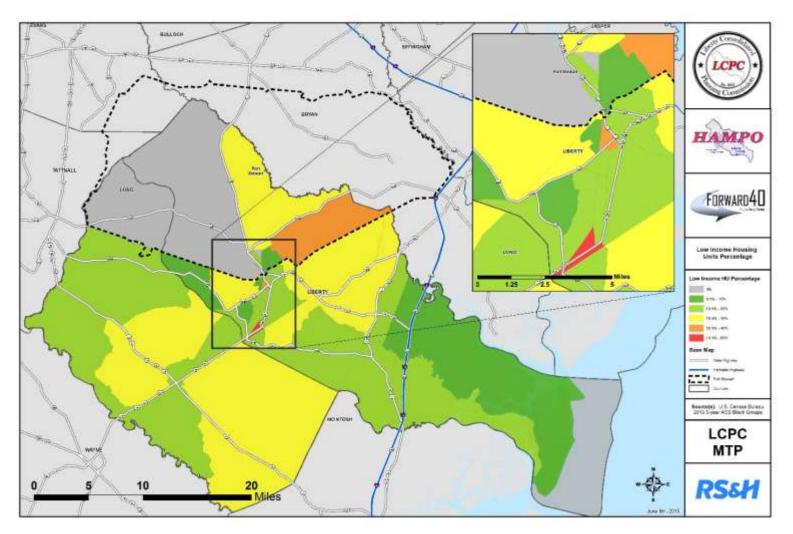
The percentage of the population falling below the federal poverty level in the HAMPO study area have experienced increases from 2000 to 2013, which is consistent with the state and national trends. While both Liberty and Long Counties have realized increases in persons below the poverty level, the rate of increase is lower than the rate of increase for the state. Figure 8 shows the locations of the low income population in the HAMPO area.



Source: US Census Bureau



#### Figure 8. Low Income Population

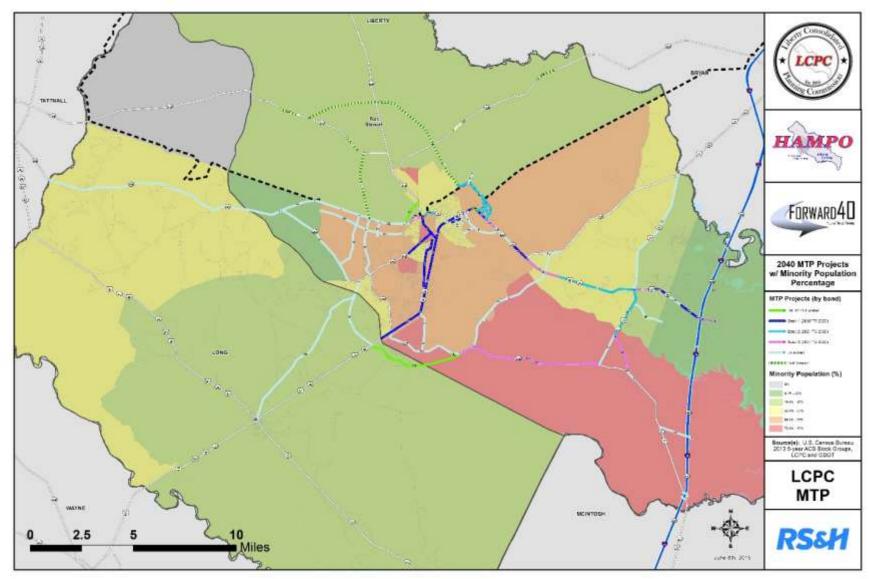


In accordance with federal requirements, the geographic locations of the identified traditionally underserved and environmental justice communities were compared with proposed transportation investments to identify opportunities for focused outreach efforts and to determine if any disproportionate impacts were anticipated. The resulting analysis showed that the proposed transportation investments for the 2040 MTP are proportionately dispersed throughout the HAMPO study area and do not present disproportionate impacts on Environmental Justice communities. The MTP projects overlaid with the minority populations are shown in Figures 9 and 10. Additional information about the EJ outreach efforts can be found in the Public Participation section of the plan.

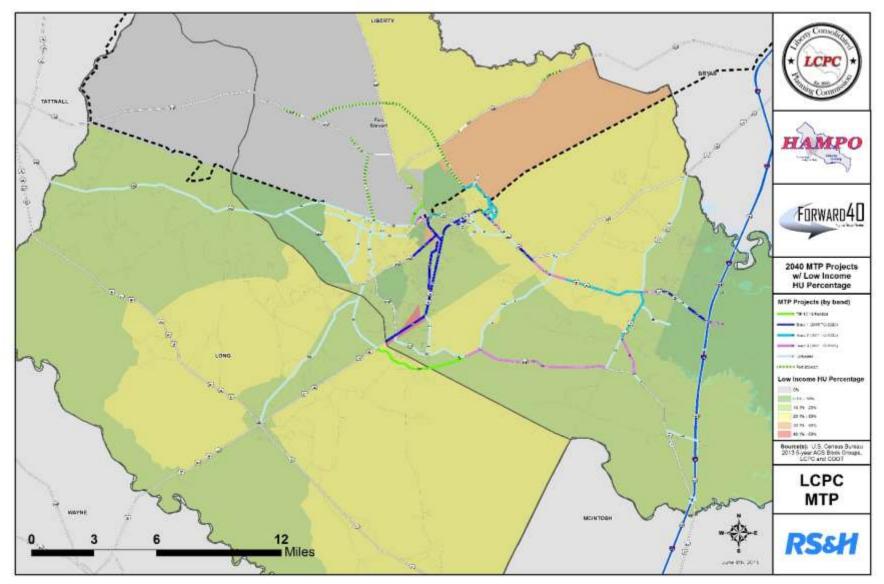


Figure 9. MTP Projects and Minority Populations









#### Figure 10. MTP Projects and Low Income Populations



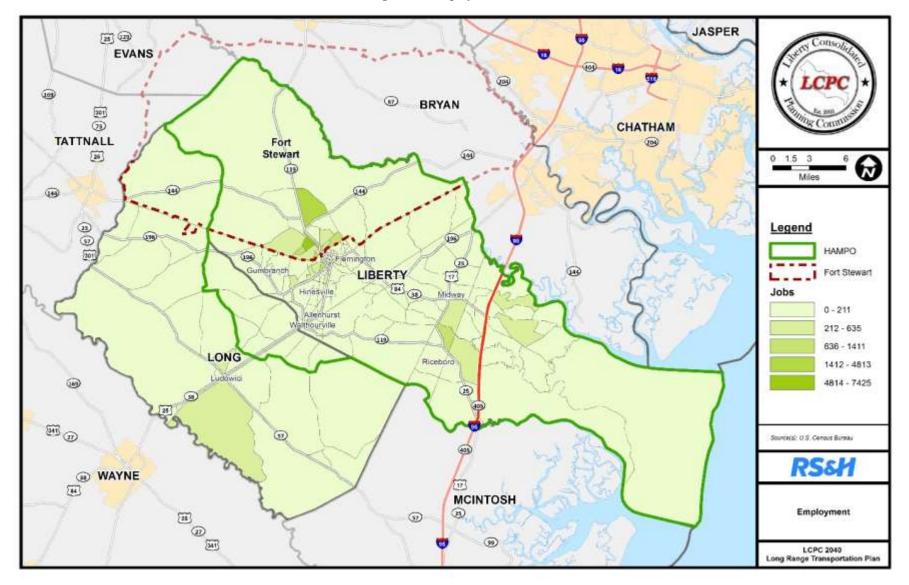
#### Employment

According to the US Department of Labor statistics, the unemployment rate for Liberty County in 2014 was 7.9%, representing 2,026 residents actively seeking employment and 7.3% or 485 residents for Long County. The combined employed workforce for both Liberty and Long Counties for 2014 was 29,918.

Comparable to the population distribution within the HAMPO study area, employment is most densely concentrated within the City of Hinesville and Fort Stewart military base. In addition to these primary employment densities, the City of Midway and the City of Riceboro also have a prominent manufacturing and wholesale industry that represents a significant employment base. While Long County's urbanized area has population saturated along the Liberty County boundary, there is a notable lack of employment opportunity within the urbanized area demonstrated in Figure 11.



Figure 11. Employment



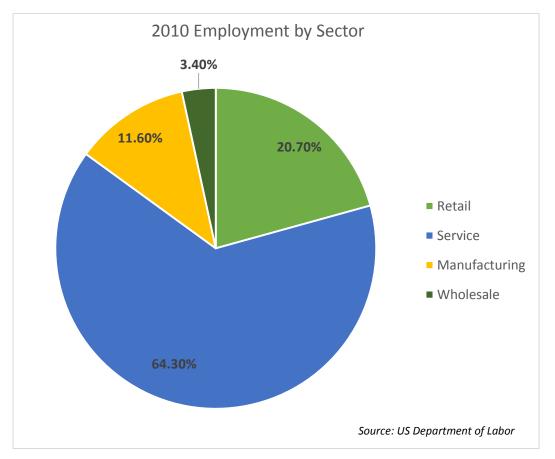


While the HAMPO study area has a diverse employment base, the primary employment sectors are service, manufacturing/wholesale, and government services. The 10 largest employers within the study area in 2014 were:

- Fort Stewart
- Liberty County Board of Education
- SNF Holding Company
- Liberty Regional Medical Center
- Walmart Super Center

- Target Distribution Center
- Liberty Board of Commissioners
- Interstate Paper, LLC
- City of Hinesville
- Hugo Boss Distribution

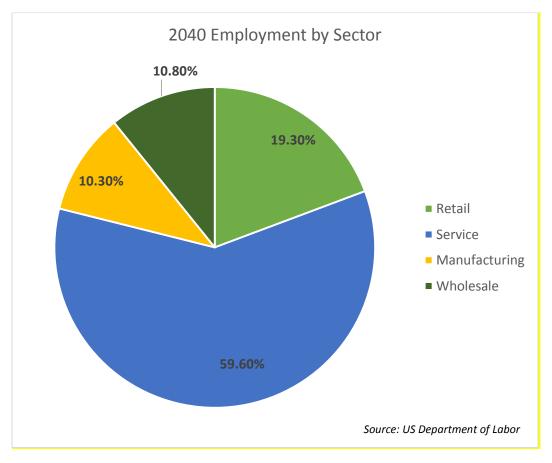
The following graph shows employment by sector for the 2010 base year of the MTP. It is evident that the primary industry in the HAMPO study area is the Service Industry at 64.3% of the total employment. Retail is the second most prominent employment sector with 20.7%, followed by the Manufacturing sector at 11.6% and Wholesale at 3.4%.



The socio-economic analysis for the 2040 MTP includes projections of employment by sector for the 2040 plan horizon. This analysis utilizes historical growth trends from the US Department of Labor as well as local projection factors such as military growth and planned employment expansions by major employers in the region. The 2040 employment is anticipated to remain consistent for both the



Manufacturing and Retail sectors at 10.3% and 19.3% respectively. However, the Service sector is anticipated to see a decrease by percentage due largely to conservative military growth projections provided by Fort Stewart, while the Wholesale industry is expected to experience an increase in employment by percentage due to planned expansions to Tradeport East and Tradeport West industrial business centers. The breakdown of employment by sector for the 2040 horizon are shown in the figure below.





Fort Stewart and Hunter Army Airfield are the home of the 3rd Infantry Division and combine to be the Army's Premier Power Projection Platform on the Atlantic Coast. It is the largest military base east of the Mississippi, covering 280,000 acres including parts of Liberty, Long, Tattnall, Evans and Bryan counties.

Despite fluctuations in troop strength resulting from various deployment missions, Fort Stewart is the largest employer within the HAMPO study area with 18,792 military jobs and 3,392 civilian support jobs reported in the 2013 population profile. Since the 2035 LRTP update, Fort Stewart has invested in several significant mission and facility expansion efforts, including the completion of the 4<sup>th</sup> Infantry Brigade Facility (4<sup>th</sup> IBCT) located along SR 144 along the North boundary of the cantonment area, the



completion of single soldier quarters on the west side of the installation and the introduction of unmanned aircraft training facilities known as Gray Eagle at the Midcoast Regional Airport. Recent Base Realignment and Closure (BRAC) analyses and community planning efforts have demonstrated the continued commitment to maintain Fort Stewart as a training and mission ready military base. While Fort Stewart's historical growth trend varies based on federal administration and deployment activities, Fort Stewart's logistics and master planning division project a conservative increase in its military troop strength of approximately 14% by the planning horizon year 2040.



Liberty County has 16 industrial companies made up of 13 manufacturing businesses and five distribution hubs. These industrial companies provided more than 3,000 jobs in 2014. Of the total industrial jobs, 59% were manufacturing of chemical and advanced materials, 24% distribution, 11% manufacturing of concrete and wood products and 6% manufacturing of consumer goods. Liberty County has five industrial parks, two within close proximity to I-95 and approximately 30 miles from the Port of Savannah. These facilities include the Tradeport East and Tradeport West Business Centers, the Midway Industrial Park, Hinesville Technology Park and Walthourville Industrial Park. It is anticipated that the deepening of the Port in Savannah will result in additional expansion and employment for the industrial distribution and manufacturing sectors within the HAMPO study area. Additional information regarding the industrial and freight-based industry can be found in the Freight Plan section, beginning on page 71.

Another major contributor to the employment base for the HAMPO region is the Liberty and Long County Boards of Education and Post-Secondary Schools. In 2014, there





were 10,092 students enrolled in Liberty County public schools and 2,508 students in Long County's school system. Since the adoption of the 2035 LRTP in October 2010, the Liberty County Board of Education has expanded to include the opening of the Liberty College and Career Academy. This new facility is located along SR 119 in the City of Walthourville and offers college preparatory courses and employment training for students enrolled in Liberty County Schools. Armstrong State University has also broken ground on their new satellite facility in the City of Hinesville and anticipates completion in 2015 – 2016.

Both Liberty Regional Medical Center on SR 196/EG Miles Parkway and Wynn Army Medical Center (WAMC) on Fort Stewart have experienced significant facility and employment expansion since 2010. Liberty Regional completed construction of a 15,440 square-foot expansion to the emergency department, while WAMC is in phase two of their expansion, constructing a new 23,000 square foot emergency department. Another advance in HAMPO's regional medical service employment base includes the opening of the Ralph H. Johnson VA Medical Center Outpatient Veterans Clinic located on US 84 at the intersection of Memorial Drive.

