



CORE Connections 2035

Volume 1 Framework Mobility Plan

Adopted September 17, 2009



Prepared by:



With services from:



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 is also available at: www.thempc.org/Transportation/COREConnections 2035LRTP.html.

Prepared in cooperation with and funding from the Department of Transportation, Federal Highway Administration and the Georgia Department of Transportation.





METROPOLITAN PLANNING ORGANIZATION

Resolution to Adopt the 2035 Long Range Transportation Plan CORE Connections 2035 Framework Plan

WHEREAS, federal regulations for metropolitan transportation planning issued in February 14, 2007, require that the Coastal Region Metropolitan Planning Organization (formerly the Chatham Urban Transportation Study), in cooperation with participants in the planning process, develop and update the Long Range Transportation Plan (LRTP) every five years; and

WHEREAS, the Coastal Region Metropolitan Planning Organization has been designated by the Governor as the Metropolitan Planning Organization (MPO) of the Savannah urbanized area; and

WHEREAS, the staff of the Chatham County-Savannah Metropolitan Planning Commission 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 CORE Connections 2035 Framework Plan; and

WHEREAS, the Coastal Region Metropolitan Planning Organization, in accordance with federal requirements for a Long Range Transportation Plan, has developed a twenty-five year integrated plan for federally-funded highway and transit projects for the Savannah urbanized area; and

WHEREAS, the CORE Connections 2035 Framework Plan is consistent with all plans, goals and objectives of the Coastal Region 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 CORE Connections 2035 Framework Plan includes the plans for motorized, non-motorized, and transit projects in the Savannah urbanized area for the next 25 years; and

WHEREAS, The 2035 LRTP Framework Plan will be used as the basis for the CORE Connections 2035 Total Mobility Plan that will be conducted over the next two (2) years; and

NOW, THEREFORE BE IT RESOLVED, that the Coastal Region Metropolitan Planning Organization Board adopts the attached CORE Connections 2035 Framework Plan; and

BE IT FURTHER RESOLVED, that the Coastal Region Metropolitan Planning Organization Board finds that the requirements of applicable law and regulation regarding Metropolitan Transportation Planning have been met and authorizes the MPO Study Director (MPC Executive Director) to execute a joint certification to this effect with the Georgia Department of Transportation.

CERTIFICATION

I hereby certify that the above is a true and correct copy of a Resolution adopted by the Coastal Region Metropolitan Planning Organization Board at a meeting held on September 17, 2009.

Pete Liakakis, Chairman

Coastal Region Metropolitan Planning Organization









Framework Mobility Plan

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Chatham County

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Frank McIntosh

Savannah Bicycle Campaign

Charles Odimgbe, Executive Director

Chatham Area Transit Authority

Seth Rutz, Terminal Manager

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Mark Wilkes, Director of Transportation

Planning, MPC





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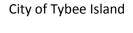
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City of Savannah

Beth Kinstler
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Louis Wilson

City of Savannah
Jack Knops

City of Savannah

Henry Levy







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Chairman McArthur Jarrett Interested Citizen

James Aberson, ADA Coordinator

Chatham County

Teresa Brenner

Savannah Council of the Blind

William K. Broker, Managing Attorney

Georgia Legal Services

Project Manager

TeleRide (Laidlaw Transit Services)

Wayne Dawson, Executive Director

Savannah - Chatham County Fair Housing Council

Jan Elders

Savannah-Chatham Council on Disability Issues

Jeff Felser, Alderman City of Savannah

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Housing Authority of Savannah

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National Federation of the Blind

Bob Habas

Living Independence for Everyone Inc.

Timamu Hakim, Service Manager

Chatham Area Transit Authority

Zoe Hardenbrook, Intermodal Program District

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Chatham County-Savannah Metropolitan

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Patti Lyons, President

Senior Citizens Savannah - Chatham County Inc.

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Goodwill Industries of the Coastal Empire

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United Way of the Coastal Empire

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Coastal Center for Development Services

Terri White

Savannah Association of the Blind

Leslie Wilson

Economic Opportunity Authority





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COASTAL REGION METROPOLITAN PLANNING ORGANIZATION STAFF MEMBERS

Thomas L. Thomson, P.E., AICP, Executive Director Chatham County-Savannah Metropolitan Planning Commission

Mark Wilkes, P.E., AICP, Director of Transportation Planning Chatham County-Savannah Metropolitan Planning Commission

Zhongze (Wykoda) Wang, Transportation Planner Chatham County-Savannah Metropolitan Planning Commission

Jane Love, Transportation Planner Chatham County-Savannah Metropolitan Planning Commission

Michael Adams, Transportation Planner Chatham County-Savannah Metropolitan Planning Commission

Ellen Harris, Historic Preservation/Transportation Planner Chatham County-Savannah Metropolitan Planning Commission

Bethany Jewell, Natural Resources/Transportation Planner Chatham County-Savannah Metropolitan Planning Commission

Jessica Mayfield, Administrative Assistant Chatham County-Savannah Metropolitan Planning Commission





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RS&H STAFF MEMBERS

Beverly, Davis, AICP, Senior Project Manager RS&H

Steve Cote, P.E., AICP, Project Manager/Senior Planner RS&H

Sara Huie, P.E., Transportation Engineer RS&H

Megha Young, Planner RS&H

Tyler Plain, Planner RS&H





Framework Mobility Plan

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1.0 Introduction

Metropolitan Planning Organizations, which are designated by federal mandate, are required to develop and periodically update long range transportation plans. These plans chart the course of transportation for the next twenty years and include the identification of financially feasible projects to be completed during the planning timeframe. The CORE Connections – 2035 Long Range Transportation Plan (LRTP) is the five-year update of the Chatham County – Savannah region's previous long range transportation plan, adopted on September 22, 2004.

This updated plan meets all of the federal and state requirements and incorporated a coordinated and inclusive effort in its development. The process included a continual process of public and inter-agency engagement to help the community achieve their transportation goals as well as support other community efforts, goals and aspirations.

1.1 The Coastal Region Metropolitan Planning Organization

The Coastal Region Metropolitan Planning Organization¹ (CORE MPO) is the designated Metropolitan Planning Organization (MPO) for the Savannah urbanized area, a Census-designated area that includes the City of Savannah as well as surrounding Census blocks with at least 500 people per square mile. Metropolitan planning processes are governed by federal law (23 USC 134), with regulations included in 23 CFR 450. Since 1962, federal law has mandated that metropolitan transportation plans and programs be developed through a continuing, cooperative and comprehensive (3-C) planning process.

According to law, transportation planning processes must be organized and directed by MPOs for all urbanized areas with a population of at least 50,000 as defined by the US Census Bureau. MPOs oversee the transportation planning processes for the urbanized area, as well as the area expected to become urbanized in the next 20 years. Figure 1.1 depicts the geographic extent of the CORE MPO planning area.

According to the 2000 US Census, the Savannah Urbanized Area population exceeded 200,000, designating the MPO as a Transportation Management Area (TMA). In addition to the federal requirements of MPOs, TMAs are also responsible for developing congestion management processes, Transportation Improvement Programs (TIP) project selection, and are subject to a joint federal certification review of the planning process at least every four years.

The CORE MPO Board (CORE Board) includes elected and appointed officials from Chatham County and its municipalities, and executives from local, state and federal agencies. The CORE Board voting members are as follows:

¹ The CORE MPO was formerly designated the Chatham Urban Transportation Study (CUTS). The MPO formally changed its name in 2009.





Core MPO Voting Members:

- Chatham County
- City of Savannah
- City of Garden City
- City of Pooler
- City of Bloomingdale
- City of Port Wentworth
- City of Tybee Island
- Town of Thunderbolt
- Town of Vernonburg
- Georgia Department of Transportation (GDOT)
- Chatham Area Transit Authority (CAT)
- Georgia Ports Authority (GPA)
- Savannah Airport Commission
- Metropolitan Planning Commission (MPC)
- Savannah Economic Development Authority (SEDA)
- Savannah Area Chamber of Commerce
- Hunter Army Airfield
- CORE MPO Citizens Advisory Committee (CAC)
- CORE MPO Advisory Committee on Accessible Transportation (ACAT)

There are three committees that advise the CORE Board and help them carry out the 3-C planning process. These committees include the Technical Coordinating Committee (TCC), the Citizens Advisory Committee (CAC) and the Advisory Committee on Accessible Transportation (ACAT). The membership and roles of each of these advisory committees are discussed in more detail in **Appendix A**.