Liberty and Long County have seen employment trends consistent with the State of Georgia and the US and anticipate continued growth as the global economy continues its recovery.

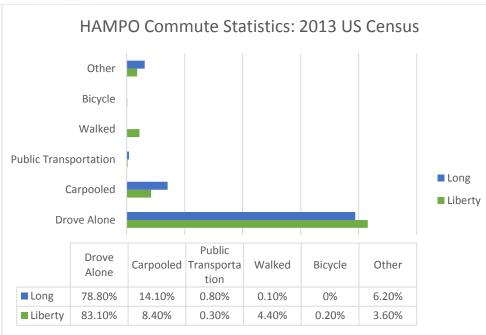
### Travel and Commuting Patterns

In order to adequately plan for future transportation investments, it is imperative that travel characteristics and patterns within the study area be analyzed and understood. Since the adoption of the 2035 LRTP, the City of Hinesville partnered with the City of Flemington and Fort Stewart to implement a fixed route transit system called Liberty Transit. This multimodal investment, coupled with a number of pedestrian and bicycle facility projects, have marked a significant shift in modal options within the HAMPO study area. Despite these investments, and an ongoing commitment to improving non-motorized transportation options, the primary mode of transportation is driving a motor vehicle alone.

In 2013, 83% of Liberty County residents reported driving to work alone, an increase from 2010's 80%. In Long County, 78.8% of residents reported driving to work alone in 2013, which decreased slightly from 79.6% in 2010. Figure 12 depicts the breakdown of travel trends reported to the US Census Bureau in 2013 for both Liberty and Long counties.

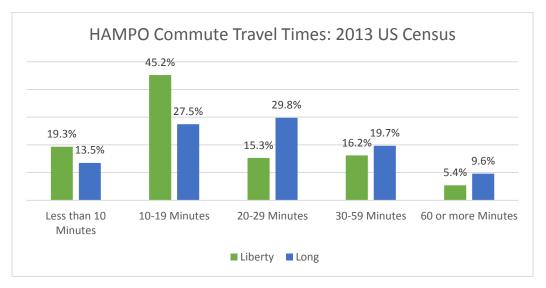
Figure 12. HAMPO Commute Statistics - 2013





The US Department of Labor reports that in 2013, 81% of Liberty County residents were employed in Liberty County while 11.2% were employed in Chatham County. The most significant number of employees commuting to Liberty County for employment were residents of Long County.

Long County's overall employment commute patterns are more dispersed than Liberty County's, with 49% of their citizens employed in Liberty County, 13.9% in Long County, 9.7% in Tattnall, 8.1% in Chatham, 8% in Wayne County, and the remainder distributed to surrounding counties. The impacts of these commute patterns are shown in Figure 13 which demonstrates the employment trip travel times reported by residents of Liberty and Long counties.



#### Figure 13. HAMPO 2013 Commute Travel Times - 2013



While there have been minor shifts in all modes of travel over the last 10 years, the mode choice and general travel patterns have remained consistent for both Liberty and Long Counties. The HAMPO region will likely continue to see shifts in these travel statistics as the employment sectors grow in various parts of the study area and increased investments in multimodal facilities continue to provide options for residents.

### **Future Projections**

The basis for predicting future travel patterns in the HAMPO region comes from socioeconomic projections, or estimates of future population and employment distributed geographically throughout the study area. The distribution of these projections is used as a primary component of travel demand modeling to demonstrate the existing pressures placed on the transportation network and anticipated future demands. The methodology used to distribute future growth in Liberty and Long Counties consisted of attributing all population and employment densities to planned developments first and then distributing the remaining projected growth to areas most likely to develop, based on:

- local comprehensive, corridor and sector planning efforts;
- municipal master plans;
- developable land without environmental sensitivity or protections; and
- areas with access to municipal water and sewer service.

The following figures show these analysis components mapped within the MPO boundary. For the purposes of this analysis, Fort Stewart's future development plans and infrastructure have been removed. The future socio-economic distribution analysis and close coordination with local planning staff provided insights to areas most likely to see significant growth within the plan horizon. Figure 14 depicts the developed and undevelopable areas; Figure 15 depicts the areas with water service; Figure 16 shows the areas with sewer service; and Figure 17 demonstrates areas considered likely to develop with high, medium, low and rural growth densities.



Figure 14. Developed and Undevelopable Areas

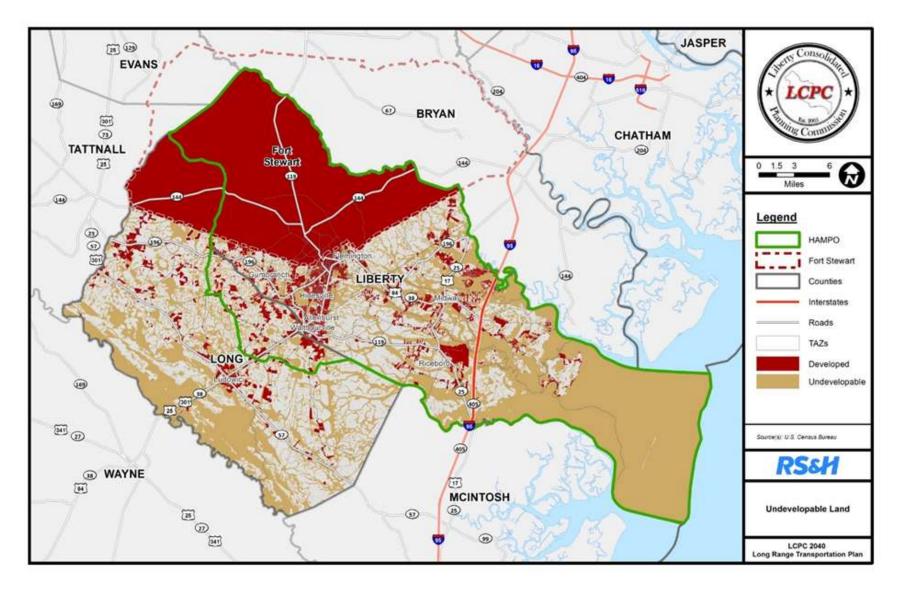
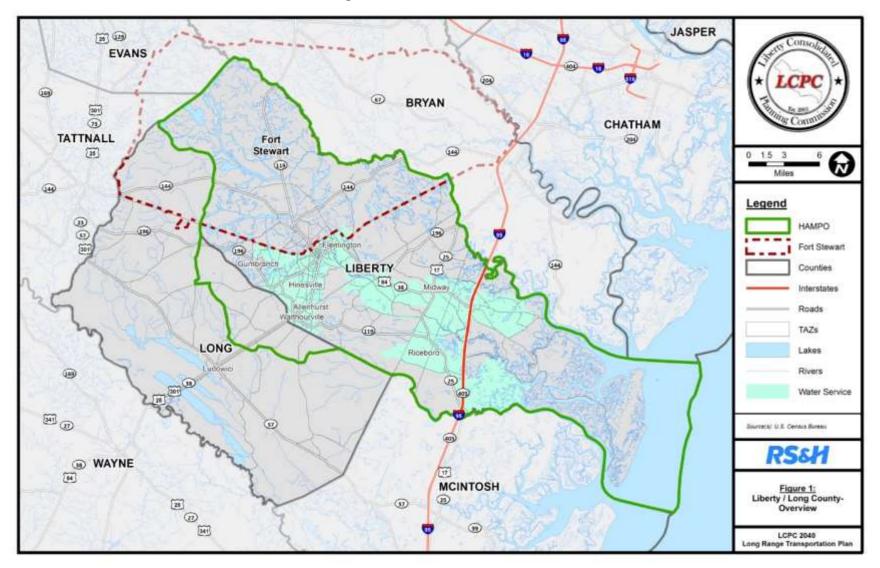




Figure 15. Areas with Water Service





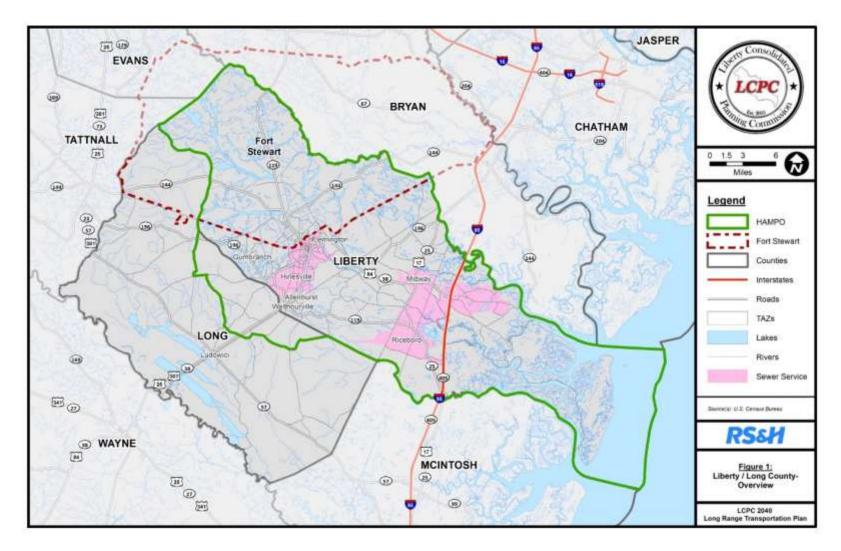
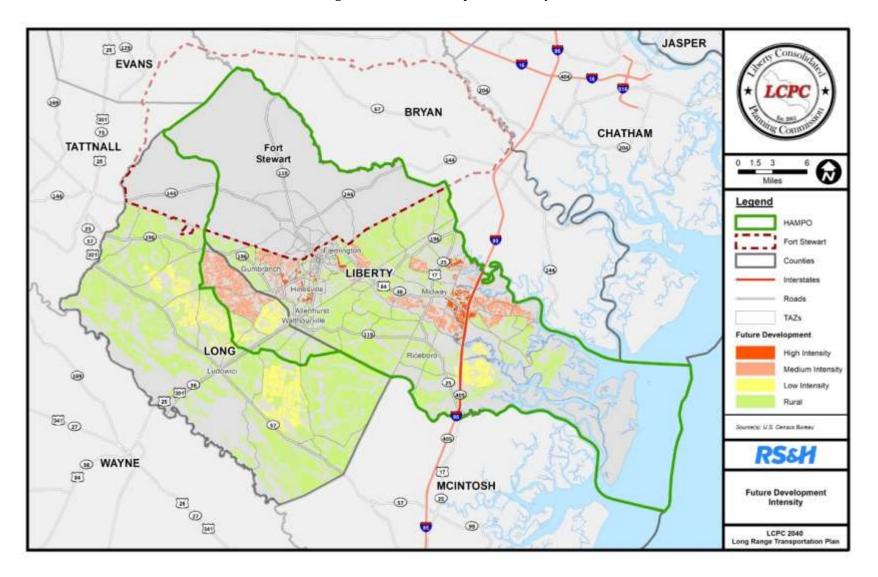


Figure 16. Areas with Sewer Service

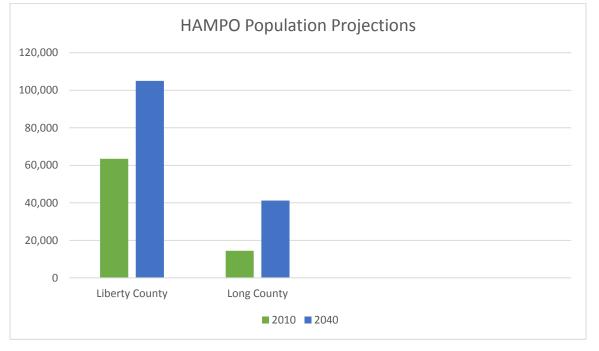


#### Figure 17. Future Development Intensity





The base year population and employment figures come from the 2010 Census and Department of Labor data; 2040 projections are based on historic trends used to estimate a median future population and employment scenario for the HAMPO study area. While the economic downturn has slowed the extremely fast paced growth for Liberty County, Long County continues to see a relatively rapid rate of growth. Although the HAMPO region is not anticipated to reach levels of growth projected prior to the global recession, the combined future population is expected to exceed 140,000 by 2040. Figure 18 provides an overview of the anticipated population growth for both Liberty and Long Counties.

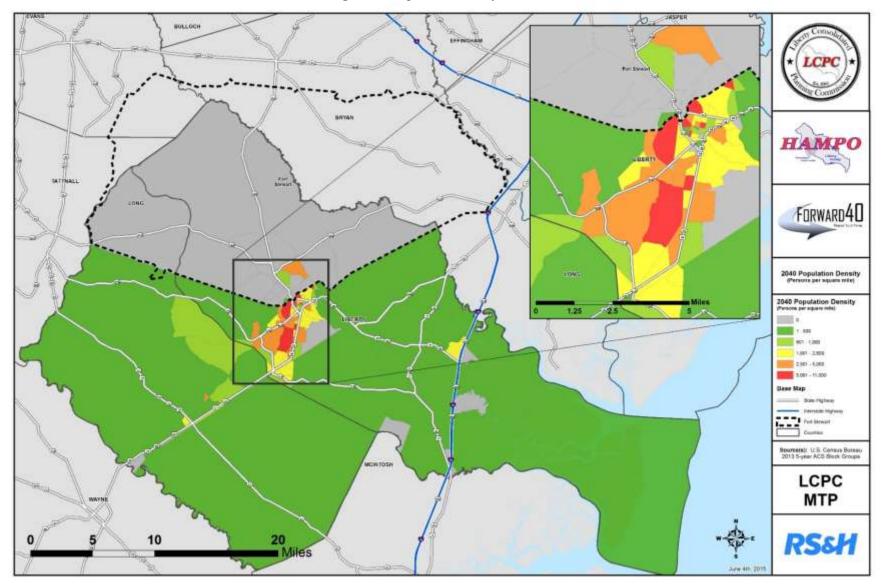


#### Figure 18. Population Projections

These growth scenarios indicate that Liberty and Long counties will continue to experience significant growth over the 30-year projection horizon. With abundant developable land in close proximity to employment centers, low ad valorem taxes in comparison to neighboring counties, and no indication that measures will be enacted to slow growth, Long County could see a population increase of more than double the 2010 census population within the 2040 planning horizon. Figure 19 shows the distribution of 2040 projected population per square mile at the Census Block level. The most significant densities are all located within the HAMPO urbanized area. However, the projected growth at the I-95 interchange in Midway begins to display higher densities in comparison to surrounding areas. Another area demonstrating significant density is the 4<sup>th</sup> IBCT located along SR 144 on Fort Stewart military base. This brigade area includes single soldier housing quarters and supporting facilities.



Figure 19. Population Density - 2040





As described earlier in this chapter, support services and infrastructure for the projected growth such as educational, medical, and retail sectors will continue to expand to meet the demands of the growing population. While the largest majority of this growth is anticipated within the City of Hinesville and Fort Stewart, future plans for satellite medical facilities and retail development pressures at the I-95 interchange in the City of Midway are anticipated. Additional commercial and retail development is anticipated in the City of Walthourville and the City of Flemington, predominantly along the US 84 corridor. It is critical that local planning efforts balance the development desires of proximity to this major State Route with the carrying capacity of the facility.

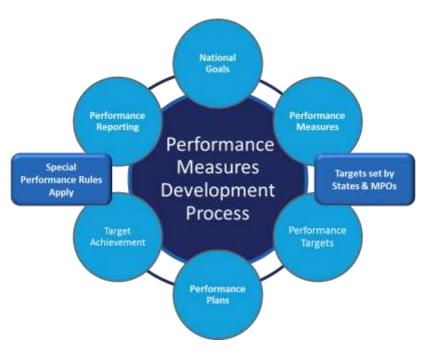
The City of Riceboro's masterplan, adopted in 2012, identifies tourism and industrial manufacturing as its primary employment base. There sectors are focused along US 17 and SR 119 and will continue to be promoted throughout the planning horizon. Due to the close proximity to the employment centers in Liberty and Wayne Counties, Long County's development trends are expected to continue as primarily residential development.

## 2040 MTP PLAN DEVELOPMENT

#### Performance Measures

MAP-21 focuses on a performance-driven planning process that includes established, consistent, and relevant performance targets that can be assessed to track progress towards the identified goals and measures. Operational and system management studies are a key element in this focus on performance and should examine the wide range of strategies to address congestion, improve mobility, and develop a sustainable multimodal transportation system.

The metropolitan transportation planning process is required to document performance measures and targets established by the MPO that support the seven national performance goals and are coordinated to the extent possible with the GDOT and with public transportation providers. The FHWA has also has a recommended approach for developing performance measures, referred to as SMART: Specific; Measurable; Agreeable; Realistic; Timebound. In addition, the GDOT has completed the development of performance measures and targets, which will be incorporated into the MPO's planning process for measuring and evaluating performance.



By following the guidelines of the prescribed SMART approach and coordinating with GDOT, HAMPO will be well positioned to develop specific performance measures that can be incorporated into its next MTP update.



### **Prioritization Process**

The HAMPO Policy Committee adopted a 2040 MTP prioritization process in June 2014 that included utilizing a tiered screening process based on goals and objectives for the planning area, defining both qualitative and quantitative prioritization factors based on available data from accepted sources, assigning a technical sub-committee to review analysis results, and utilization of the FHWA SMART Principle.

The Forward 40 Stakeholders Advisory Committee along with the Citizens Advisory, Technical Coordinating, and HAMPO Policy Committees screened the goals from the 2035 LRTP and refined their 2040 goals before placing them in priority tiers. The tiered goals were then assigned factors upon which projects would be screened and source data that would be utilized in the analysis. The chart below demonstrates these priorities and factors:

	Tier 1 Goals	Factors	Source
•	Promote economic development	<ul> <li>Connecting population and employment</li> </ul>	<ul> <li>Travel</li> <li>Demand</li> <li>Model</li> <li>GIS</li> </ul>
•	Support local planning initiatives	<ul><li> Project status</li><li> Local priority</li></ul>	<ul> <li>Planning partners</li> </ul>
•	Encourage coordination	Consistency with other plans	<ul> <li>Planning partners</li> </ul>
•	Protect natural, social and cultural resources	Impacts to resources	• GIS
•	Implement projects to support freight movement	<ul> <li>Freight connections to strategic infrastructure</li> <li>Truck Traffic</li> </ul>	<ul><li>GDOT</li><li>GIS</li></ul>
	Tier 2 Goals	Factors	Source
•	Invest in mobility options	<ul> <li>Level of Service</li> <li>Truck Traffic</li> <li>Multimodal alternatives/priorities</li> </ul>	<ul> <li>GDOT</li> <li>Travel Demand Model</li> <li>Modal plans</li> </ul>
•	Promote quality of life	<ul> <li>Accessibility for under-served populations</li> <li>Community enhancements</li> </ul>	<ul> <li>GIS</li> <li>Planning partners</li> </ul>
•	Improved safety and security	<ul> <li>Crash rates</li> <li>Designated evacuation route</li> <li>Bridge sufficiency rating</li> </ul>	<ul> <li>GDOT</li> <li>Emergency Management</li> </ul>
	Education	Consistency with public	<ul> <li>HAMPO</li> </ul>



Tier 3 Goals	Factors	Source
Promote community and public relations	<ul><li>Community enhancement</li><li>Public involvement/input</li></ul>	<ul> <li>HAMPO</li> <li>Planning partners</li> </ul>

A technical subcommittee focused on prioritization was convened on September 21, 2014 and held three meetings. The committee was comprised of:

- Hinesville City Manager
- Liberty County Administrator/TCC Chairman
- City of Hinesville Engineer
- City of Flemington Mayor Pro-tem
- HAMPO/LCPC Executive Director
- Fort Stewart Representative

The subcommittee was presented with a list of projects identified in the 2035 LRTP and new projects identified during the 2040 plan update. Projects were then evaluated using both empirical and subjective factors to provide a score directly tied to the planning goals and objectives of the MTP. Project ranking was adjusted to allow for factors such as grouping of dependent projects, project commitments, and engineering judgment regarding local projects and priorities.

The subcommittee's recommendations and prioritized project list were presented to the HAMPO Stakeholder Advisory Committee, Citizens Advisory Committee, Technical Coordinating Committee and Policy Committee where they were unanimously approved. Additional information on the prioritization process and results can be found in Appendix A of the MTP.

#### Public Participation and Coordination

Public involvement and outreach is one of the most critical components of the Metropolitan Transportation Plan update. It is vital that opportunities be provided for the public and stakeholders to receive information about the planning process and provide input throughout the plan update. For the HAMPO 2040 MTP, a Public Participation Plan (PPP) has been developed that follows the guidelines set forth in the federal transportation legislation, MAP-21. The PPP describes the processes and procedures that will be employed during the plan update, ensures compliance with MAP-21, and provides the guidance to enable members of the public to have ample opportunity to ask questions and provide feedback. It also outlines the framework for how public participation was administered for this 2040 MTP update. The adopted PPP can be found in the Appendix B of this MTP.

The public involvement strategies developed for the 2040 MTP emphasize the importance of coordination among the various agencies, interested stakeholders, businesses, and community members and Environmental Justice populations.. The MTP public participation plan also provides strategies for disseminating information for public consumption and providing forums for public input and comment. Some of the significant components of these outreach efforts include:

 Public Involvement Workshops – Three rounds of public involvement workshops were held in order to solicit feedback and comment from the public regarding various aspects of the 2040



MTP planning process. In addition to public workshops, over 35 opportunities for information dissemination and comment were provided at HAMPO committee meetings throughout the planning process. A summary of these meetings is detailed within this chapter and meeting materials can be found in Appendix B.

- Public Hearing prior to plan adoption, a formal public hearing was held for review of the final draft plan; this public hearing was held on 09/10/2015 at 9:00 AM.
- Website various informational items regarding the MTP update have been posted on the LCPC/HAMPO website throughout the plan development process.
- Survey a survey was developed and administered to get general feedback on an array of topics associated with transportation in the region, and the results have been incorporated into this 2040 MTP; survey questions and results are found in Appendix A.
- Stakeholders Advisory Committee targeted stakeholders integral to the transportation planning process were invited to participate in a committee in order to solicit input and provide information to the community. A summary of these meetings is detailed within this chapter while meeting materials can be found in Appendix A.

### Public Meetings and Workshops

A series of public meetings and workshops with varying focus topics were organized in accessible locations in different places throughout the planning area in order to encourage maximum participation. Each of the meeting locations were identified based on accessibility by all populations, as well as proximity to transit and environmental justice communities.

The first round of public input meetings were held at the following locations and times:

- Liberty County Community Complex, Midway Monday, April 21st ► 5:00 7:00 PM
- Historic Liberty County Courthouse, Hinesville Tuesday, April 22nd ► 5:00 7:00 PM
- Ludowici City Hall, Ludowici Wednesday, April 23rd ► 5:00 7:00 PM

Participants were provided with an overview of the study and a survey, and large format maps were available for markup and comments. Significant feedback was obtained at the Hinesville and Midway meetings and a summary of these comments is provided below:

- Midway (60% of participants minority/disadvantaged)
  - Veterans Parkway in Hinesville is too congested for additional commercial development unless there is a frontage road for new businesses.
  - US 84 at Martin Luther King in Hinesville (adjacent to McDonalds) needs a left turn arrow at the signal.
  - US 84 at Patriots Trail in Flemington (adjacent to health department) needs a light. This is a very dangerous location to try and turn left.
  - US 84 improvements at I-95 in Midway are needed for safety and economic development.



- A turn lane and deceleration lane is needed at the VA clinic on US 84 at Memorial Drive.
   Turning traffic causes abrupt stops and near misses.
- Medians are a great idea for US 84 and are needed for pedestrian and car safety.
- Transit: a substation is needed for the City of Midway with service provided approx.
   three times per day.
- Transit: Full fixed-route service should be considered for Midway and Riceboro by 2040.
- Hinesville (20% minority/disadvantaged)
  - Signage for public parking in Hinesville is needed (both way-finding and public parking signs).
  - Improved signage for parks is needed (way-finding and park signs).
  - Improved streetscapes in Downtown Hinesville are needed (Memorial Drive provided as example of desired cross section).
  - Improvements to the Midcoast Regional Airport (runway extension) is a great idea but increased training and activity is likely to cause more sound issues for citizens.
  - Flemington Loop Bypass is a great idea.
  - We should work to reinstate an Amtrak stop with park-n-ride facilities.

The second round of public meetings focused on the non-motorized aspects of the plan and were held at the following locations and times:

- Liberty County Community Complex, Midway February 24<sup>th</sup> ► 5:30 6:30 PM
- Historic Liberty County Courthouse, Hinesville February 25<sup>th</sup> ► 5:30 6:30 PM

Participants were provided with large format maps demonstrating draft MTP highway projects and nonmotorized projects, presentation slides describing the non-motorized planning process and analysis results, and comment forms.

The comments received were focused primarily on the US 84 safety and access management projects and all comments were in favor of the improvements. Participants felt that the multipurpose path approach was favorable and that the community would benefit from these improvements.

All HAMPO Citizens Advisory, Technical Coordinating, and Policy Committee meetings are published and open to the public. At HAMPO committee meetings, 2040 MTP updates and study materials have been presented and the public invited to provide comment. These public input opportunities began in February 2013 and included the following meeting dates:

- 1. February 14, 2013 Policy Committee
- 2. February 26, 2013 Citizens Advisory Committee
- 3. March 14, 2013 Technical Coordinating Committee
- 4. April 11, 2013 Policy Committee
- 5. April 23, 2013 Citizens Advisory Committee



- 6. May 9, 2013 Technical Coordinating Committee
- 7. June 25, 2013 Citizens Advisory Committee
- 8. August 8, 2013 Policy Committee
- 9. October 22, 2013 Citizens Advisory Committee
- 10. November 14, 2013 Technical Coordinating Committee
- 11. December 12, 2013 Policy Committee
- 12. January 7, 2014 Citizens Advisory Committee
- 13. January 9, 2014 Technical Coordinating Committee
- 14. January 25, 2014 Citizens Advisory Committee
- 15. February 13, 2014 Policy Committee
- 16. March 13, 2014 Technical Coordinating Committee
- 17. April 10, 2014 Policy Committee
- 18. June 24, 2014 Citizens Advisory Committee
- 19. July 10, 2014 Technical Coordinating Committee
- 20. August 14, 2014 Policy Committee
- 21. September 11, 2014 Technical Coordinating Committee
- 22. October 9, 2014 Policy Committee
- 23. October 28, 2014 Citizens Advisory Committee
- 24. November 19, 2014 Technical Coordinating Committee
- 25. December 18, 2014 Policy Committee
- 26. January 16, 2015 Technical Coordinating Committee
- 27. February 12, 2015 Policy Committee
- 28. February 24, 2015 Citizens Advisory Committee
- 29. April 1, 2015 Technical Coordinating Committee
- 30. April 9, 2015 Policy Committee
- 31. May 5, 2015 Citizens Advisory Committee
- 32. May 14, 2015 Technical Coordinating Committee
- 33. June 11, 2015 Policy Committee
- 34. August 13, 2015 Technical Coordinating Committee
- 35. August 25, 2015 Citizens Advisory Committee
- 36. September 8, 2015 Technical Coordinating Committee
- 37. September 10, 2015 Policy Committee

As prescribed by the planning procedures, the MTP was available for a 45-day public comment period prior to final adoption. The comment period was held during the month of July, 2015 and 3 public meetings were held on the following dates:

Liberty County Community Complex, Midway - August 12, 2015 ► 5:30 PM to 6:30 PM

Long County Courthouse, Ludowici, GA – August 19, 2015 ► 5:30 PM to 6:30 PM

Historic Courthouse, Hinesville - August 25, 2015 ► 5:30 PM to 6:30 PM



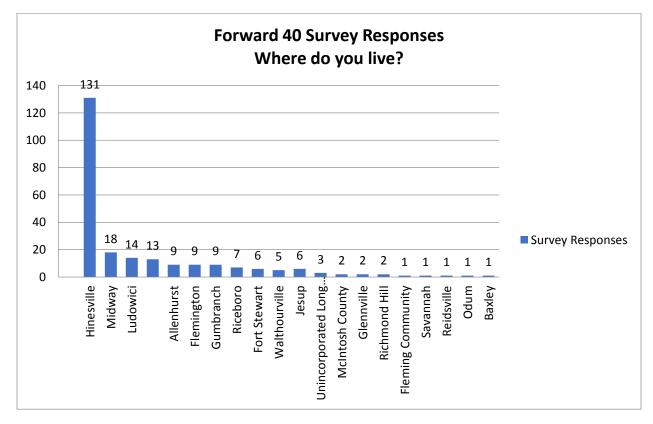
#### Public Survey

A public survey was developed and circulated throughout the HAMPO study area via electronic and paper copy distribution beginning in December 2014. The survey was circulated to all local universities, Liberty and Long county schools, the City of Hinesville housing authority and homeless coalition, the local ministerial alliance, all local municipal and county staff, public libraries, Fort Stewart, the Chamber of Commerce, the Liberty County Development Authority, and all members of the HAMPO committees and Forward 40 Stakeholders Committee. In addition to direct distribution, fliers and quick response codes were posted at public facilities and commercial destinations and the survey was posted on the HAMPO website. Survey responses were collected over a five month period and resulted in 241 total responses. A summary of the responses is provided below.