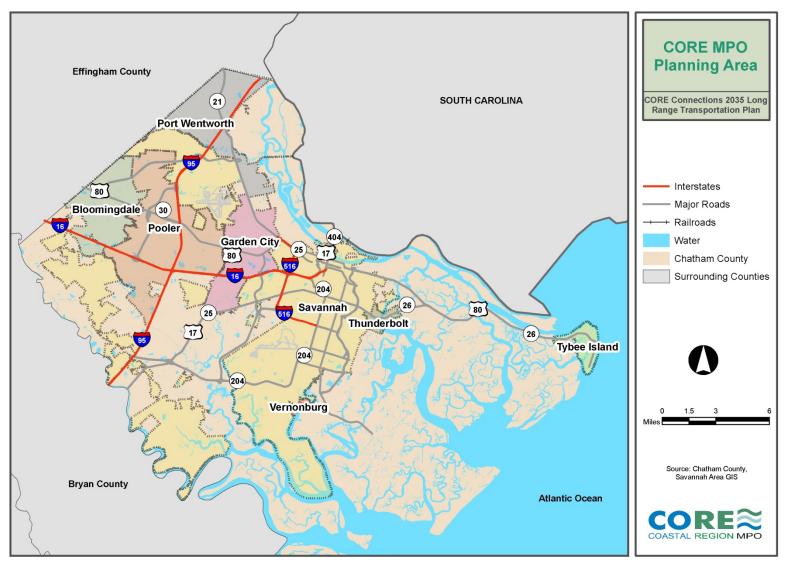


Figure 1.1 CORE MPO Planning Area





1.2 The CORE Connections - 2035 LRTP

One of the federal requirements for metropolitan transportation planning under 23 CFR 450 is the development of a "metropolitan transportation plan" that meets the requirements of § 450.322. The metropolitan transportation plan is commonly referred to as the regional Long Range Transportation Plan (LRTP). According to federal regulations, the LRTP must include the development of a multimodal transportation system with a horizon year of no less than 20 years. Further, the LRTP must include both short and long-term strategies and actions that "lead to the development of an integrated multimodal transportation system to facilitate the safe and efficient movement of people and goods in addressing current and future transportation demand."²

Because the CORE MPO region has attained federal air quality regulations, the LRTP must be updated every five years. The 2035 LRTP was adopted on September 17, 2009. The CORE MPO's 2035 LRTP has been entitled "CORE CONNECTIONS – 2035 LRTP".

Incorporation of SAFETEA-LU Legislation

In August 2005, the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) was signed into law and replaced the previous Federal Transportation legislation. SAFETEA-LU authorizes the federal surface transportation programs for highways, highway safety and transit. The SAFETEA-LU planning requirements have been in effect since February 14, 2007.

While SAFETEA-LU retains many of the goals and programs found in TEA-21, there are some significant changes in, and new additions to, the transportation planning requirements. SAFETEA-LU places an emphasis on improving safety and security, reducing traffic congestion, improving efficiency in freight movement, increasing intermodal connectivity and protecting the environment. The CORE Connections - 2035 LRTP will meet and exceed the requirements set forth by SAFETEA-LU.

1.3 Two-Volume Approach: Framework Mobility Plan vs. Total Mobility Plan

The 2035 LRTP will be completed in two volumes. Volume 1, or the "Framework Mobility Plan," will set the policy and project groundwork for a more detailed transportation planning analysis and public/stakeholder involvement process which will be completed in Volume 2, titled the "Total Mobility Plan". In Volume 2, recommended projects will be assessed in more detail, including the planning of "complete streets," improvements and amenities such as bicycle and pedestrian facilities, a Transit Vision Plan, as well as green infrastructure and climate change. Volume 2 will also include an intensive and extensive stakeholder and public outreach program. Figure 1.2 shows the estimated timeframe proposed for development of both Volume 1 and Volume 2 of the CORE Connections – 2035 LRTP.

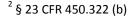






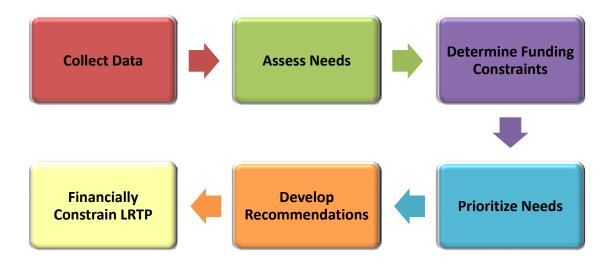
Figure 1.2 CORE Connections - 2035 LRTP Development Schedule

				20	009									20	10						2011											
LRTP	М	J	J	Α	s	0	N	D	7	F	М	Α	М	7	7	Α	S	0	Ν	D	7	E	М	Α	М	7	J	Α	S	0	Z	D
Volume I: Framework Mobility Plan																																
Volume II: Total Mobility Plan																																

1.4 - Framework Mobility Plan: The Development Process

The development of the CORE Connections – 2035 LRTP will be completed in two volumes over the course of two years. The products developed for both Volume 1 and Volume 2 will be combined into a single document with Volume 1 information completed initially as a guideline for the Volume 2 information, which will be adopted into the overall plan at the time of its completion. The steps for development of Volume 1 of the 2035 LRTP are summarized in Figure 1.3 and described in the following section.

Figure 1.3 CORE Connections - 2035 LRTP Volume 1: Framework Mobility Plan Development Process



 Collect Data – The initial task of the project involves obtaining existing multimodal data necessary to complete an assessment of existing and future county-wide transportation conditions. The data required for the Framework Mobility Plan is extensive, including traffic data, vehicle miles of travel data, safety/crash data, socio-economic data (population, households and employment), GIS data, transit data, port and freight related data and financial





projections.

- Assess Needs This task involves a detailed assessment of the performance of the region's transportation system, both for existing conditions, as well as future conditions through 2035. The assessment includes analyses of existing and projected congestion deficiencies, in addition to existing safety and security deficiencies. Other needs are also assessed in this stage of the project such as freight maintenance, asset management, economic development, and multimodal system performance.
- Determine Funding Constraints This critical component to the development of the Framework
 Mobility Plan involves establishing an estimate of transportation funding by using a combination
 of both traditional and non-traditional funding strategies that will be available through the plan
 horizon year 2035. This step is required to determine how many transportation projects can be
 implemented during the planning period.
- Prioritize Needs In order to develop a list of projects to consider for inclusion in the Framework
 Mobility Plan, input from the stakeholders and public, as well as technical analysis is used to
 determine the most urgent needs of the community. The entire list of identified needs is
 evaluated against goals and performance measures to develop a prioritized list of needed
 projects and programs. This interim list acts as an inventory of all transportation needs in the
 region and is not fiscally-constrained.
- Develop Recommendations Based on the prioritized needs determined from the previous task, this task consists of developing project and policy recommendations for inclusion in the financially-constrained Framework Mobility Plan. This process seeks to include those projects and policies that most closely address existing needs and goals of the CORE MPO.
- Financially Constrain LRTP Federal regulations require that all LRTPs be financially-constrained. In other words, there must be a reasonable estimate of future funding over the life of the plan equal to or greater than the estimated costs of recommended projects and programs. Historic funding data is examined in order to determine an appropriate estimate of anticipated funding for the years 2010 to 2035. This task matches funding from available revenue sources with recommended projects, ensuring that all plan projects and programs can be implemented. The financially-constrained LRTP (Framework Mobility Plan) will be divided into three time periods for implementation: short range (2010-2015), mid range (2016 2025), and long range (2026-2035).





2.0 Development of Goals, Objectives and Performance Measures

Goals, objectives and performance measures are necessary for measuring implementation and success of plans. They are a key component in need-based planning by providing a benchmark for evaluating the performance of the plan and for identifying improvements for future plans. They are important to the LRTP process not only to help guide the study, but to help develop and prioritize recommended transportation improvement projects for the Chatham County - Savannah region. Goals and performance measures for the Framework Mobility Plan were developed through coordination with and input from the project team, key stakeholders from the community and the general public. The adopted goals enable the Framework Mobility Plan to address the needs of the region in a way that supports local community goals and aspirations, while complying with federal requirements.

The Safe, Accountable, Flexible, Efficient Transportation Equity Act - a Legacy for Users (SAFETEA-LU) established eight planning factors which MPOs must consider in the development of transportation plans and programs. These planning factors are:

- 1. Support the economic vitality of the United States, the States, nonmetropolitan areas, and metropolitan areas, 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 the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns.
- 6. Enhance the integration and connectivity of the transportation system, across and between modes throughout the State, for people and freight.
- 7. Promote efficient system management and operation.
- 8. Emphasize the preservation of the existing transportation system.

These planning factors are intended to target national transportation priorities. They serve as the foundation for the goals and objectives developed for the Framework Mobility Plan. These goals and objectives are also guided by those of the 2030 LRTP, which were formed upon the planning factors of the Transportation Equity Act for the 21st Century (TEA-21), similar to those of SAFETEA-LU.

On June 1, 2009, a meeting was held with the Framework Mobility Plan Stakeholder Advisory Committee. The purpose of this meeting was to further introduce the Committee to the plan development and identify transportation issues and needs for the Chatham County - Savannah region. The Committee was divided into two working groups, each of which developed a list of issues and needs based upon the 2030 LRTP goals and objectives and the SAFETEA-LU planning factors. Additionally, a Public Involvement Workshop was held on June 2, 2009, to hear the concerns of the general public and develop a list of regional issues and needs to compare with the proposed goals.





The issues and needs developed by both the Stakeholder Advisory Committee and general public were then used to further expand 2030 LRTP goals, and ensure that they directly address the region's future needs and opportunities. The resulting Framework Mobility Plan proposed goals are shown in Table 2.1.

Table 2.1 Framework Mobility Plan Proposed Goals

1. Economic Activity	Support the economic vitality of the region, in concert with the community's goals, especially by enabling local, regional and global competitiveness, productivity and efficiency.
2. Safety	Ensure and increase the safety of the transportation system for all users, including motorized vehicles, bicyclists and pedestrians.
3. Security	Ensure and increase the security of the transportation system for all users, including motorized vehicles, bicyclists and pedestrians.
4. Accessibility, Mobility and Connectivity	Ensure and increase the accessibility, mobility and connectivity options available to people and freight, and ensure the integration of modes, where appropriate.
5. Environment and Quality of Life	Protect, enhance and sustain the environment and quality of life, promote energy conservation and address climate change.
6. System Management and Maintenance	Assess the transportation system to determine what works well, what does not work well, and potential improvement options.
7. Intergovernmental Coordination	Ensure coordination in the transportation planning process between intra- and inter-regional partners, including both state and local agencies.

Source: CORE Connections - Framework Mobility Plan Study Team, Key Stakeholders and General Public

The objectives and performance measures associated with each of these goals were adapted from the 2030 LRTP, as well as the 2009 CORE MPO Congestion Management Process (CMP). These goals, objectives and performance measures were then approved by the CORE MPO's Citizens Advisory Committee (CAC) and Technical Coordinating Committee (TCC) at separate meetings on June 18, 2009. They are shown in Table 2.2.





Table 2.2 Framework Mobility Plan Objectives and Performance Measures

		ty of the region, matching the community's goals,
		al competitiveness, productivity and efficiency.
	Objectives: • Minimize work trip congestion	Performance Measures: Project cost/vehicle miles of travel (VMT)
	Promote projects which provide the maximum	Reductions in VMT
	travel benefit per cost	Work trip vehicle hours of travel (VHT)
_		Sustained or increased funding status
 - -		Increased Sustainable development
GOAL		incorporating mixed-use, pedestrian-oriented
		design
	· · · · · · · · · · · · · · · · · · ·	sportation system for all users, including motorized
	vehicles, bicyclists	
	Objectives:	Performance Measures:
	Eliminate at-grade railroad crossings	Total accidents per million miles traveled, involving all years types.
	Minimize frequency and severity of vehicular accidents	involving all user typesInjury accidents per million miles traveled,
7	Minimize conflicts and increase safety for non-	involving all user types
Æ	motorized users	Fatal accidents per million miles traveled,
GOAL 2	motorized users	involving all user types
		Implementation of transit and other safety
		projects
		Number of increased bike and pedestrian
		facilities
		Number of at-grade crossings reduced
	Security: Ensure and increase the security of t	he transportation system for all users, including
		yclists and pedestrians.
	Objectives:	Performance Measures:
	Promote projects which aid in hurricane	Hurricane evacuation route status
	evacuation	Improved emergency responses (e.g.,
	Adequately prepare for coordinated responses	ambulance travel times to hospitals)
GOAL 3	to incidents	Maximize transportation system mobility
O	Monitor vulnerable infrastructure through	during disruptive events (such as reductions in
G	visual and other inspection methods	time to clear major crashes from through
		lanes)
		 Reduction in vulnerability of the transportation system (such as implementation of monitoring
		infrastructure for major transportation system)
		250. acta. c .cajo. transportation systemy





Accessibility, Mobility and Connectivity: Ensure and increase the accessibility, mobility and connectivity options available to people and freight, and ensure the integration of modes, where appropriate.

Objectives:

- Minimize congestion delays
- Maximize regional population and employment accessibility
- Provide efficient and reliable freight corridors
- Minimize delays in corridors served by transit
- Encourage use of transit and non-motorized modes, focusing on areas with low rates of automobile ownership or high population of elderly and/or disabled populations
- Expand transit service area and increase service frequency

Performance Measures:

- Base year vs. future year volume/capacity ratios for various modes
- Percent of population within ½ mile of transit route or facility connecting to regional activity center(s)
- Daily freight truck use/lane
- Operational performance of transit system (buses arriving/departing on schedule)
- Percent of population within ½ mile of bicycle facility connecting to regional activity center(s)
- Transit ridership

Environment and Quality of Life: Protect, enhance and sustain the environment and quality of life, promote energy conservation and address climate change.

Objectives:

- Protect wetlands, historic resources, neighborhoods, recreational facilities and other important resources
- Support infill development
- Implement green infrastructure to reduce region's impact on stormwater pollution and address potential impacts from a changing climate

Performance Measures:

- Impacts to natural environment (such as rate of development of greenspace compared to the rate of greenspace preservation)
- Impacts to historic and cultural resources (such as the strengthening of regulations to protect historic and cultural resources)
- Strengthening of regulations promoting infill and brownfield development
- Project utilization of green infrastructure
- Vehicle miles of travel
- Energy consumption trends
- Air quality trends

System Management and Maintenance: Assess the transportation system to determine what works well, what does not work well, and potential improvement options.

Objectives:

- Maximize efficiency of signalized intersections
- Expand use of Intelligent Transportation Systems (ITS)
- Continue existing levels of maintenance for highways and bridges

Performance Measures:

- Average Daily Traffic (ADT) per lane
- Congestion Index (CI)
- Level of Service (LOS)
- ITS coverage of region
- Roadway pavement ratings and bridge sufficiency ratings
- Bicycle and pedestrian facility surface conditions
- Transit user satisfaction (such as reliability)





	_	pordination in the transportation planning process										
	between intra- and inter-regional partners, including both state and local agencies											
7	Objectives:	Performance Measures:										
٩L	 Enhance coordination between CORE MPO, 	CORE MPO represented at all project										
GOAI	Georgia Department of Transportation, County	development meetings										
0	departments and City governments	Establishment of coordination policies to										
		promote communications between various										
		agencies										





3.0 Overview of Regional Trends

Understanding the patterns and trends in the Chatham County - Savannah region is crucial to effectively develop a long-range transportation plan. The physical and cultural environment of the area directly impacts the region's transportation needs. It is important to understand who the users of the transportation system are, and where they travel, in order to offer the various transportation solutions that they require. The following sections describe the regional trends in the Chatham County - Savannah area.

3.1 Chatham County Population Trends

According to the US Census Bureau, population in Chatham County has steadily grown. Since 1980, the population has increased by approximately 22 percent. For each five year period, the growth has remained close to 3.5 percent. From 2009 to the horizon year 2035, the Chatham County population is projected to grow at a rate of approximately three percent per five year period, or 15 percent over the 26 year period. Regional population trends indicate that surrounding counties are growing at a faster rate than Chatham County, due to suburbanization. These counties include Bryan and Effingham Counties in Georgia, as well as Jasper and Beaufort Counties in South Carolina. These counties grew at rates between 43 and 130 percent in the 20 year period between 1980 and 2000, according to the 2000 US Census. Population growth since 1980 and projections to 2035 are shown in Table 3.1.

Table 3.1 Chatham County Total Population Change and Projections, 1980 to 2035

Year	Population	Percent Change
1980	202,226	-
1985	209,581	3.5%
1990	216,935	3.5%
1995	224,492	3.5%
2000	232,048	3.4%
2005	239,504	3.2%
2010	246,959	3.1%
2015	254,415	3.0%
2020	261,870	2.9%
2025	269,326	2.8%
2030	276,781	2.8%
2035	284,531	2.8%

Source: US Census Bureau

Shaded Area = Projected Population

Population distribution in Chatham County's municipalities is shown below in Table 3.2. The majority of Chatham County's population resides in the City of Savannah, with 141,629 residents in 2000 according to the Chatham County-Savannah Metropolitan Planning Commission (MPC). The population of Savannah is expected to reach 176,717 by 2035. Other municipalities in Chatham County are also projected to increase in population by 2035 with Pooler, Bloomingdale and Port Wentworth experiencing the largest percentages of growth.





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According to the MPC's *Tricentennial Plan Community Assessment*, approximately 25 percent of the population at any given time is not actually included in the official population count. This includes commuters living in other counties but working in Chatham County, local college and university students, second home owners who only spend part of their time in Chatham County and military personnel.

MPC staff developed disaggregated population data for each Traffic Analysis Zone (TAZ) within Chatham County for 2006 and 2035. As depicted in Figure 3.1 and 3.2, the most densely populated part of Chatham County for both 2006 and projected for 2035 is downtown Savannah. There are as many as 26 to 85 persons per acre in this dense, urban area. In other areas of the City of Savannah surrounding the downtown, studies have revealed less density, between nine and 25 persons per acre. The remaining areas of Savannah, Tybee Island, portions of the City of Pooler and a small area in unincorporated Chatham County between Savannah and Tybee Island have a population density of two to eight persons per acre. The least density is found in parts of unincorporated Chatham County, where there is less than one person per acre.