Generally, the majority of survey respondents were:

- Between the ages 55 64 (46%)
- Female (50.2%)
- College graduate (28.1%)
- Annual household income of \$50,000 \$75,000 (30%)
- Typically make a trip utilizing a motor vehicle (98.1%)

The location/residence of the survey respondents is shown in the graph below.





The respondents were asked a series of questions about their travel patterns, their priorities for transportation investments, and how they would rate various aspects of the transportation system.

The largest percentage of respondents felt that the overall HAMPO transportation system was fair (45.2%), followed by good at 33%, while 19% felt that the system was poor. The areas of greatest concern were availability of sidewalks, recreational trails and paths, and bicycle facilities. This concern was also expressed by the Stakeholder Advisory Committee with "Lack of Transportation Options" being one of the primary areas of dissatisfaction. The top four priorities for investment were reduction of traffic congestion, maintenance of roadways, pedestrian safety improvements and intersection improvements.

When asked why utilizing modes of non-motorized transportation may be considered undesirable in the HAMPO area, 69.2% of respondents reported that they felt unsafe due to lack of lanes and paths, followed by safety concerns and lack of support facilities such as storage racks. The survey responses were presented to the HAMPO committees, as well as the Stakeholders Advisory Committee in order to provide insight to the committee members on public opinion and concerns.

#### Stakeholders Advisory Committee

The HAMPO planning region is home to a large network of public and private organizations that provide a unique platform for sharing information and gathering feedback. The MTP planning team identified this network as an integral source of input for the plan development, but also an opportunity for members of the community to build understanding and encourage involvement and support within their individual networks.

The Forward 40 Stakeholders Advisory Committee was established with representatives from local universities, school boards, major employers, transportation professionals including CSX rail and freightbased trucking, emergency service providers, members of the private development and real estate industry, local industrial/manufacturing representatives, environmental justice support organizations, fixed route and rural transit providers, local development authorities, and local, state, and regional planning partners.

The committee held a kick-off meeting August 8, 2013 where they were provided with an overview of the study and their anticipated role in the process. The committee held three subsequent meetings at key milestones in the plan development process:

- Meeting 2 January 2014: Goals, objectives and prioritization
- Meeting 3 May 2014: Existing conditions and public input efforts
- Meeting 4 December 2014: Draft prioritized project list

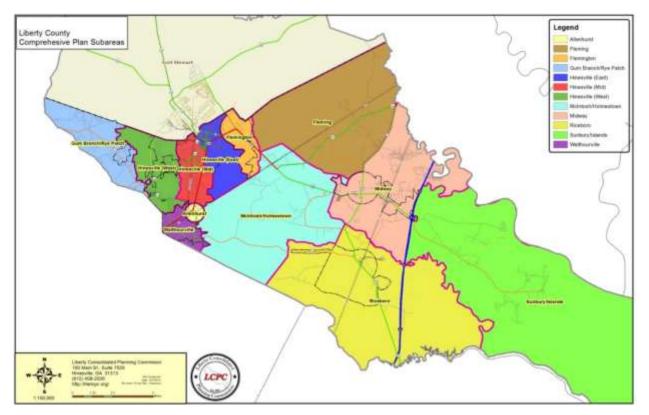
At each of these meetings, participants were provided with updates on the MTP planning process, as well as data and information on which they were asked to provide feedback, comment, and recommendations to the MPO committees.

#### Additional Public Input

As previously described, the HAMPO 2040 MTP was developed in conjunction with the update of Liberty County's Countywide Comprehensive Plan. Public workshops were held for each of the planning



subareas or sectors that were identified for this component of the Forward 40 initiative. These planning sectors can be seen in Figure 20. At each of these subarea workshops, information regarding the 2040 MTP was presented to ensure a coordinated and comprehensive approach to the planning process.



#### Figure 20. Planning Sectors

In addition to public input meetings, HAMPO staff presented information on the 2040 MTP update at various public forums including the 2015 Liberty County Countywide Planning Retreat, the local Rotary Club chapter meeting, and the Chamber of Commerce Progress through People luncheon.

From the extensive public participation efforts that were administered, some consistent themes emerge including:

- Desire for the public transit system to be expanded into new services areas
- Focus on investments for safe bicycle and pedestrian access
- Reduction in traffic congestion and delay

One other component of the PPP was the inclusion of performance measures, created to evaluate and help improve public outreach efforts. An evaluation of the public involvement activities that were conducted for the 2040 MTP will provide the HAMPO with relevant information to implement changes for future MTP updates.



## TRANSIT

Since the 2035 Long Range Transportation Plan update in 2010, a new mode of transportation within the urbanized area has been introduced. Fixed route transit service was implemented in 2010 by the City of Hinesville, providing citizens within this fast growing community with options for alternative modes of transportation. This chapter will describe the existing transit service available within the HAMPO study area, as well as planned capital and operational expansions and financial resources needed for these initiatives.

## **Existing Conditions**

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 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 including the American Recovery and Reinvestment Act (ARRA) 5307 capital grant.

#### Urban Fixed Route Service

Liberty Transit is a fixed-route transit system that began operation in October 2010. The service area for the system includes the municipalities of Hinesville and Flemington, 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, 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. In the initial stages of transit service, there were several factors that limited the growth of the system, including a lack of funding and limited ridership due primarily to lack of information and exposure to the new transportation option.

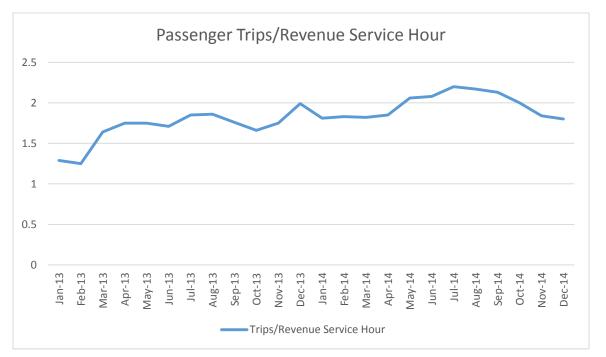
In response to these initial system challenges, the Hinesville MPO completed an update to their Transit Development Plan (TDP) called the Liberty Transit Strategic Plan; which resulted in a revamped route structure and service plan. A Transit Development Plan (TDP) is required by federal and state agencies 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. The following table is the five year financial outlook for the Liberty Transit system, which provides the actual system expenditures for fiscal years 2012 – 2014, along with the 2015 budget and projections for the next five years. The implementation of the 2012 Strategic Plan recommendations can be seen in the significant reduction in system operating expenditures in FY 2013/2014.



#### City of Hinesville Liberty Transit Company Financial Projection Fiscal Years 2012 - 2020

200000	FY 2012 Actual	FY 2013 Actual	FY 2014 Actual	FY2015 Budget	FY2016 Estimate	FY2017 Estimate	FY2018 Estimate	FY2019 Estimate	FY2020 Estimate
Revenues Federal & Stele Funding	639,245	553,387	414.306	462,522	754,929	777.534	800.849	824,895	549,893
Farebox	21,932	14.124	12,995	12,000	12,240	12,485	12,734	12,989	13,249
All Other Revenues	36.017	53.077	10	6,000	6.000	5.000	6.000	6.000	6.000
Flemington Local Match	12,581	3,099	4,214	5.055	6,406	6.600	6,798	7.003	7.214
City of Hinesville Local Match	583.675	143,760	195,494	234,438	297,315	306,195	315,370	324,849	334,647
Total Revenues	\$ 1,293,450	\$ 767,427	\$ 627,019	\$ 720,015	\$ 1,076,892	\$ 1,108,814	\$ 1,141,751	\$ 1,175,736	\$ 1,210,803
Expenses									
Operations Contract	1,129,804	643.376	506,435	554,101	570,724	587,846	605,481	623,645	642,354
Associated Transit Improvements	-+		+	- = -	335,715	345,786	356,160	366,845	377,850
Fuel	117,415	83,435	50,935	60,364	62,175	64,040	85,961	87,940	69,978
Administration	2,394	7.577	5.825	11,000	11,000	11,000	11.000	11,000	11.000
Mobility Management	23.945	26.667	40,000	40.000	40,000	40.000	40.000	40.000	40,000
Maintenance	12,105	7.954	889	4.500	4,725	4,961	5.209	5,469	5,742
General Operating	3.099	11.991	18,179	40,050	42,063	44,156	46 364	48.682	51,116
Marketing	4,687	6,427	4,756	10,000	10,500	11,025	11,576	12,155	12,763
Total Expenses	\$ 1,293,450	\$ 767,427	\$ 627,018	\$ 720,015	\$ 1,076,892	\$ 1,108,814	\$ 1,141,751	\$ 1,175,736	\$ 1,210,803
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Since the implementation of the Strategic Plan recommendations, the service has experienced increased ridership and efficiency, demonstrated in Figure 21. The number of passengers utilizing public transportation for every hour of service offered by Liberty Transit has increased over the past 24 months.



#### Figure 21. Liberty Transit Passenger Trips per Revenue Service Hour

In February 2014 the transit system implemented a service area expansion to serve more of the lowincome, transit-dependent residents of the transit agency's service area. The current service area and route structure can be seen in Figure 22.





Figure 22. Liberty Transit Routes



#### **Transit Propensity**

Understanding the magnitude of riders attracted to and served by transit is vital to helping transit systems meet the mobility needs of the community it serves.

Census data from the 2010 Census was used to determine the relative propensity to use transit service by block group. The 2040 MTP propensity analysis uses a technique based upon Transit Cooperative Research Program (TCRP) "Report 28: Transit Markets of the Future" to weight eight demographic characteristics that influence transit use. This approach highlights the relative "need" for transit service within the service area.

One important aspect of transit demand is evaluating where and whether population and employment densities are sufficient to support transit service. *The Transit Capacity and Quality of Service Manual* states, "The more people and the more jobs that are within easy access distance of transit service, the more potential customers there are to support high-quality service."

Transit-supportive population density thresholds of three units per gross acre are considered sufficient for hourly bus service; about 4.67 units per gross acre to support buses every 30 minutes, and 10 units per gross acre to support buses every 10 minutes. Alternatively, four jobs per gross acre would support hourly bus service. Operating transit service balances tradeoffs between the provision and utilization of service, which depend in large part on density.

To identify the areas exhibiting a propensity for transit, the demographic factors used in this analysis were identified. These consist of Households without Cars, Poverty, Minority, Female, Disability, Mobility Limitations, and Workers 65 and Older. Four of these demographic factors were available at the block group level. The most detailed level available for the other four factors was the tract level.

- <u>Households without Cars</u>: Census Table B25044 Tenure by Vehicles Available contains the total number of occupied housing units and households with no vehicle available (owner occupied and renter occupied) at the block group level.
- <u>Poverty:</u> Census Table B17017 Poverty Status in the Past 12 Months by Household Type by Age of Householder contains the data of total households and income in the past 12 months below poverty level at the block group level.
- <u>Minority</u>: Census Table B03002 Hispanic or Latino Origin by Race contains the data of total population and population white alone, not Hispanic or Latino at the block group level. The percentage of population not "white alone, not Hispanic or Latino" was calculated.
- <u>Female</u>: Census Table B01001 Sex by Age contains the data of total population and female population at the block group level.
- <u>Disability</u>: Census Table C18120 Employment Status by Disability Status contains total population and population with a disability (by "employed in the labor force", "unemployed in the labor force", and "not in the labor force") at the tract level.
- <u>Mobility Limitation</u>: Census Table B18105 Sex by Age by Ambulatory Difficulty contains total civilian noninstitutionalized population 5 years old and over and "with an ambulatory difficulty" by age cohort at the tract level.
- <u>Workers 65 Years Old and Older</u>: Census table B23004 Work Status in the Past 12 Months by Age by Employment Status for the Civilian Population 65 Years and Over contains "worked in the past 12 months, 65 to 74 years" and "worked in the past 12 months, 75 years and over" at the



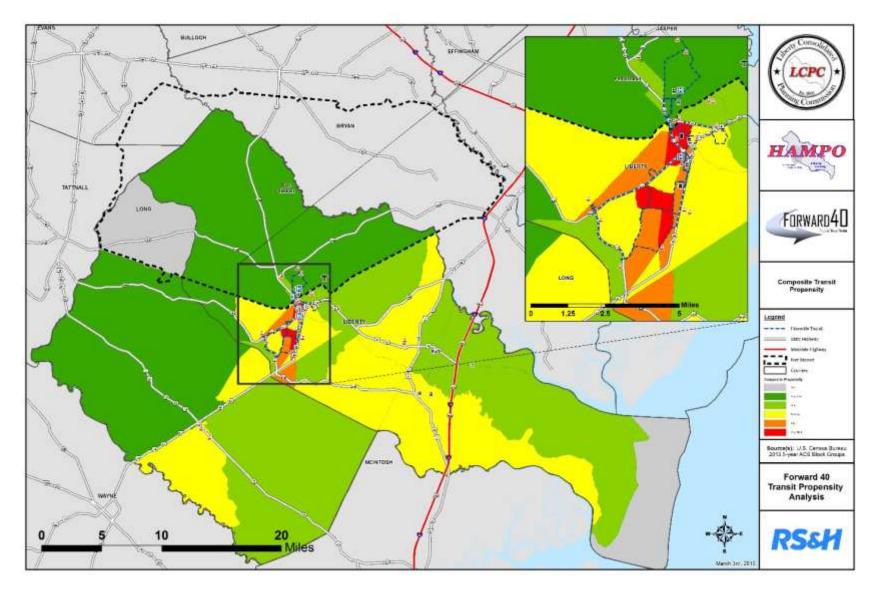
tract level. Because the universe for this table is civilian population 65 years and over, the number of other workers was borrowed from Census table C18129. The percentage of workers that are 65 years old or over was calculated.

- <u>Density</u>: Distinct from the transit supportive densities above, the composite transit propensity utilizes a population density factor. Density was calculated from the Tiger/LINE block group shapefiles. The total area was calculated from the land area and water area attributes to derive percent land area. The area in square miles of each block group was calculated via Calculate Geometry, and the percent land area was applied to obtain square miles of land. Population was then divided by square miles of land to obtain the density value.
- <u>Composite Propensity</u>: Factors that were only available at the tract level were spatially joined from the tract to constituent block groups, resulting in all factors residing at the block group level. The percentage of households or population of each demographic factor (except for older workers) together with the population density in persons per square mile were each individually indexed to rate each block group's factor on a scale from one to 100. The factors were then weighted according to the accepted methodology.

Areas in the City of Hinesville, City of Flemington and Fort Stewart military installation with density sufficient to support hourly bus service are all served by the current bus system. One area that demonstrated higher concentrations of populations in need of transit service not currently served by Liberty Transit were within the City of Walthourville along US 84 and SR 119. The transit propensity is shown in Figure 23.



#### Figure 23. Transit Propensity





The propensity analysis further demonstrates that there is not sufficient population, employment, or other activity to support fixed route transit service to outlying areas in Liberty County, including areas adjacent to the interstate. Although major employers are located in these areas, previous efforts by the Coastal Regional Commission to form vanpools or provide carpool matching have been unsuccessful, suggesting that there is not a sufficient level of interest in alternative commuting options. The limited information available about employee residence locations also suggests that many employees commute from outside of Liberty County and would therefore not support transit service from the urbanized areas in Hinesville to the workplaces located near the interstate or manufacturing-based employment centers in rural areas.

#### Ongoing and Future Initiatives

Liberty Transit is committed to the advancement of its mission to enhance the quality of life for residents, soldiers and their families, and visitors by providing safe, environmentally-friendly and cost-effective transportation options.

The City of Hinesville, with guidance from the Hinesville Area MPO and Transit Steering Committee have identified the following areas of focus for implementation during the horizon of the 2040 MTP:

- Continue to expand ridership through strategic route modifications and targeted outreach.
- Continue to explore opportunities to partner with municipalities in the HAMPO urbanized area to expand transit service where transit supportive densities have been identified.
- Maintain the existing fixed-route transit fleet and analyze opportunities for procurement of vehicles right sized for Liberty Transit ridership.
- Continue to coordinate with local planning agencies to identify opportunities for service expansions/modifications to support new transit-oriented developments and employment destinations.
- Prepare for the update to the 2012 TDP through procurement of 5307 transit capital planning funding in Fiscal Years 2016 and 2017.
- Complete shelter installation efforts and procure additional shelters for prioritized stop locations within the service area.
- Identify key non-motorized infrastructure improvement projects within the transit service area and implement utilizing 5307 transit capital funding.

The City of Hinesville has identified the need to improve pedestrian access to the fixed route transit system, especially in the older, disadvantaged portions of the City. As the City did not require installation of sidewalks prior to 1999, a high percentage of the bus stops that serve these housing areas are either without sidewalks or have sidewalks that are substandard. The 2040 MTP Non-Motorized Plan will identify the pedestrian gaps for access to public transit, develop a prioritized implementation strategy, prepare construction drawings, obtain GDOT clearances, and oversee construction. This effort anticipates "rolling over" the difference between the operating budget and annual 5307 allocation for three years to match the project delivery schedule.

While there is consistent interest expressed by citizens regarding limited fixed-route service to Savannah with connecting service to Chatham Area Transit, there are no planned expansion activities by either agency within the short term Transit Development Plan horizon. However, Coastal Regional Coaches currently provides a public transportation option for those who wish to travel between Liberty County



and Chatham County, with restrictions on stop locations based on rural and urban area designations. The need for regular service between Savannah and Liberty County should be assessed within the framework of the next Liberty Transit TDP update and findings incorporated into the 2045 HAMPO MTP.

## **NON-MOTORIZED TRANSPORTATION**

As demands on traditional transportation infrastructure continue to grow, alternative modes of transportation have become increasingly desirable and advantageous. Trails, bike lanes, and sidewalks not only help to meet the growing transportation needs in the HAMPO region and contribute to an improved quality of life through the benefits of recreational activities, but they are also a cost-effective means of transportation.

The HAMPO Non-Motorized Plan is focused on the delineation of a pedestrian and bicycle facilities network to provide an alternative method of transportation, as well as recreational opportunities. The planning process involved identifying and understanding key local issues, analyzing current conditions and facilities, and identifying projects needed to build a multimodal network within the HAMPO region.

An important element of development of this plan is the dialogue and focused coordination with technical representatives, local stakeholders, citizens, and other interested parties to identify the local needs.

### Goals and Objectives

As a component of the Forward 40 Plan and the 2040 MTP, the HAMPO Non-Motorized Plan shares the primary goals and objectives developed through a collaborative Stakeholder, Committee, and Public Participation effort. These goals are compliant with 8 federal planning factors set forth in MAP-21 legislation. The goals are as follows:

- 1. Promote economic development
- 2. Invest in mobility options
- 3. Support local planning initiatives
- 4. Promote quality of life
- 5. Encourage coordination
- 6. Improve safety and security
- 7. Protect social, natural, and cultural resources
- 8. Implement projects to support freight movement
- 9. Improve public information

Building upon the above goals, the goals for the Non-Motorized Plan include:

• Develop a safe and interconnected regional network of non-motorized transportation facilities that link destinations and people, locally and regionally.



• Improve quality of life in the HAMPO region by developing a network designed to expand and encourage alternative transportation and active recreation.

These goals were applied throughout the planning process used to develop the Non-Motorized Plan and project list.

#### Planning Process

The planning process for development of the Non-Motorized Plan began with an existing conditions analysis that included collection and analysis of available data, such as Geographic Information Systems (GIS) data and any studies and plans for the HAMPO region that had already been completed. This information was used to inventory the existing system, as well as to identify any other non-motorized improvements that are planned within the study area. This, along with information gained from staff and stakeholders with knowledge of the system, was used to complete the existing conditions analysis.

The Non-Motorized Plan documents the development of the proposed network through:

- Identification of issues and opportunities in the HAMPO region;
- Analysis of access and connectivity to destinations and other potential connections, such as schools, parks, transit, community amenities, and other locations that offer educational, historical, and natural history opportunities;
- Development of a preliminary bicycle and pedestrian infrastructure, trails, and greenways network;
- Public involvement activities for citizens to review existing and planned facilities, provide input and suggestions on the proposed network, and
- Development of a preliminary project list.

In developing a non-motorized system, it is important to realize the effects that three elements land use, mobility, and safety have on the development of an effective and accessible bicycle and pedestrian system. In addition, the assessment must identify "service areas" and use connectivity between these service areas as the founding principles for developing a solid bicycle and pedestrian system. Service areas for the purpose of this assessment and for use in developing the network are defined by the areas where citizens live, work, play, and learn.

To serve as an alternative mode of transportation, a bicycle and pedestrian system should provide access to the primary activity centers that residents currently use motorized vehicles to access. The land use component of the assessment considers existing and proposed land use plans for the HAMPO region in determining current and future service area locations and the needed connections. Typically, as roadways become more congested, bicyclists and pedestrians are hesitant to utilize those facilities, especially when inadequate accommodations for bicyclists and pedestrians are provided. As improvements in mobility for pedestrians and bicyclists are implemented, it is also imperative to continuously review connectivity between service areas. If a continuous multimodal route with logical termini is not provided, then the facility will not be utilized.

The third consideration in the analysis, and arguably the most critical, is the element of safety. It is imperative that the safety of the traveling public be a primary objective when considering non-motorized improvements for the HAMPO region. Elements of safety were analyzed within the framework of reduction of conflict points between non-motorized facilities and motor vehicles,



maximizing separation between roads and trails when possible, closing non-motorized urban infrastructure gaps, and maximizing visibility to ensure public safety and community awareness.

### **Existing Conditions**

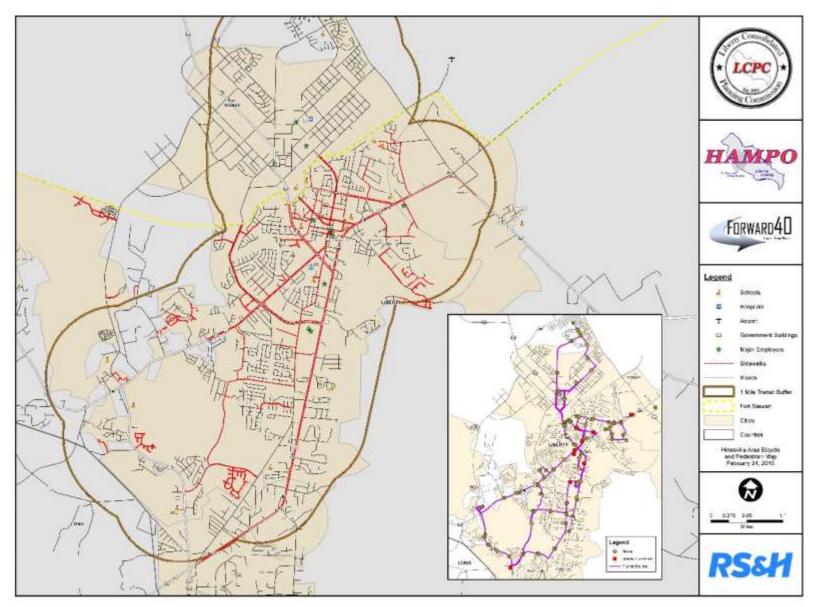
During the development of the HAMPO Non-Motorized Plan, an important step early in the process was to inventory the existing bicycle and pedestrian facilities and conditions in the area to establish a baseline. Like many small urban communities throughout the U.S., the HAMPO region has traditionally focused on planning for, and improving, the vehicular transportation network, while the non-motorized transportation infrastructure lagged in focus and investment. In order to gain a more robust understanding of the existing conditions and needs within the MPO study area, an extensive survey and analysis of existing infrastructure was conducted and critical gaps identified. This survey 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 in order 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. As with all modes of transportation, a trip for the transit user will always begin and end with a bicycle and/or pedestrian trip component. All transit stops were screened to determine if adequate pedestrian facilities were available within ¾ of a mile or connecting major trip generators such as employment, community service and multifamily housing centers. Although ¼ mile is the typical buffer for transit stops, this effort used the ¾ mile buffer due to the transit systems deviated service within ¾ mile of the transit route.

The existing conditions and gap analysis revealed that the majority of existing facilities are located within the HAMPO urbanized area, and specifically in the downtown area of Hinesville. The City of Hinesville has identified the need to improve bicycle and pedestrian infrastructure, especially in the older, disadvantaged portions of the City. As noted previously, 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 24 shows the Liberty Transit service area and existing non-motorized infrastructure within the HAMPO urbanized area.



Figure 24. Liberty Transit Service Area and Existing Pedestrian and Bicycle 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 East end of Liberty County, serves unincorporated Liberty, the City of Midway, and 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 to be developed in the region. The Coastal Georgia Greenway is envisioned as a 450-mile trail system suitable for a variety of non-motorized 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 includes recommendations for bicycle and pedestrian facilities. These recommendations have all been incorporated into the HAMPO non-motorized facilities analysis as components of the regional bicycle and pedestrian network.

## New Non-Motorized Facilities

Since the adoption of the 2035 Sustainable Mobility Plan, municipalities within the HAMPO urbanized area have taken action to implement various bicycle and pedestrian facilities. Examples of these recent



Source: City of Hinesville

non-motorized capital projects are found in the City of Hinesville, the City of Flemington, and unincorporated Liberty County. These projects have been accomplished through a variety of strategies and funding sources including federal, state, and local. Through a combination of local funding and acquisition of Transportation Enhancement (TE) or Transportation Alternatives Program (TAP) funding administered by the Georgia Department of Transportation and the MPO, the City of Hinesville and City of Flemington have begun the process of investing in non-motorized facilities. The City of Hinesville successfully acquired TAP funding for non-motorized improvements and enhancements along Memorial



Drive from US 84 to Fort Stewart and Central Avenue in the downtown district. These projects incorporated roadway realignment, multipurpose paths for pedestrians and bicyclists, lighting, signage, and landscaping, and were completed in May 2015.

The City of Flemington also leveraged TAP funds for the completion of sidewalks along US 84/Oglethorpe Highway from the existing facilities terminus adjacent to Applebee's to the intersection at Old Hines Road, completed in April 2015. Using Special Purpose Local Option Sales Tax (SPLOST) funds, the Liberty County Board of Commissioners implemented sidewalks, bicycle storage facilities, pedestrian amenities, and landscaping adjacent to their headquarters on North Commerce Street.

Additional non-motorized facilities have been implemented throughout the HAMPO region in conjunction with highway facility projects. These projects are as follows:

- 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

The GDOT has also worked closely with the City of Hinesville and City of Flemington engineers to identify and mitigate non-compliant ADA facilities along state routes within the urbanized area. These efforts took place in 2014 and were focused primarily along US 84/Oglethorpe Highway and 196/EG Miles Parkway and included upgrades to handicapped-accessible ramps, the addition of tactile paving panels at crossings, infrastructure repairs, and other modifications. Additional improvements have been implemented throughout the urbanized area as needs are identified.

#### **Proposed Facilities**

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. These facility types are as follows:

- 4' Urban Bicycle Lane
- 4' Urban Bicycle Lane with Sidewalk
- Urban Sidewalk
- Bicycle Symbol Marking on Existing Facilities
- 5' Rural Facilities
- Multiuse Path
- Bicycle and Pedestrian Bridge
- 12' 14' Median

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. The following table and Figure 25 details the projects recommended by the HAMPO Non-Motorized Plan. Projects are listed alphabetically, not in priority order, and costs are in 2014 dollars.