In 2035, the most densely populated portion of the County is projected to remain in downtown Savannah. Areas in the County that are projected to grow the most by the 2035 horizon year are in the western portion of the County, to the west of and surrounding I-95. These areas are projected to see growth to two to eight persons per acre. Minimal growth is projected for downtown Savannah, with some areas increasing to nine to 15 persons per acre by horizon year 2035 and others to 16 to 25 persons per acre. Many unincorporated areas of the County will remain only marginally populated, much of which is due to wetlands.





Table 3.2 Chatham County Municipalities Population, 1995 to 2035

Municipality	1995	2000	2005	2010	2015	2020	2025	2030	2035
Savannah	134,535	141,629	145,420	146,163	152,734	159,680	166,068	170,412	176,717
Change		5.27%	2.68%	0.51%	4.50%	4.55%	4.00%	2.62%	3.70%
Pooler	5,346	7,646	12,757	16,610	19,759	23,358	26,920	29,585	32,815
Change		43.02%	66.85%	30.20%	18.96%	18.21%	15.25%	9.90%	10.92%
Thunderbolt	2,568	2,976	3,022	2,973	3,039	3,115	3,191	3,243	3,262
Change		15.89%	1.55%	-1.62%	2.22%	2.50%	2.44%	1.63%	0.59%
Bloomingdale	2,648	2,715	2,941	5,050	6,613	8,351	10,088	11,391	12,712
Change		2.53%	8.32%	71.71%	30.95%	26.28%	20.80%	12.92%	11.60%
Garden City	9,350	10,385	10,527	11,380	12,311	13,356	14,366	15,083	15,809
Change		11.07%	1.37%	8.10%	8.18%	8.49%	7.56%	4.99%	4.81%
Tybee Island	3,117	5,196	5,607	5,763	6,069	6,377	6,610	6,776	6,998
Change		66.70%	7.91%	2.78%	5.31%	5.07%	3.65%	2.51%	3.28%
Vernonburg	106	157	157	158	164	168	172	174	177
Change		48.11%	0.00%	0.64%	3.80%	2.44%	2.38%	1.16%	1.72%
Port									
Wentworth	3,644	2,621	2,851	6,534	9,212	12,271	15,326	17,618	20,353
Change		-28.07%	8.78%	129.18%	40.99%	33.21%	24.90%	14.95%	15.52%

Source: Chatham County-Savannah Metropolitan Planning Commission





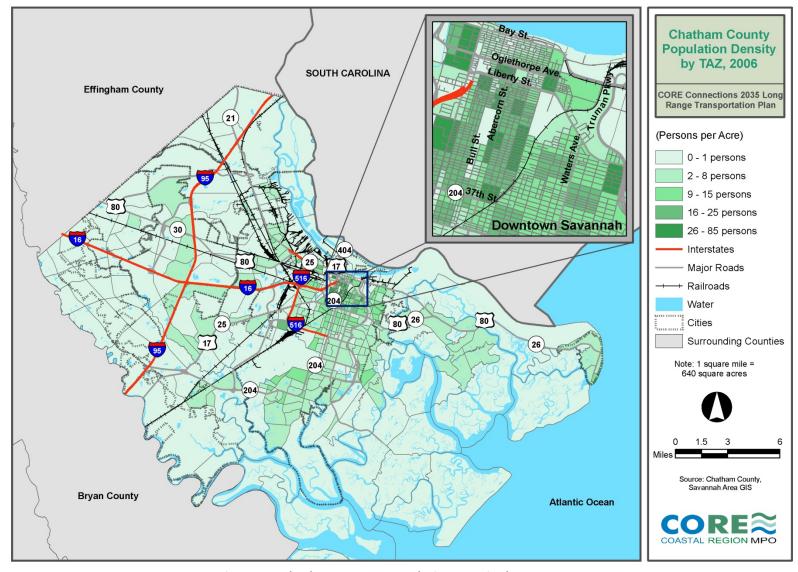


Figure 3.1 Chatham County Population Density by TAZ, 2006





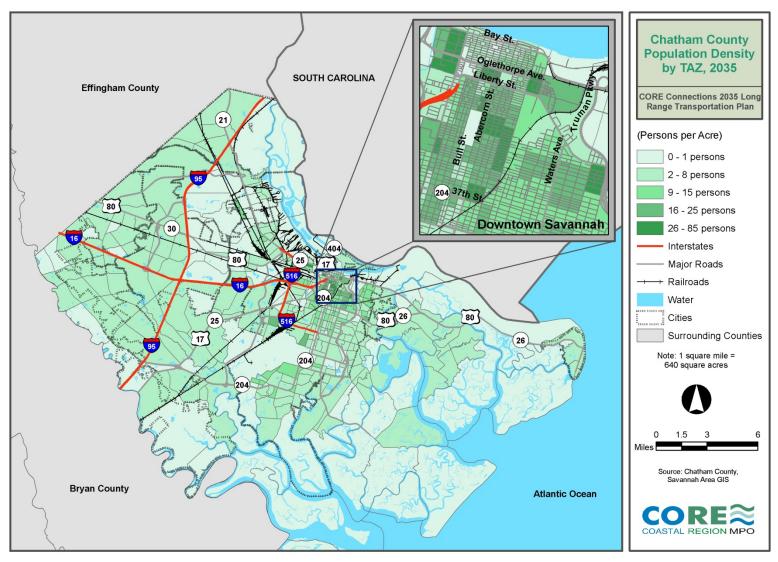


Figure 3.2 Chatham County Population Density by TAZ, 2035





Framework Mobility Plan

3.2 Chatham County Employment Trends

Chatham County historic and projected employment data obtained from the Georgia Department of Community Affairs for years 1980 to 2035 are illustrated in Table 3.3. The period between 1980 and 2005 saw a 35 percent total increase (1.4 percent annual increase) in employment in Chatham County. The highest rate of change was between 1980 and 1985 at 8.8 percent (1.8 percent annual increase), and the lowest rate was 4.2 percent (0.8 percent annual increase) between 1995 and 2000. Chatham County employment is projected to grow by 24.6 percent (approximately one percent annually) between 2010 and 2035.

The MPC also developed disaggregated employment data for each TAZ within Chatham County for year 2006 and 2035. The employment densities by TAZ for these two years are shown in Figures 3.3 and 3.4, respectively. In 2006, most areas of the County have one to three jobs per acre. Some higher density employment areas are located in downtown Savannah, with 11 to 138 jobs per acre. The majority of the downtown area has more than three jobs per acre. There are several pockets of TAZs with 11 to 138 jobs per acre surrounding the Port of Savannah and in the City of Savannah.

In horizon year 2035, employment density is projected to remain very similar to that of 2006. The majority of the County is projected to have employment densities ranging from one to three jobs per acre. Several TAZs in downtown Savannah are projected to grow from four to 10 jobs per acre to 11 to 35 jobs per acre, and others from 11 to 35 jobs per acre to 36 to 138 jobs per acre. This projected increase in employment density within the downtown Savannah area will likely result in worsening peak period/commuter-related congestion, unless further enhancements to the transit and non-motorized transportation systems downtown are implemented.





Table 3.3 Chatham County and Municipalities Employment Change and Projections, 1980 to 2035

Municipality	1980	1985	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035
Chatham County	79,850	86,910	93,969	98,083	102,196	107,783	113,369	118,956	124,542	130,129	135,715	141,279
Change	-	8.8%	8.1%	4.4%	4.2%	5.5%	5.2%	4.9%	4.7%	4.5%	4.3%	4.1%
Savannah	54,173	55,019	55,865	54,730	53,594	53,449	53,305	53,160	53,015	52,870	52,726	52,568
Change	-	1.6%	1.5%	-2.0%	-2.1%	-0.3%	-0.3%	-0.3%	-0.3%	-0.3%	-0.3%	-0.3%
Pooler	1,117	1,702	2,287	2,688	3,088	3,581	4,074	4,566	5,059	5,552	6,045	6,547
Change	-	52.4%	34.4%	17.5%	14.9%	16.0%	13.8%	12.1%	10.8%	9.7%	8.9%	8.3%
Thunderbolt	880	1,035	1,190	1,189	1,188	1,265	1,342	1,419	1,496	1,573	1,650	1,728
Change	-	17.6%	15.0%	-0.1%	-0.1%	6.5%	6.1%	5.7%	5.4%	5.1%	4.9%	4.7%
Bloomingdale	737	924	1,111	1,256	1,401	1,567	1,733	1,899	2,065	2,231	2,397	2,550
Change	-	25.4%	20.2%	13.1%	11.5%	11.8%	10.6%	9.6%	8.7%	8.0%	7.4%	6.4%
Garden City	2,794	3,188	3,582	4,152	4,722	5,204	5,686	6,168	6,650	7,132	7,614	8,056
Change	-	14.1%	12.4%	15.9%	13.7%	10.2%	9.3%	8.5%	7.8%	7.2%	6.8%	5.8%
Tybee Island	992	1,124	1,256	1,503	1,749	1,938	2,128	2,317	2,506	2,695	2,885	3,078
Change	-	13.3%	11.7%	19.7%	16.4%	10.8%	9.8%	8.9%	8.2%	7.5%	7.1%	6.7%
Vernonburg	73	58	42	51	59	56	52	49	45	42	38	35
Change	-	-20.5%	-27.6%	21.4%	15.7%	-5.1%	-7.1%	-5.8%	-8.2%	-6.7%	-9.5%	-7.9%
Port Wentworth	1,624	1,724	1,824	1,690	1,556	1,539	1,552	1,505	1,488	1,471	1,454	1,436
Change	-	6.2%	5.8%	-7.3%	-7.9%	-1.1%	-1.1%	-1.1%	-1.1%	-1.1%	-1.2%	-1.2%