Project #	Facility	Proposed Type	From	То	Location	Length (Miles)	Estimated Cost
1	Bacon001	Urban Sidewalk, 1 side	McDowell Road	Varnedoe Street	Hinesville	0.24	\$ 32,361.72
2	Bradwell001	Urban Sidewalk, 1 side	Existing sidewalks south of Martin Street	Existing sidewalks north of E Mills Ave	Hinesville	0.09	\$ 12,135.65
3	Bradwell002	Urban Sidewalk, 1 side	Lakeview Drive	E General Stewart Way	Hinesville	0.37	\$ 49,890.99
4	Deal001	Urban Sidewalk, 1 side	E G Miles Parkway	South Main Street	Hinesville	0.49	\$ 66,071.85
5	Dunlevie001	Urban Sidewalk, 1 side	West Oglethorpe Highway	Talmadge Road	Allenhurst / Walthourvill e	1.98	\$ 266,984.19
6	Eunice001	Urban Sidewalk, 1 side	Bacon Road	South Main Street	Hinesville	0.25	\$ 10,742.03
7	Flemming001	Urban Sidewalk, 1 side	E G Miles Parkway	Bacon Road	Hinesville	0.58	\$ 78,207.49
8	Forest001	Urban Sidewalk, 1 side	Fraser Street	Gray Fox Road	Hinesville	0.38	\$ 51,239.39
9	Fraser001	Urban Sidewalk, 1 side	West Oglethorpe Highway	Forest Street	Hinesville	0.24	\$ 32,361.72
10	Harrison001	Urban Sidewalk, 1 side	East General Stewart Way	East Oglethorpe Highway	Hinesville	0.34	\$ 45,845.77
11	HoneyRidge	Urban Sidewalk, 1 side	Pineland Avenue	Varnedoe Street	Hinesville	0.29	\$ 39,103.75
12	Hwy196-001	Urban Sidewalk, 2 sides	Citation Boulevard	Airport Road	Hinesville	1.49	\$ 401,824.69
13	Kacey001	Urban Sidewalk, 1 side	South Main Street	West Oglethorpe Highway	Hinesville	0.2	\$ 26,968.10
14	Kings001	Urban Sidewalk, 1 side	Lakeview Drive	Snelson-Golden Middle School	Hinesville	0.53	\$ 71,465.47
15	Lakeview001	Urban Sidewalk, 1 side	North Main Street	Martin Road	Hinesville	0.28	\$ 37,755.34
16	Main001	Urban Sidewalk, 2 sides	Glenn Bryant Road	Darsey Road	Hinesville	0.54	\$ 145,627.74
17	Main002	Urban Sidewalk, 1 side	Olmstead Drive	Lakeview Drive	Hinesville	0.21	\$ 28,316.51
18	MainExt001	Urban Sidewalk, 1 side	Darsey Road	West Oglethorpe Highway	Hinesville	0.55	\$ 74,162.28
19	Martin001	Urban Sidewalk, 1 side	Lakeview Drive	Jacks Hill Road	Hinesville	0.12	\$ 16,180.86



20	McDowell001	Urban Sidewalk, 1 side	EG Miles Parkway	Bacon Road	Hinesville	0.39	\$ 52,587.80
21	Olive001	Urban Sidewalk, 1 side	Existing sidewalks west	Existing sidewalks on	Hinesville	0.4	\$ 53,936.20
			of Cheerydale Street	Madison Drive			
22	PaulCaswell001	Urban Sidewalk, 1 side	Existing sidewalks on	Desert Storm Drive	Hinesville	0.56	\$ 75,510.68
			Debbie Drive				
23	SandyRun001	Urban Sidewalk, 1 side	Tupelo Trail	Gray Fox Road	Hinesville / Walthourvill e	0.56	\$ 75,510.68
24	Shaw001	Urban Sidewalk, 2 sides	Darsey Road	Airport Road	Hinesville	2.63	\$ 709,261.03
25	Talmadge001	Urban Sidewalk, 1 side	West Oglethorpe	Dunlevie Road	Walthourvill	2.05	\$ 276,423.03
	-		Highway		е		
26	Varnedoe001	Urban Sidewalk, 1 side	Bacon Road	Honey Ridge Lane	Hinesville	0.49	\$ 66,071.85
27	SR119-001	Multiuse Path, 1 side	Dunlevie Road	State Highway 119	Walthourvill e	1.98	\$ 819,720.00
28	CayCreekExt001	Multiuse Path, 1 side	US Highway 84	Cay Creek	Midway	0.85	\$ 351,900.00
29	Edgewater001	Urban Sidewalk, 1 side	East Oglethorpe Highway	Liberty Elementary School	Midway	0.56	\$ 75,510.68
30	EvergreenPk001	Multiuse Path, 1 side	Veterans Parkway	Azela Street	Hinesville	0.76	\$ 314,640.00
31	Fort Morris001	Multiuse Path, 1 side	Interstate 95	Fort Morris Road	East Liberty County	7	\$ 2,898,000.00
32	Martin002	Urban Sidewalk, 1 side	US Highway 17	US Highway 84	Midway	1.26	\$ 169,899.03
33	PeacockTrl001	Multiuse Path, 2 sides	Holmestown Road	James Brown Park Recreation Facility	Central Liberty County	11.45	\$ 5,084,300.00
34	SandyRun002	Multiuse Path, 1 side	Barrington Ferry Road	US Highway 17	Riceboro	4.29	\$ 1,776,060.00
35	BarringtonFerry001	Rural Facilities	Sandy Run Road	E B Cooper Highway	Riceboro	3.25	\$ 1,345,500.00
36	EBCooper001	Rural Facilities	Barrington Ferry Road	US Highway 17	Riceboro	1.89	\$ 782,460.00
37	LeConteConnector 001	Multiuse Path, 1 side	Barrington Ferry Road	RailToTrailConnector	Riceboro	2.71	\$ 1,121,940.00
38	RailToTrailConnect or001	Multiuse Path, 1 side	US Highway 17	South Liberty County Line	Riceboro	4.63	\$ 1,916,820.00
39	OldSunburyRd001	Multipurpose Path, 1 side	Hines Road	Fort Stewart Boundary	Flemington	1.2	\$ 496,800.00



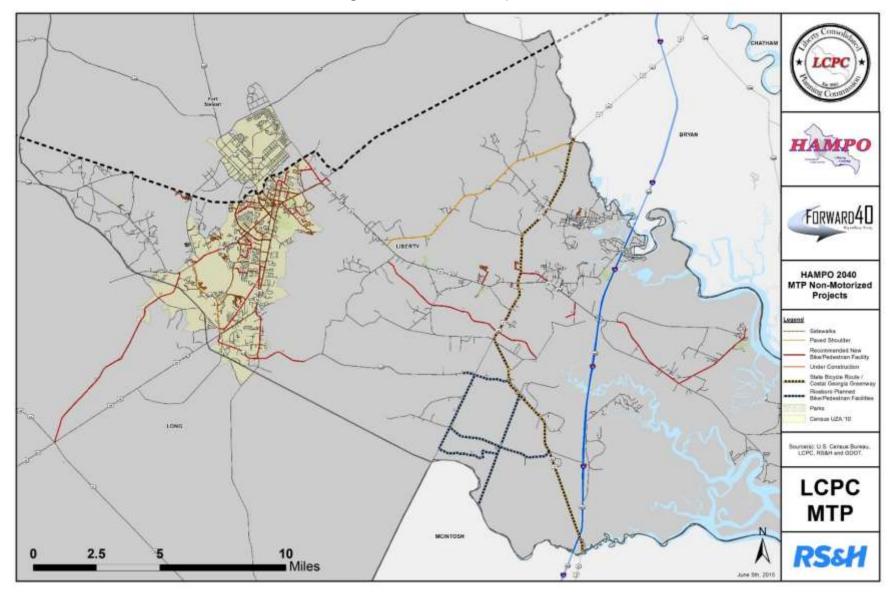
40	OldHinesRd001	Multipurpose path, 1 side	Old Sunbury Road	Arts Center Road	Flemington	0.45	\$	186,300.00
		side						
41	Holmestown	Rural Facilities	US 84	Peacock Creek Canal	Liberty	.50	\$	207,500.00
					County			
*	Georgia Costal	Bike/Ped and	North Liberty County	South Liberty County	Central	*	*	
	Greenway US Hwy	Supporting Facilities	Line	Line	Liberty			
	17				County			

Note: Coastal Georgia Greenway projects include a variety of elements including non-motorized bridges, multipurpose paths, paved and unpaved trail facilities, trail head amenities, signage and surrounding site improvements. These project costs and descriptions can be seen at

www.coastalgeorgiagreenway.org.



Figure 25. Non-Motorized Projects





## Funding

The development of the Non-Motorized Cost Feasible Plan was integrated into the framework of the HAMPO 2040 MTP, with the ultimate goal of including the bicycle and pedestrian projects as part of the overall financial plan. The MTP includes a non-motorized funding set aside for each of the constrained cost bands. These set aside funding totals were established by projecting the overall federal, state and local revenues through the plan horizon. Based on historical non-motorized funds awarded within the HAMPO study area for bicycle and pedestrian facilities, the MPO established a 1% non-motorized financial set aside. These funds were then distributed across the three planning bands. Additional information about the process used to project funding estimates for the 2040 MTP can be found in the Cost Feasible Plan on page 73. The financial bands and non-motorized transportation funding set asides are shown in the following table.

Band 1	Band 2	Band 3
(2015 – 2020)	(2021 – 2030)	(2031 – 2040)
\$421,243	\$358,587	\$795,009

With over \$20 million in non-motorized projects defined for the HAMPO region, it is critical to explore all available funding sources. In general, there are four primary sources of funding at the federal, state and local level for non-motorized infrastructure projects. These funding sources include:

#### Local Funding

Local non-motorized transportation funding comes from a variety of sources including SPLOST, local bonds, and general funds gathered through taxes paid by citizens and property owners. Other local funding sources that are not currently utilized within the HAMPO region for nonmotorized improvements include special assessment or taxing districts, tax increment financing, tax allocation districts, community improvement districts, voluntary assessments, and developer impacts fees.

#### Transportation Alternatives Program (TAP) – Federal/State

Provides funding for programs and projects defined as transportation alternatives, including onand off-road pedestrian and bicycle facilities, infrastructure projects for improving non-driver access to public transportation and enhanced mobility, community improvement activities, and environmental mitigation, recreational trail program projects and safe routes to school projects

#### • Capital 5307 Grants for Transit Supportive Infrastructure – Federal Transit Administration

The 5307 formula funds granted to the City of Hinesville have provisions for investment in transit supportive infrastructure such as shelter installation, lighting/safety improvements, and sidewalks and trails to improve access to public transit.

#### • STP Funding – Federal/State

The STP program provides a national annual average of \$10 billion in flexible funding that may be used for projects to preserve or improve conditions and performance on any federal-aid



highway, bridge projects on any public road, facilities for non-motorized transportation, transit capital projects and public bus terminals and facilities. While MAP-21 includes provisions for non-motorized improvements in the TAP program, STP funding includes non-motorized improvements as components of a highway improvement project.

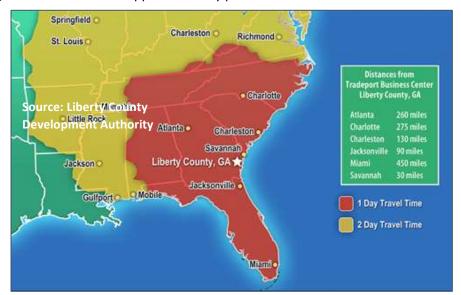
In addition to the primary grant sources listed, there are a number of additional competitive application grant sources available at the regional, state, and federal level, as well as private grant revenue sources. Each of the funding sources identified requires a local project sponsor and grant matching funding through cash or in-kind sources; therefore the HAMPO non-motorized projects have not been fiscally constrained or prioritized. Local municipalities within the HAMPO region will continue to utilize local funding as match for federal, state, and private grants to advance the non-motorized transportation network.

## FREIGHT

The transportation system, including major rail and truck routes within the HAMPO area, are critical competitive elements in the economic vitality of the Coastal Georgia region and State. A strong freight network is also needed to position the area as a regional / national trade and logistics hub. As the trend toward an expanded international trade economy continues, combined with the deepening of the Port of Savannah, the HAMPO region with its strategic location, mild climate, roadway and rail facilities, military presence, and strong business focus and support is ideally positioned to become a leader in the

growing global trade economy. However, attaining this leadership role is dependent upon the timely implementation of the necessary infrastructure improvements to support this anticipated growth and allow this region to achieve its long-term economic goals.

The HAMPO Regional Freight Plan will provide a blueprint for addressing the projected freight movement needs, identify realistic



opportunities for funding essential improvements, and functional responsibilities for implementation. This comprehensive, intermodal plan will also provide a policy framework and the short and long-term capital improvement projects needed to support the region's freight related economic development potential. The HAMPO Regional Freight Plan will be integrated with the 2040 Liberty County Comprehensive Plan Update, the HAMPO 2040 LRTP Update, the CORE MPO Regional Freight Plan and the GDOT Statewide Freight and Logistics Plan (2011) to ensure consistency across regional and state planning levels.

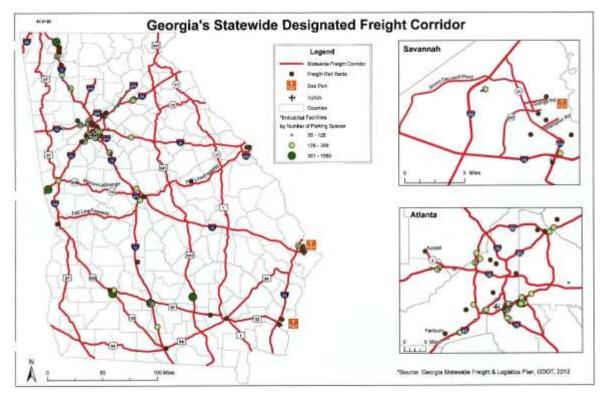


The Plan includes the identification of critical transportation infrastructure, as well as environmental and land use strategies needed to achieve the overall goals. In order to compete for and obtain funding on statewide and national levels, eligible transportation infrastructure projects must be supported by a strong technical analysis based on existing and projected public need, cost-benefit assessment, and inclusion in a short-range work program coordinated with a long range component. This overall planning approach, including the short and long-term components, will ensure that elements and projects can be quickly placed within local and state modal plans for consistency and fiscal programming.

Combining the mobility needs of the public, private, and military sectors for required supporting infrastructure into a comprehensive plan will provide this region with the best opportunity to be nationally competitive for funding within the freight emphasis contained in MAP-21. In addition, with reasonable and defensible future projections, the potential for private investments and partnerships is also increased. The framework for this Freight Plan has been completed and the fully developed plan will be completed within this framework.