Source: Georgia Department of Community Affairs





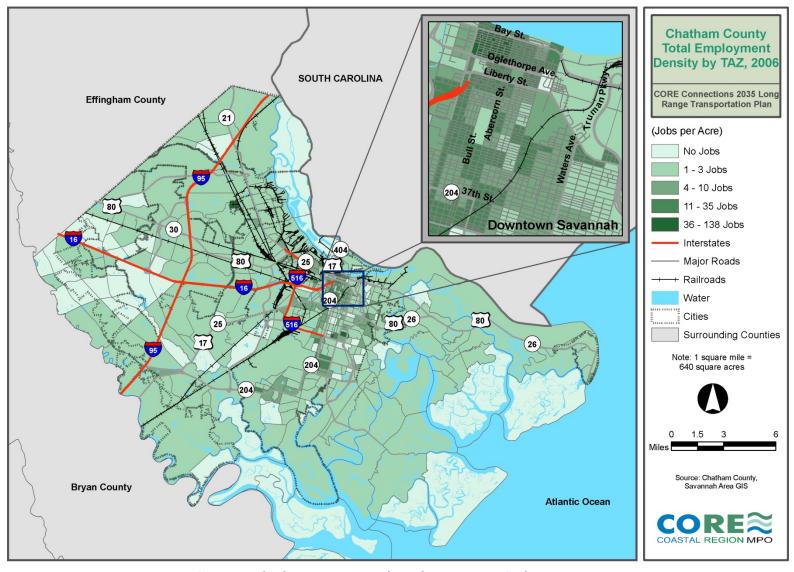


Figure 3.3 Chatham County Total Employment Density by TAZ, 2006





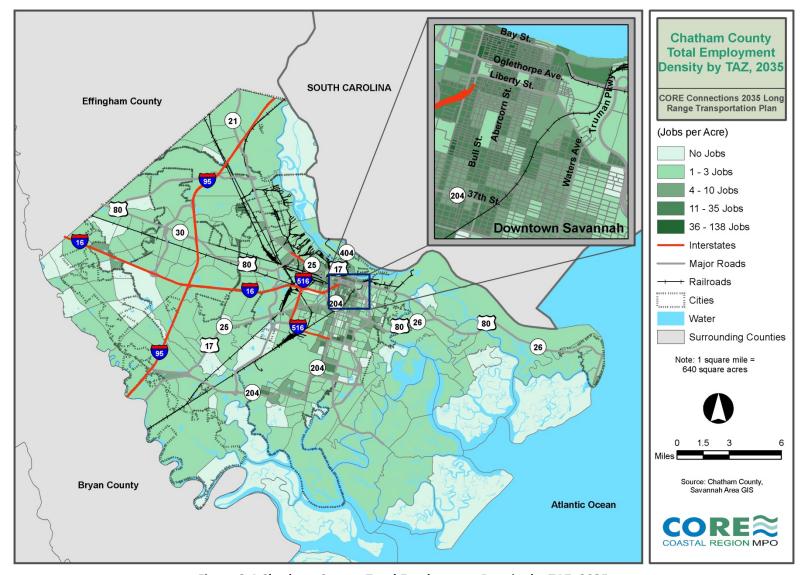


Figure 3.4 Chatham County Total Employment Density by TAZ, 2035





3.3 Demographic Characteristics

An important component of transportation planning is the demographics of the region. Understanding the diversity of the Chatham County population will enable the CORE Connections planning team to recommend a system that serves all population groups present in the region. This understanding will be key to recognizing what types of transportation infrastructure or services are needed in the Chatham County - Savannah region.

Table 3.4 presents the demographic characteristics of Chatham County and its municipalities, according to the 2000 US Census. For the County as a whole, 43.4 percent of the population is non-white, and 15.6 percent of the population lives below the poverty level. The vast majority of the non-white population and the population living below poverty level live in the City of Savannah. 12.8 percent of the population in Chatham County is age 65 and over, while 3.6 percent is age 15 to 19. 11.9 percent of the households in Chatham County, or 10,694 households, do not have vehicles, most of these households are located in the City of Savannah. The Figures 3.5 and 3.6 display demographic characteristics of Chatham County.

Table 3.4 Demographic Characteristics by Jurisdiction (2000)

Municipality	Population	Number of Households	Non-White Population	Population below Poverty	Population Age 65 and Over	Population Age 15 to 19	Households without Vehicles
Chatham County	232,048	89,865	43.4%	15.6%	12.8%	3.6%	11.9%
City of Savannah	131,510	51,375	59.8%	21.2%	13.3%	3.9%	17.6%
City of Pooler	6,239	2,245	10.5%	8.3%	9.6%	2.1%	3.5%
Town of Thunderbolt	2,340	997	40.4%	12.6%	21.2%	3.5%	9.3%
City of Bloomingdale	2,665	1,001	7.9%	7.7%	10.3%	4.4%	4.9%
City of Garden City	11,289	3,981	43.7%	18.3%	9.9%	3.0%	11.3%
City of Tybee Island	3,392	1,568	3.4%	10.0%	18.4%	3.2%	6.9%
Town of Vernonburg	138	59	0.0%	0.0%	28.3%	10.1%	10.3%
City of Port Wentworth	3,276	1,285	16.7%	11.0%	18.4%	2.5%	5.2%

Source: 2000 US Census Bureau

3.3.1 Environmental Justice

According to the US Department of Transportation (US DOT) Federal Highway Administration (FHWA), there are three fundamental Environmental Justice principles associated with the expenditure of federal funds for construction of transportation improvement projects:

• To avoid, minimize or mitigate disproportionately high and adverse human health and





environmental effects, including social and economic effects, on minority populations and low income populations.

- To ensure the full and fair participation by all potentially affected communities in the transportation decision-making process.
- To prevent the denial of, reduction in or significant delay in the receipt of benefits by minority and low income populations.¹

Federal Environmental Justice requirements are set forth in Presidential Executive Order 12898 (1994), which states, "each federal agency shall make achieving Environmental Justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies and activities on minority populations and low income populations." The following terms are defined as presented in the FHWA Order 6640.23 FHWA Actions to Address Environmental Justice in Minority Populations and Low Income Populations:

- Low Income: A household income at or below the Department of Health and Human Services poverty guidelines. According to 2000 guidelines, the threshold was \$8,350 for one person and \$17,050 for a family of four. According to the 2009 guidelines, the threshold for Georgia was \$10,830 for one person and \$22,050 for a family of four.²
- Minority: A person who is:
 - (1) Black (having origins in any of the black racial groups of Africa),
 - (2) Hispanic (of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish Culture or origin, regardless of race),
 - (3) Asian American (having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent or the Pacific Islands), or
 - (4) American Indian and Alaskan Native (having origins in any of the original people from North America and maintains cultural identification through tribal affiliation or community recognition).

These definitions are used to define Environmental Justice in the Chatham County - Savannah region. Environmental Justice areas are reflected in Figures 3.5 and 3.6 that display Chatham County's minority and low income populations.

² United States Department of Health and Human Services, "2009 HHS Poverty Guidelines."







¹ FHWA Publication No. FHWA-EP-00-013, "An Overview of Transportation and Environmental Justice."