#### **Existing Conditions**

The freight network within the HAMPO Region is comprised primarily of Interstate, US Highways, and State Routes that support the truck-based shipping industry. These routes include I-95, US 84, SR 119, SR 196, DT 144 and US 17. Fort Stewart maintains a dedicated truck inspection point at the 15<sup>th</sup> Street (Gate 7) Access Control Point off of SR 119/Airport Road creating a local freight route. I-95 and US 84 are part of Georgia's Statewide Designated Freight Corridor defined in the Georgia Statewide Freight and Logistics Plan, 2010 – 2050. The freight corridors identified by GDOT are considered vital to the State's freight and logistics industries and are shown in the figure below.



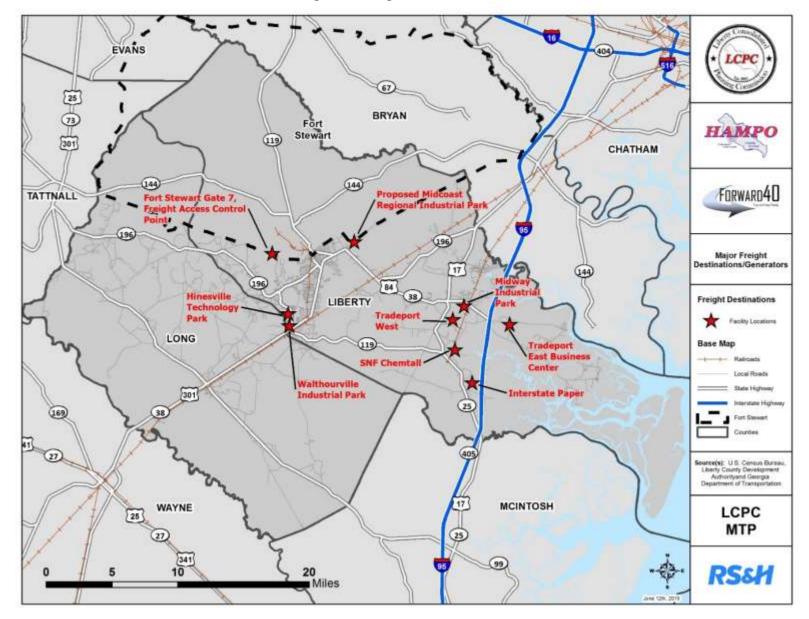


SR 119 and US 17 are major local freight routes for Interstate Paper and SNF Chemtal industrial plants with today's truck volumes exceeding 18%. As freight travel times increase on US 84 through Hinesville due to congestion, the SR 119/Barrington Ferry/US 17 route is becoming a default bypass. This route along SR 119/Barrington Ferry is challenged by both narrow pavement and lack of shoulders and overuse has resulted in the replacement of two structurally insufficient bridges. The prioritized 2040 MTP project #306 addresses these deficiencies, including the addition of improved and widened shoulders, overlay, structural bridge improvements, and intersection safety improvements. These improvements are critical with the delays in the implementation of the US 84/Hinesville Bypass due to funding and alignment issues. Construction of the US 84/Hinesville Bypass has been a priority at both the state and local level for over 20 years. The primary goal of this project is to relocate the existing and growing through freight movements outside of the Hinesville urban area to support regional economic development and mitigate local safety issues.

While there are CSX and Norfolk Southern Rail facilities within the study area, they function only as pass through facilities for both shipping and passenger lines. Figure 26 displays the location of the industrial /freight related facilities.



Figure 26. Freight Intensive Facilities





# COST FEASIBLE PLAN

The 2040 Cost Feasible Plan is a required element of the HAMPO 2040 MTP Update under MAP-21. Under the legislation that guides Metropolitan Planning Organizations in the country, each MPO is required to:

- Ensure adopted plan can be implemented
- Indicate the resources that are reasonably expected to implement the plan, and
- Recommend any additional financing strategies for needed projects.

With limited funding projections coming from both FHWA and GDOT, HAMPO has taken an innovative approach in planning for the future. The MPO has focused on developing evaluation criteria and performance measures to allow for the most important projects to be funded, based on the goals and the objectives developed throughout the process. The incorporation of a performance-based plan is a relatively new element in the federal legislation guiding MPOs. The HAMPO has ranked projects by a number of factors including: safety, maintenance, congestion, and economic development.

A public engagement effort was also implemented to both educate the public on transportation issues as well as gather feedback. Much of the input in developing the goals and the 2040 Cost Feasible Plan was supported by comments made in public meetings and the transportation survey that was sent out to the HAMPO region during the initial phases of the plan.

The financial analysis for the 2040 MTP included the development of cost estimates for proposed projects as well as revenue projections from all anticipated sources within the plan horizon. Based on guidance from GDOT, project costs were developed and inflated at 2.5% annually to the anticipated year of expenditure, or the year that the project is expected to be underway. The anticipated revenues from all sources, including federal, state, and local, were also inflated at a rate of 2% annually through the year 2040. The project costs were then compared to the anticipated funding to ensure that all of the projects were financially feasible to complete. The list of financially balanced projects is the 2040 MTP Cost Feasible Plan. The projects identified, but not included in the Cost Feasible Plan, are incorporated in the Vision Plan, or unfunded project list.

Since the adoption of the HAMPO 2035 Sustainable Mobility Plan, a significant number of projects have been completed and were therefore removed from the plan. These projects include:

Project Name	Project Type
SR 119/Airport Road	Widening Project
Veterans Parkway Phase I	Widening Project
15 <sup>th</sup> Street Widening from Fort Stewart Gate 7 to	Widening Project
Wilson Avenue	

In addition to the projects that have been completed, a number of projects have progressed within the construction process, resulting in the removal of preliminary engineering and right of way acquisition phases from the plan. These projects include:



Project Name	Phase Completed
The US 84 Freight Bypass New Construction	Preliminary Engineering
Russell Swamp Bridge Replacement	Preliminary Engineering and Right of Way Acquisition
Veterans Parkway Phase II	Preliminary Engineering and Right of Way Acquisition

The HAMPO Policy Committee, with feedback from the Technical Coordinating, Citizens Advisory, and Stakeholders Committees, elected to project transportation funding revenues utilizing historic revenue data provided by GDOT for years 2003 through 2013, anticipated revenues published in the current 2015 – 2018 HAMPO Transportation Improvement Program (TIP), and a 2% annual inflation rate based on the average anticipated funding through the planning horizon.

Anticipated funding was then split into two categories based on historic expenditures, including: 80% Highway Improvement and 20% Operations and Maintenance of the existing system. The table below depicts the anticipated revenues for the planning period of 2014 – 2040. The expenditures for transit are identified, but are dedicated to the specific category and are not included in the funds available for projects.



		INFLATION FACTOR
	Fiscal Year	2%
	2003	7,579,964.56
	2004	6,160,568.76
	2005	15,868,153.70
	2006	43,814,212.11
. <u>.</u>	2007	1,370,446.76
Historic	2008	3,194,396.70
ist	2009	2,667,907.94
I	2010	7,939,151.75
	2011	3,077,943.46
	2012	12,418,463.91
	2013	7,822,506.98
	2014	18,204,484.48
	2015	4,409,676.00
₽	2016	12,872,769.00
-	2017	1,419,000.00
	2018	4,051,000.00
	2019	9,745,503.69
	2020	9,940,413.76
	2021	10,139,222.04
	2022	10,342,006.48
	2023	10,548,846.61
	2024	10,759,823.54
	2025	10,975,020.01
	2026	11,194,520.41
Š	2027	11,418,410.82
Projections	2028	11,646,779.04
it i	2029	11,879,714.62
oje	2030	12,117,308.91
- L	2031	12,359,655.09
	2032	12,606,848.19
	2033	12,858,985.15
	2034	13,116,164.86
	2035	13,378,488.15
	2036	13,646,057.92
	2037	13,918,979.08
	2038	14,197,358.66
	2039	14,481,305.83
	2040	14,770,931.95
Tatal D	(2015 2040)	200 204 200 00
Total Plan	(2015-2040)	288,794,789.80
	90% Highword	221 025 024 04
	80% Highway	231,035,831.84
	20% Operations/Maint.	57,758,957.96

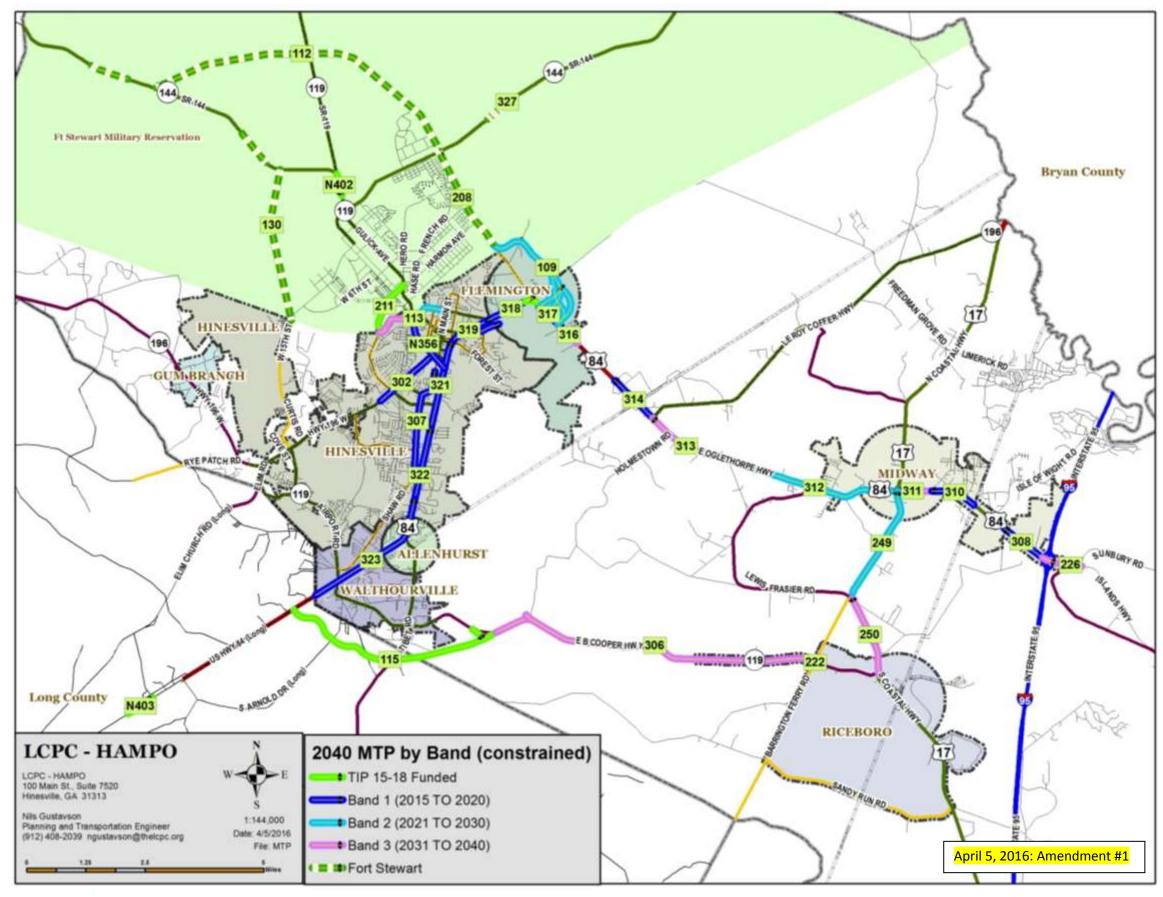
The project list, shown below, and the maps on the following pages identify the projects included in the 2040 Cost Feasible Plan; those projects already funded through the 2015-2018 TIP are also included.