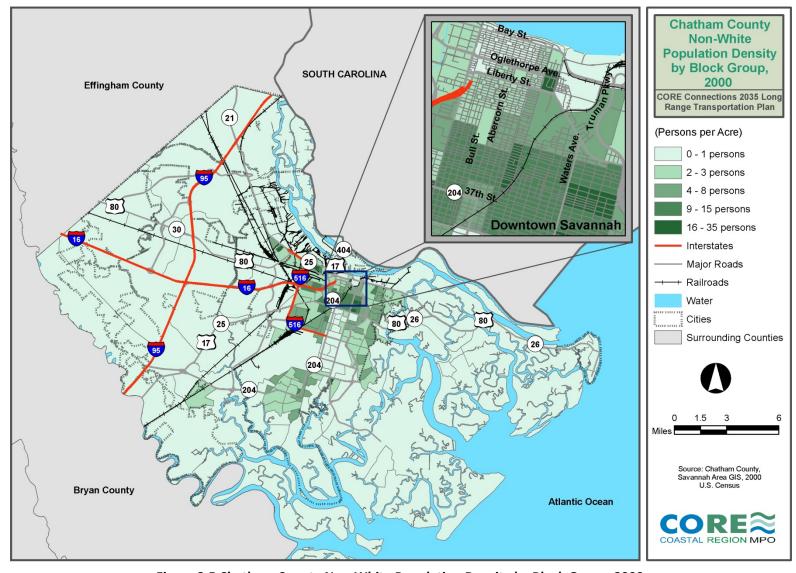


Figure 3.5 Chatham County Non-White Population Density by Block Group, 2000





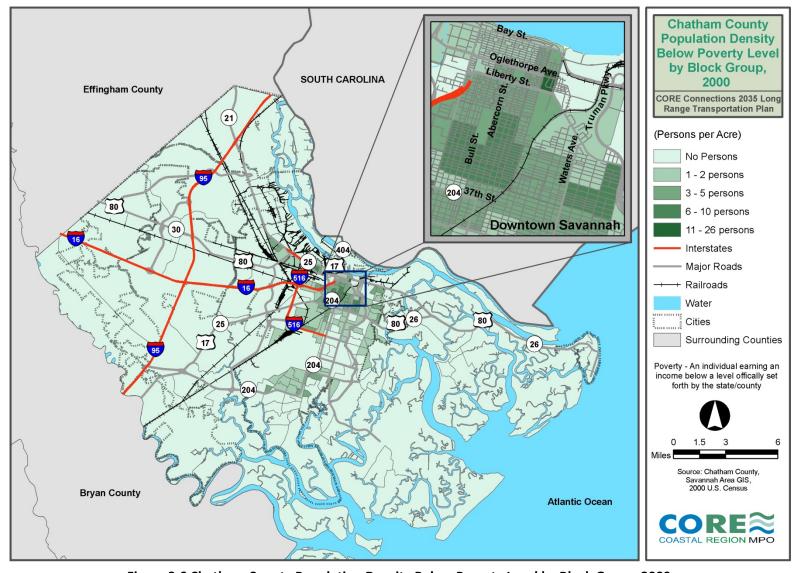


Figure 3.6 Chatham County Population Density Below Poverty Level by Block Group, 2000





3.4 Commute Characteristics and Patterns

Table 3.5 below summarizes journey-to-work data for persons working in Chatham County based on data from the 2000 US Census Bureau. The majority of workers in Chatham County (78 percent) also live in Chatham County, with the remaining 22 percent living outside the County. Workers from Effingham County are the next largest component, making up eight percent of the total Chatham County workforce. An additional five percent are from Bryan County, three percent from Liberty County, and two percent from Bulloch County. There are two counties from neighboring South Carolina that also have residents who work in Chatham County, each with one percent of the workforce. Figure 3.7 displays a summary of where workers commute from to work in Chatham County.

Table 3.5 Summary of Where Chatham County Workers Live, by County

Workplace County	Residence County	Number of Workers Commuting to Chatham County	Percent of Total Chatham County Jobs
	Chatham	98,501	78%
>	Effingham	9,965	8%
ļ tr	Bryan	6,215	5%
County	Liberty	3,214	3%
	Bulloch	2,474	2%
	Beaufort (SC)	1,135	1%
Chatham	Jasper (SC)	820	1%
Ō	Others	4,715	4%
	Total	127,039	100%

Source: 2000 US Census Bureau

Table 3.6 illustrates the counties in which Chatham County's employed residents work. The vast majority of residents who live in Chatham County (94 percent) also work in Chatham County. Approximately six percent of Chatham County's workforce is employed outside of the County, led by Beaufort County, SC (two percent) and Liberty, Effingham, and Bryan Counties at one percent. Figure 3.8 displays a summary of where Chatham County residents commute for work.

Table 3.6 Summary of Where Chatham County Residents Work

Residence County	Workplace County	Number	Percent of Employed Chatham County Residents
_	Chatham	98,501	94%
Į į	Beaufort	1,591	2%
County	Liberty	1,055	1%
	Effingham	883	1%
tha	Bryan	557	1%
Chatham	Other	2,266	2%
	Total	104,853	100%

Source: 2000 US Census Bureau





Table 3.7 shows Chatham County and its municipalities and the respective commuting times and modes of travelling to work. The majority of people in Chatham County get to work by driving alone, and approximately 76 percent of the total workers are age 16 and over. An additional 13 percent carpool to work. Only small percentages of workers get to work by public transit, walking, or other unspecified methods of transportation, or they work at home. The average commute time for the County is 22.3 minutes. The municipality with the lowest average commute time is the City of Port Wentworth (19.9 minutes), and the municipality with the highest average commute time is Tybee Island (26.6 minutes).

Table 3.7 Commute Characteristics of Chatham County Residents, 2000

Municipality	Workers Who Commute (16 and over)	Average Commute Time (minutes)	Drive Alone	Carpool	Public Transit	Walk	Other	Work at Home
Chatham County	104,853	22.3	80,088	14,099	3,317	2,989	1,723	2,637
City of Savannah	55,740	21.4	39,437	8,544	2,748	2,406	1,260	1,345
City of Pooler	3,085	24.6	2,614	399	14	0	33	25
Town of Thunderbolt	1,171	20.5	982	97	24	26	22	20
City of Bloomingdale	1,384	24.6	1,168	136	7	13	6	54
City of Garden City	4,708	21.1	3,283	933	232	153	99	8
City of Tybee Island	1,737	26.6	1,454	145	3	30	35	70
City of Vernonburg	59	25.5	42	14	0	3	0	0
City of Port Wentworth	1,535	19.9	1,329	161	7	8	14	16

Source: 2000 US Census





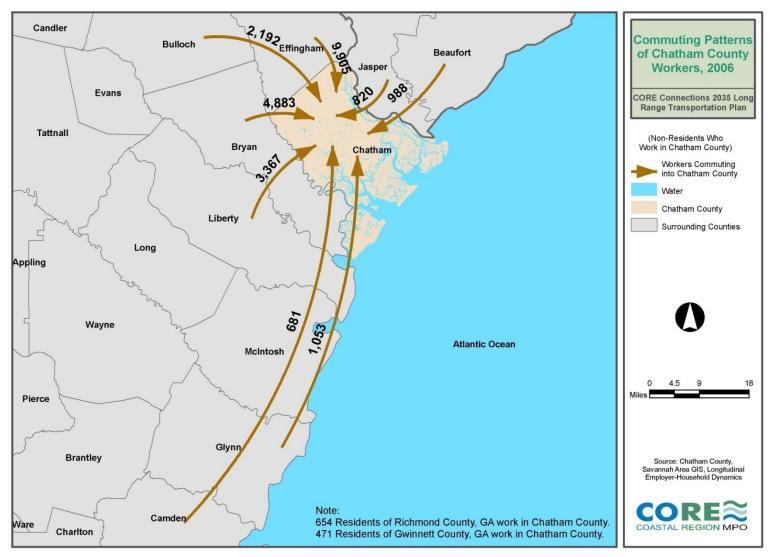


Figure 3.7 Commuting Patterns of Chatham County Workers, 2006





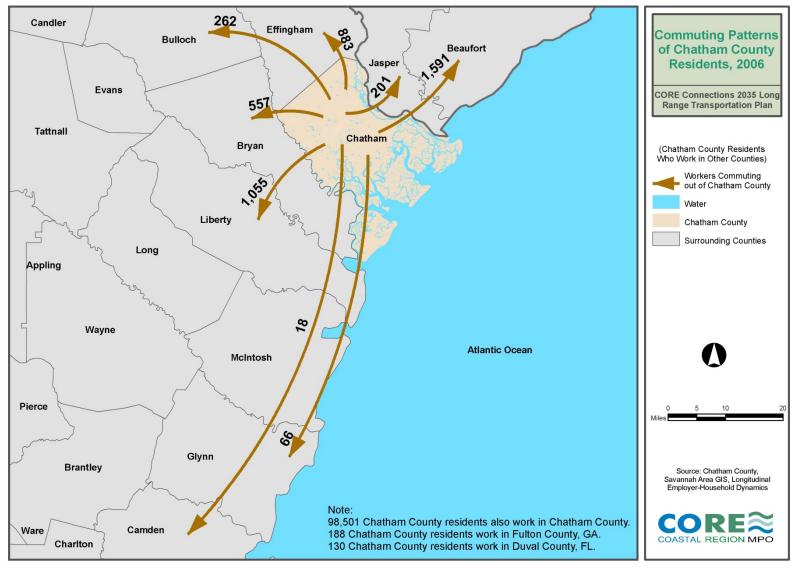


Figure 3.8 Commuting Patterns of Chatham County Residents, 2006





4.0 Coordinated Regional Planning

A coordinated transportation plan is crucial for successful transportation planning, and is required as part of the continuing, cooperative and comprehensive (3-C) planning process. The following sections summarize various planning efforts recently completed or currently underway that directly impact Chatham County, as well as the modes of transportation available to and planned for the region. Priorities, needs and goals identified in previous planning efforts currently shape and influence the transportation planning environment of the region. A thorough understanding of the existing planning environment of the Chatham County - Savannah region will enable CORE Connections to be successful. This Plan seeks to build from these previous efforts to support a cohesive transportation planning process and to foster attainment of previously established regional goals.

4.1. Transportation Amenities Plan

The CORE MPO's *Transportation Amenities Plan*, which was begun in 2003, seeks to preserve and support the unique characteristics of the Chatham County - Savannah area, and ensure that future roadways are developed with full consideration of context sensitive design principles and complete streets concepts. This is accomplished through the conservation and management of existing scenic and historic roadways and the integration of enhancement activities, such as sidewalks, landscaping, tree preservation and bikeways into future roadway construction projects. This plan was inspired by citizen concerns regarding the impacts of road construction projects, particularly the loss of trees. The CORE MPO, the City of Savannah, Chatham County and GDOT worked together to develop a resolution in support of these types of transportation amenities. The resolution was adopted by the CORE MPO, the Chatham County Commission, the City of Savannah and the Town of Thunderbolt. The development of the *Transportation Amenities Plan* followed this resolution, seeking to continue the growth of the transportation system in ways that take advantage of the unique characteristics of the region's roadways.

Implementation of the *Transportation Amenities Plan* is a two-phase process. Phase I of the Plan, completed in 2004, identifies amenity corridors and classifies them into seven categories:

- Canopy Roadways,
- Replanting Areas Due to Lost Canopy,
- Community Gateways,
- Palm-Lined Causeways,
- Historic Road Segments,
- Landscaping of New and Recently Completed Roads, and
- Scenic Vistas.





The identification of these corridors in the *Transportation Amenities Plan* allows for them to be more carefully integrated into future transportation planning activities. As future projects are planned and designed, the amenities identified through this Plan will be preserved and enhanced. Figures 4.1 and 4.2 show the Transportation Amenity Corridors identified by the *Transportation Amenities Plan*, and Table 4.1 provides a detailed list of these roadways.

Table 4.1 Transportation Amenity Corridors

Road Name	From	То
Amenity Type: Canopy Roads and Sig	nificant Trees in Right-of-Way	
37th St	Ogeechee Rd	Abercorn St
Abercorn St	Victory Dr	67th St
Bay St	MLK Jr. Blvd	President St
MLK Jr. Blvd	River St	52nd St
Victory Dr	Ogeechee Rd	River Dr/Saffold Dr
White Bluff Rd	DeRenne Ave	Truman Pkwy (Ph. 5)
37th St	Abercorn St	Waters Ave
Anderson St	Habersham St	Cedar St
Bull St	Victory Dr	DeRenne Ave
Ferguson Ave	South of Skidaway Rd	Bethesda Rd
Henry St	Habersham St	West of Bee Rd
Johnny Mercer Blvd	East of US 80/Saffold Dr	
Johnny Mercer Blvd	West of Whitemarsh Island Dr	Bryanwoods Rd
Johnny Mercer Blvd	East of Turner Creek	US 80
LaRoche Ave	Tompkins Rd	Semmken Ave
LaRoche Ave	East of DeRenne Ave	Bluff Dr
Liberty St	Tattnall St	East Broad St
Montgomery St	Berkeley Pl	South of Staley St
Norwood Ave	Central Ave	LaRoche Ave
Oglethorpe Ave	MLK Jr. Blvd	East Broad St
Shipyard Rd	East of Ferguson Ave	
Bull St	33rd St	41st St
Columbus Dr	Bull St	Waters Ave
East Broad St	Harris St	Hall St
Goebel Ave	Duval St	Skidaway Rd
First Ave	Within Wilmington Island	
Third Ave	Within Wilmington Island	
Atkinson Ave		
Atlantic Ave	Baldwin Park	Tiedeman Park
Beaulieu Rd	Off Whitefield Ave	
Bethesda Rd		
Bluff Dr	Off LaRoche Ave	
Bull St	Forsyth Park	Bay St
Central Ave	West of Bluff Dr	
Eastridge Dr	Off Shipyard Rd	
Island Rd	Off Shipyard Rd	
Kinzie Ave	Forest Ave	Pennsylvania Ave
Jones St	Tattnall St	East Broad St
Lehigh Ave	Ferguson Ave	Shipyard Rd
North Dr	Off Shipyard Rd	



Road Name	From	То				
Pin Point Rd	Lehigh Ave	Diamond Causeway				
Amenity Type: Replanting Lost Canopy						
Cane Brake Rd	I-95	US 17				
Ferguson Ave	Diamond Causeway	Shipyard Rd				
Liberty St	Tattnall St	MLK Jr. Blvd				
Johnny Mercer Blvd	Small segment E of Saffold Dr/US 80					
LaRoche Ave	Semken Ave	South of Bismark Ave				
Montgomery St	South of Victory Dr	Thackeray Pl				
White Bluff/Coffee Bluff	South of Truman Pkwy Ph 5	mackeray i i				
Whitefield Ave	South of Truman Pkwy					
Bull St	North of Victory Dr					
Bull St	33rd St	Anderson St				
Bull St	Anderson St	Park Ave/Forsyth Park				
		Park Ave/Forsyth Park				
Amenity Type: Community Gateways		1				
37th St Connector	Gateway to Savannah from the west	37th St Connector				
Airways Ave	Already landscaped - gateway from Airport	Airways Ave				
Bay St	The Viaduct	Bay St				
I-16	Effingham County	I-16				
I-16	East of I-95 ramp	I-16				
I-16 ramps	Downtown	I-16 ramps				
I-16/I-516 ramps		I-16/I-516 ramps				
I-16/I-95 ramps		I-16/I-95 ramps				
I-95 ramps	At SR 204	I-95 ramps				
I-95	Chatham Co.	I-95				
Island Expressway/ President St	Gateway to downtown Savannah from the east	Island Expressway/ President St				
Johnny Mercer Blvd	Gateway to Wilmington Island	Johnny Mercer Blvd				
SR 204	East of US 17	SR 204				
SR 21	Off I-95	SR 21				
Truman Pkwy (Ph. V)	Whitefield Ave	Truman Pkwy (Ph. 5)				
Truman Pkwy	All off-ramps to Island Expwy	Truman Pkwy				
US 17	Chatham Co.	US 17				
US 17	I-516	US 17				
US 17	Off SR 204 ramp	US 17				
US 17	Ramps to downtown Savannah	US 17				
US 80 E/Tybee Causeway	Gateway to Tybee Island	US 80 E/Tybee Causeway				
US 80/US 17/SR 21 Ramps	Gateway to downtown Savannah	US 80/US 17/SR 21 Ramps				
Victory Dr	River Dr	Victory Dr				
Amenity Type: Palm-Lined Causeway	S	·				
US 80	Bull River	Lazaretto Creek				
US 17/SR 25/Coastal Hwy	Off Houlihan Bridge					
Shipyard Rd	East of Ferguson Ave					
Central Ave	LaRoche Ave	Ferguson Ave				
Grimble Rd	East of LaRoche Ave					
Whatley Ave	North of Victory Dr (Thunderbolt)					
Amenity Type: Historic Segment						





Road Name	From	То
US 80	Bull River	Southern Tybee Island
37th St	Ogeechee Rd	Abercorn St
Abercorn St	Victory Dr	Columbus Dr
Bay St	MLK Jr. Blvd	President St
MLK Jr. Blvd	River St	52nd St
Victory Dr	Ogeechee Rd	Truman Pkwy
US 80	Truman Pkwy	Bull River
White Bluff Rd	DeRenne Ave	Truman Pkwy (Ph. 5)
37th St	Abercorn St	West of Waters Ave
Bull St	Victory Dr	DeRenne Ave
Liberty St	Tattnall St	East Broad St
Oglethorpe Ave	MLK Jr. Blvd	East Broad St
White Bluff/Coffee Bluff	Truman Pkwy (Ph. 5)	Forest River
Broughton St	MLK Jr. Blvd	Lincoln St
Bull St	Anderson St	Victory Dr
Columbus Dr	Bull St	Waters Ave
Bethesda Rd		
Bluff Dr	Off LaRoche Ave	
Bull St	Savannah River	Anderson St
Chatham Crescent	Washington Ave	Victory Dr
Jones St	Tattnall St	East Broad St
Ogeechee Rd	Victory Dr	37th St
Washington Ave	Bull St	Waters Ave
Amenity Type: Landscaping of New a	l	
I-95	I-16	Chatham/Effingham County Line
US 80	Bull River	Lazaretto Creek
Truman Pkwy	DeRenne Ave	Montgomery Cross Rd
,	Whitefield Ave	SR 204
Bull St	The Viaduct	MLK Jr. Blvd
Jimmy Deloach Pkay	US 80	SR 21
Middleground Rd	Montgomery Cross Rd	SR 204
Montgomery Cross Rd	SR 204	Middleground Rd
SR 204	Rio Rd	Montgomery Cross Rd
US 17	SR 307	Chatham/Bryan Line
US 80	Johnny Mercer Blvd	Bull River
Dean Forest Rd/SR 307	I-16	US 17
Pooler Pkwy	I-95	US 80
Pooler Pkwy	Pine Barren Rd	Quacco Rd
Hutchinson Island Blvd		
New interchange: US 17/Hutchinson		
Isl. Blvd		
New interchange	Jimmy Deloach Pkwy	I-95
New interchange	Jimmy Deloach Pkwy	SR 21
New interchange	SR 204	Veterans Pkwy
New interchange	Pooler Pkwy	I-16
New interchange	Pooler Pkwy	US 80
Bridge replacement	US 80/Victory Dr	Over Placentia Canal
Intersection Improvement	SR 204	Eisenhower Dr