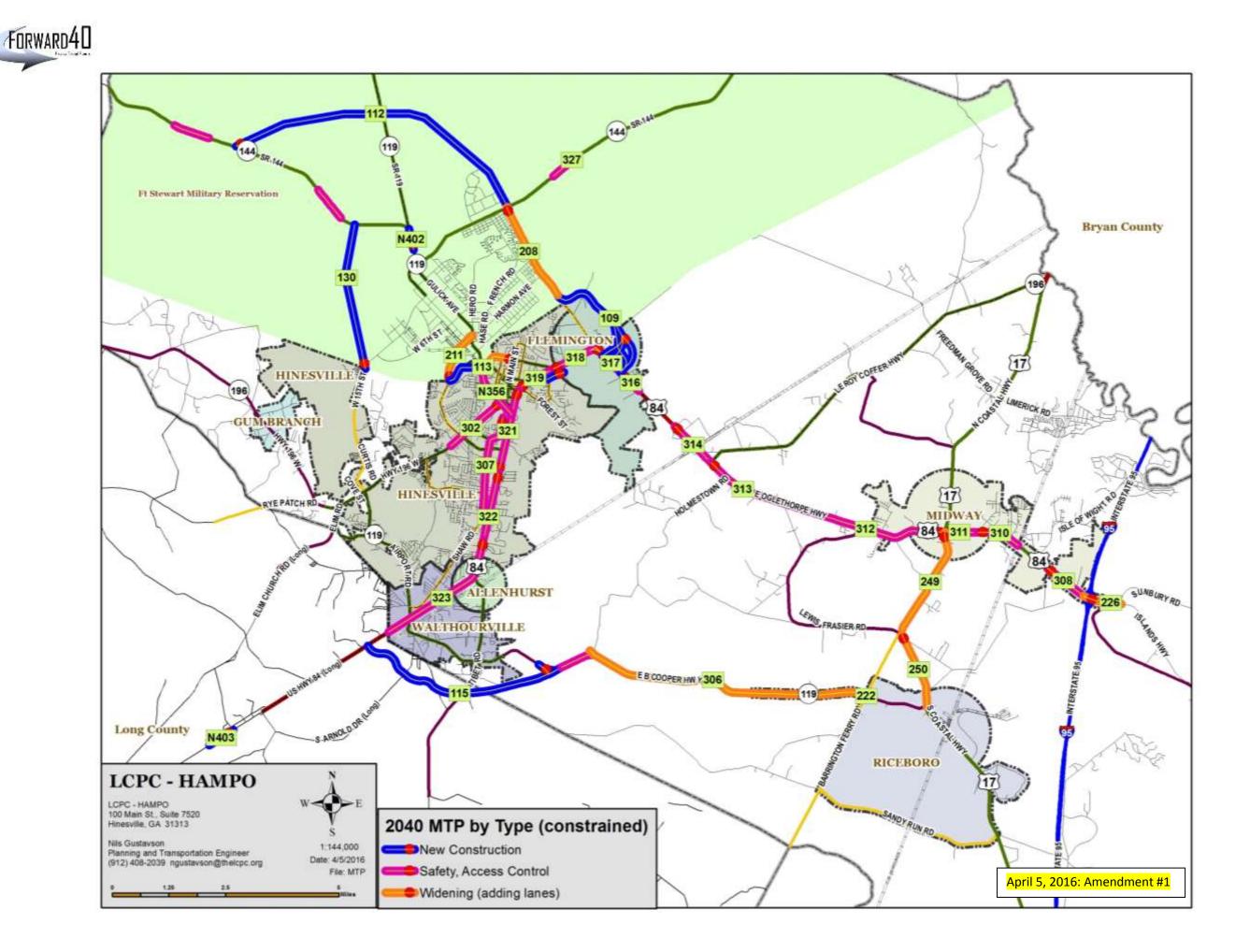
-	HAMPO 2040 MTP PRIORITZED PROJECT LIST						BAND 1		BAND 2				
roject Index	Road Name	From	То	Project Type	Proposed Lanes	2015-2020 PE	2015 - 2020 ROW	2015-2020 CST	2021-2030 PE	2021-2030 ROW	2021-2030 CST	2031-2040 PE	
Safety	Flemington Curve	Old Sunburry Road	Old Hines Road	Safety, Access Control	4	\$386,451	\$ 1,124,875.00	\$ 1,132,674.00					t
211	Veterans Pkwy Phase II	Fort Stewart boundary	Wilson Avenue	Widening	4	\$140,000	60 004 4FT	\$11,457,769			494.0C0.449		╀
115 N403*	US 84 Hinesville Bypass (western segment) SR 38 at Doctors Creek	SR 119	US 84	New Construction Bridge Replacement	2	\$500,000	\$3,221,457 \$250,000	\$1,502,820			\$24,069,443	1	t
N402	SR 119 @ Taylors Creek			Bridge Replacement	2	\$500,000	\$250,000	\$2,400,000					Ī
319	Oglethorpe Hwy/US 84 AI/Safety	General Stewart Way	MLK Jr. Drive	Safety, Access Control	4	\$93,048						<u> </u>	+
N154 321	Sandy Run/Patriots Trail Connector Oglethorpe Hwy/US 84	Sandy Run Dr General Screven Way	Patriots Trail Flowers Drive	New Construction Safety, Access Control	2	\$191,887 \$128,790	\$239,859 \$80,494	\$2,398,585 \$1,609,875					┼
321	Oglethorpe Hwy/US 84 Oglethorpe Hwy/US 84	MLK Jr. Drive	General Screven Way	Safety, Access Control Safety, Access Control	4	\$128,790 \$98,388		\$1,006,069				<u> </u>	t
318	Oglethorpe Hwy/US 84	Old Hines Road	General Stewart Way	Safety, Access Control	4	\$32,437	\$20,273	\$405,462					Ī
308	Oglethorpe Hwy/US 84	1-95	Charlie Butler Road	Safety, Access Control	4	\$99,104	\$61,940	\$1,238,796				L	ļ
	SR 119/General Screven Access Improvements	US 84 Flowers Drive	Fort Stewart Gate 1	Safety, Access Control	4	\$284,820 \$97,713	\$142,410 \$61,070				\$3,303,043 \$2,982,538		┼
322 307	Oglethorpe Hwy/US 84 South Main Street	Darsey Road	Topi Trail Deen Street	Safety, Access Control Mix: widening, median, access improvements	2	\$384,896	\$61,070				\$2,982,538		t
310	Oglethorpe Hwy/US 84	Peach Street	Butler Avenue	Safety, Access Control	4	\$85,410	\$53,381	\$1,067,624			2,2,7,7,2,2		t
317	Oglethorpe Hwy/US 84	Spires Drive	Old Hines Road	Safety, Access Control	4	\$122,856	\$76,785	\$1,535,696					Ţ
314	Oglethorpe Hwy/US 84	SR 196	Brights Lake Rd	Safety, Access Control	4	\$122,856	\$56,899				\$1,319,699		ł
323 302	Oglethorpe Hwy/US 84 SR 196/E.G. Miles Pkwy Access Management	Topi Trail Pineland Avenue	Airport Road General Screven Way	Safety, Access Control Mix: Raised Median, Access Control	4	\$20,326 \$275,158	\$12,704			518,537	\$294,649 3,988,743		ł
	SR 38C/General Stewart Way	Main St	Memorial Drive	Widening	4	\$273,138			\$339,824		\$4,247,805		t
254	SR 38C/General Stewart Way	Memorial Drive	General Screven Way	Widening	4				\$147,032	\$662,589	\$1,837,903		Į
109	Flemington Loop	US 84	Fort Stewart Rd 47	New Construction	2				944,101	756,359	\$11,801,260		╀
249 312	Coastal Hwy/US 17 Oglethorpe Hwy/US 84	US 84 US 17	Barrington Ferry Rd Bill Carter Road	Widening Safety, Access Control	4				\$2,356,712 \$549,166	\$7,537,760 \$343,229	\$14,124,038	<u>.</u>	╉
226	Sunbury Rd/Islands Hwy	I-95 ramp	Tradeport Access Road	Widening	4				\$549,100	\$545,229		\$470,283	;
	Central Connector/ General Stewart ext	General Screven Way	Veterans Parkway	New Construction	4							\$372,477	
311	Oglethorpe Hwy/US 84	Butler Avenue	US 17	Safety, Access Control	4							\$112,335	-
313	Oglethorpe Hwy/US 84	Bill Carter Road	SR 196	Safety, Access Control	4							\$520,019	
250 228	Coastal Hwy/US 17 US 84 bridge at I-95	Barrington Ferry Rd I-95 access	SR 119/EB Cooper I-95 access	Widening Widening	4							\$1,446,397 \$2,184,337	
306	SR 119/EB Cooper Hwy	US 84//hinesville Bypass	Barrington Ferry Rd	Widening	2							\$469,781	
316	Oglethorpe Hwy/US 84	John Martin Road	Spires Drive	Safety, Access Control	4							\$138,130	,
	SR 119/EB Cooper Hwy	Barrington Ferry Rd	Hinesville Bypass	Widening	4							\$3,547,585	4
315 201	Oglethorpe Hwy/US 84 15th Street	Brights Lake Road EG Miles Pkwy	John Martin Fort Stewart boundary		4								+
114	Hinesville Bypass (eastern segment)	US 84	SR 119		4								t
304	Hwy 57	US 84	US 84		2								
51145	I-95 (8 lanes)	McIntosh County line	South of Jericho River [Bryan County line] then to 0.	-	8							L	4
325	SR 119/Talmadge Rd	US 84 Railroad	US 84/Hinesville Bypass		2								+
326 303	Coastal Hwy/US 17 Elim Church Road	SR 196	Creek, includes SR 119 intersection		2							<u> </u>	t
227	Coastal Hwy/US 17	SR 196	US 84		4								t
301	Dunlevie Road	US 84	SR 119		2								I
103	Central Connector/ General Stewart ext 2	Veterans Parkway	15th Street		4	-							╀
224 309	SR 196 W (from Rye Patch Rd) Oglethorpe Hwy/US 84	Rye Patch Rd/SR 196 Charlie Butler	Hodges Rd/Central Conn Peach Street		4								t
N354	I-95 Intersection/road Improvements	I-95 Exit 76			0								t
	SR 196 W (to US 301)	Hodges Rd/Central Connector	US 301		4								Į
117	15th St/Frank Cochran Connector	Frank Cochran Dr	15th Street		2								ŧ
118 324	Laurel View Connector Barrington Ferry Rd	Isle of Wight Road SR 119	Laurelview Road US 17		2								ł
	Peacock Creek Rd	US 84	US 17 US 84		2								t
	Gen Stewart Extension East		Sandy Run Extension		2								ĺ
N355	I-95 Intersection/road Improvements	I-95 Exit 67			0								t
106	Central Connector (W)	15th Street	Dairy Rd/Hodges Rd		2 4				-				ł
248 151	Barrington Ferry Rd Hinesville Bypass III	US 17 US 84	SR 119 SR 196		2							<u> </u>	t
153	Developer Road	Peacock Creek Rd	Patriots Trail		2				-				t
145	Independence Rd (N-S)	SR 196	Central Connector/Ft Stew Boundary		2								I
146	Independence Spine Rd (E-W)	15th Street at independence Conn	Dairy Rd		2								$\frac{1}{1}$
129 147	WAAF Access Road Live Oak Church Rd	Old Hines Rd/Flem Loop Current end	Midcoast Regional Airport Central Connector		2								ł
147	Cay Creek Extension	Cay Creek Rd	US 17		2								t
	Hampton Island Road	Hampton Island	US 17		4								t
120	Sandy Run Drive extension	Sandy Run Dr	Peacock Creek Rd		2								t
	Elim Church Road	SR 196	Palmer Road		4							<b></b>	ł
N155	Sunbury Road DEFENSE FUNDED PROJECTS	End of Paved Surface	LCDA Wastewater Treatment Facility		2								ł
327	SR 144	four locations	through Fort Stewart		4								ſ
208	Ft Stewart Rd 47	Flemington Loop	SR 144		4								Į
112	Ft. Stewart Bypass	SR 144	SR 144		2								4
130	Ft Stewart Bypass (west) NON-MOTORIZED PROJECTS	SR 144	15th Street		2								1

NON-MOTORIZED PROJECTS
NM Non-motorized Funding See non motorized list \$421,243 \$358,587 Project cost estimates are inflated at 2.5% annually
 Note that projects are prioritized by band, the numerical order of the projects is not significant to the actual order in which projects will be funded and/or constructed. \$ 3,564,139 \$ 7,986,442 \$ 27,339,708 \$ 4,336,836 \$ 9,980,973 \$ 73,907,232 \$ 9,261,344 \* April 5, 2016: Admentment Number 1: Added SR38 at Doctor's Creek Birdge Project. Total Project Cost 38,890,288 88,225,041 Cost \$ \$ cenario B TIP Revenue Est. 33,950,690 88,267,819 \$ Revenue \$ (2,252,820) Cumulative Funding Balance \$ \$ (4,939,598) 42,778 Ś Balance Balance

	BAND 3		UNFUNDED					
E	2031-2040 ROW	2031-2040 CST	Long Range PE	Long Range ROW	Long Range CST			
			1	1				
_								
-								
0.1	**	\$8,787,236						
83	\$764,210	\$5,878,536			<u> </u>			
77 35	\$4,624,079 \$70,210	\$16,872,797 \$1,404,192						
55 19	\$70,210	\$6,500,240						
97	\$1,345,135	\$18,079,963						
37	\$0	\$24,660,213						
81 30	\$293,613 \$89,768	\$5,872,263			\$2,031,280			
30 85	203,108			\$10,255,580	\$2,031,280 \$50,172,084			
			\$54,481	\$92,874	\$1,857,482			
_			\$0	\$9,070,187	\$39,822,511			
_			\$1,825,933	\$14,357,797	\$93,519,508			
_			\$5,380	\$6 443 728	\$67,253			
_			\$34,317,255 \$462,151	\$6,443,728 \$243,147	\$428,965,686 \$4,862,931			
			\$462,131 \$127,097	\$243,147 \$26,220	\$900,702			
			\$638,233	\$5,897,796	\$7,977,909			
			\$6,901,235	\$20,517,475	\$86,265,432			
			\$125,165	\$1,258,502	\$1,564,568			
			\$143,453 \$3,175,881	\$3,036,753 \$16,204,586	\$19,215,138 \$39,698,509			
_			\$421,424	\$10,204,380	\$5,267,796			
_			\$95,015	\$0	\$855,132			
			\$1,732,668	\$7,824,011	\$21,658,355			
			\$363,566	\$2,536,486	\$4,544,573			
			\$720,942	\$1,335,609	\$9,011,777			
			\$165,250 \$1,149,618	\$103,281 \$2,249,447	\$2,065,624 \$14,370,230			
			\$166,453	\$5,195,255	\$1,599,784			
			\$76,012	\$0	\$684,105			
_			\$2,853,747	\$4,381,735	\$35,671,842			
_			\$1,317,782	\$5,436,071	\$16,472,271			
_			\$1,400,351 \$580,695	\$1,851,107 \$3,292,159	\$17,504,389 \$7,258,686			
			\$3,402,210	\$1,634,364	\$42,527,620			
			\$4,646,028	\$2,231,873	\$58,075,352			
_			\$1,840,650	\$1,464,484	\$23,008,124			
_			\$853,601	\$410,055	\$10,670,012			
_			\$680,888 \$1,211,354	\$0 \$5,922,371	\$8,511,099 \$15,141,922			
_			\$1,367,339	\$175,738	\$3,689,500			
_			\$1,439,856	\$370,850	\$8,550,781			
_			\$92,697	\$92,697	\$231,743			
			\$230,732	\$2,962,086	\$6,513,384			
			\$230,732	\$2,962,086 \$10,663,454	\$16,346,600			
			\$12,237,446	\$0	\$152,968,077			
			\$2,653,077	\$0	\$33,163,464			
		É705-000						
		\$795,009						
4	\$ 7,512,026.02	\$ 88,850,449	\$ 90,783,393	\$ 147,801,167	\$ 1,293,283,236			
	Cost	\$ 105,623,820		Cost	\$ 1,531,867,797			
	Revenue	\$ 108,267,820						
	Revenue	Ş 100,207,020						









## **APPENDICES**

#### Appendix A

- Complete Streets Policy
- Prioritization Process
- Travel Demand Model

#### Appendix B

- Public Participation Plan
- Public Workshop Summaries
- Survey and Survey Results Stakeholder Advisory Committee Meeting

Sources:

http://www.army.mil

http://www.fhwa.dot.gov/planning

http://www.dot.gov/map21

http://factfinder.census.gov

http://www.liberty.k12.ga.us

http://quickfacts.census.gov

http://www.lcda.com

http://explorer.dol.state.ga.us

http://www.epa.gov/environmentaljustice

http://www.smartgrowthamerica.org/complete-streets

http://www.dot.ga.gov/IS/GeorgiaFreight

http://coastalregionalcoaches.com/CRC/Home.html