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Road Name	From	То
Middleground Rd	Montgomery Cross Rd	SR 204
Montgomery Cross Rd	SR 204	Middleground Rd
SR 204	Rio Rd	Montgomery Cross Rd
US 17	SR 307	Chatham/Bryan Line
Amenity Type: Scenic Vistas		•
Bluff Dr	Off LaRoche Ave	
Diamond Causeway	East of Ferguson Ave	
Johnny Mercer Blvd	Bryanwoods Rd	Wilmington Island
Island Expressway	2 segments over Wilmington River	
Shipyard Rd	East of Ferguson Ave	
SR 204	Over Forest River	
US 17	2 segments over Little Ogeechee River	
US 17/SR 25/Coastal Highway/Houlihan Bridge	Over Savannah River	
US 80/Saffold Drive	River Dr	Johnny Mercer Blvd
US 80/Saffold Drive	River Dr	Johnny Mercer Blvd
US 80	Bull River	Tybee Island
Veterans Pkwy	Over Forest River	

Source: CORE MPO Transportation Amenities Plan





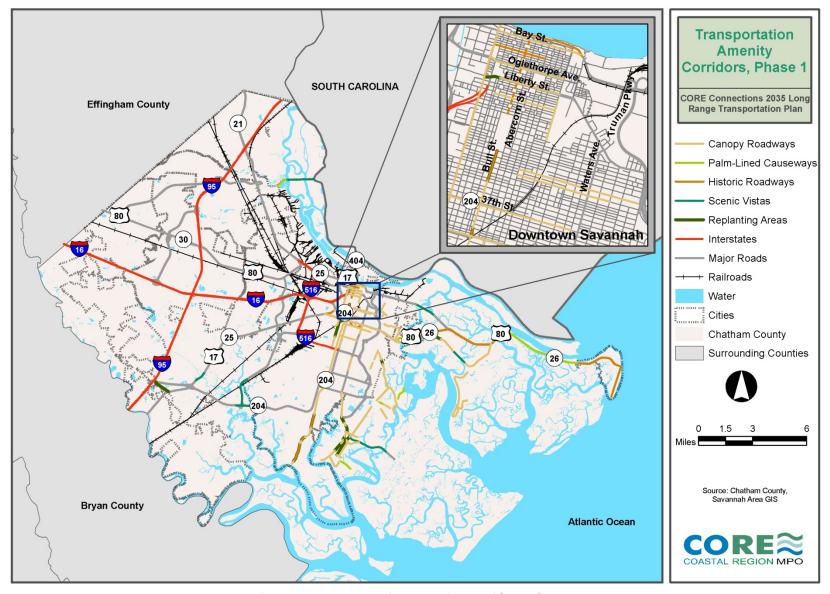


Figure 4.1 Transportation Amenity Corridors, Phase 1





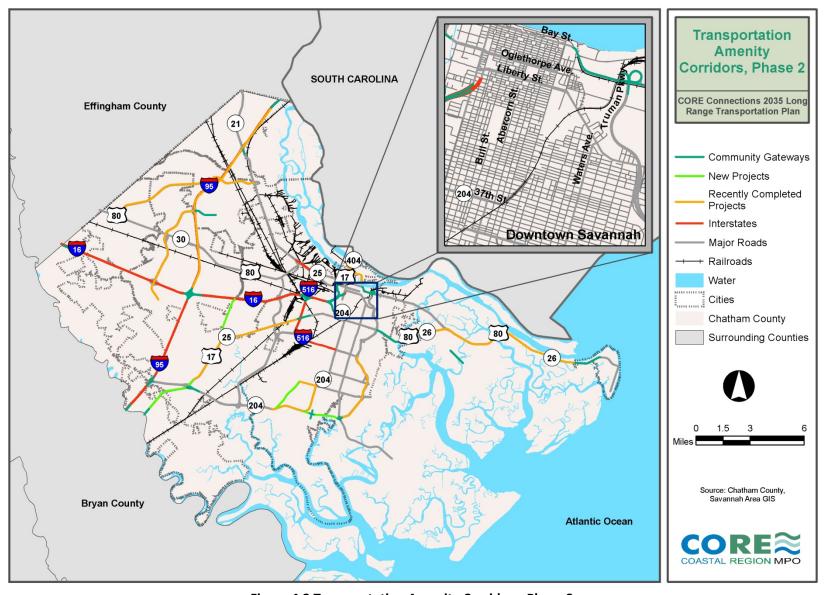


Figure 4.2 Transportation Amenity Corridors, Phase 2





Context Sensitive Design Manual

Phase II of the *Transportation Amenities Plan* involved the completion in December, 2006 of a *Context Sensitive Design (CSD) Manual* to guide new roadway development. A context sensitive solutions (CSS) approach to transportation projects seeks to seamlessly integrate transportation projects into their surrounding communities and environments. A successful project utilizing CSS principles builds consensus among project stakeholders, upholds community values, and reaches the best possible solutions to transportation issues while minimizing impacts to the surrounding community and environment.

To further enhance and preserve the Chatham County - Savannah area's unique environment and transportation system, the CSD manual provides design guidelines for future transportation projects that are sensitive to the amenities, history and character that were identified along corridors in Phase I of the *Transportation Amenities Plan*. The CORE MPO initiated the development of this manual in order to maintain its vision for the transportation system in the region, which is:

- Treating trees (especially canopy trees) as historic, essential elements of the region;
- Providing streets that encourage travel for automobiles, bicycles, and pedestrians through the use of landscaping and other enhancements; and
- Involving these ideals as an integral part of the planning and design processes.

Development of the *Context Sensitive Design Manual* involved an extensive public involvement process that consisted of local meetings, workshops, and one-on-one stakeholder discussions.

The Context Sensitive Design Manual addresses various project types in multiple contexts, and gives examples of how transportation facilities can be better implemented using context sensitive design, accommodating all facility users rather than just the automobile. Guidelines are presented through the use of typical sections and design criteria, allowing both technical designers and less technical citizens to communicate clearly about project designs and expectations. Guidelines include:

- Developing and maintaining canopy streets; and
- Roadway design for various facility types that are in:
 - Historic districts,
 - Traditional neighborhoods,
 - Village centers,
 - Suburban and gated communities,
 - Scenic corridors, and
 - Rural or undeveloped corridors.

With the implementation of these guidelines, projects in the region can better preserve the character and amenities of the transportation system that make the Chatham County - Savannah region unique

¹ CORE MPO Context Sensitive Design Manual





Framework Mobility Plan

and maintain the vision set forth by the CORE MPO. Volume II of the CORE Connections - 2035 LRTP, the Total Mobility Plan will include a comprehensive evaluation of the types of context sensitive solutions that are best suited for the various planned and programmed transportation projects.

4.2 Corridor, Sector and Comprehensive Plans

Corridor, sector and comprehensive plans that were conducted in the Chatham County - Savannah area have also been incorporated into the development of the Framework Mobility Plan. These plans are described below.

Chatham County - Savannah Tricentennial Plan

The *Tricentennial Plan* was adopted in October 2006 and is an update of the Chatham County - Savannah Metropolitan Planning Commission (MPC) Comprehensive Plan. With a planning horizon of 2033 (300 years after the City of Savannah and Georgia colony founding), the purpose of this plan is to set a direction for growth and future development throughout unincorporated Chatham County and the City of Savannah. The *Tricentennial Plan* includes a Unified Comprehensive Plan consisting of a Community Participation Plan, Community Assessment and Community Agenda. These documents cover not only the region's transportation, but also the following topics:

- Land use
- Economic development
- Housing
- Historic and cultural resources

- Natural resources
 - Community facilities and services
 - Intergovernmental coordination

The transportation component of the *Tricentennial Plan* was based on the CORE MPO's 2030 Long Range Transportation Plan. This component evaluated the existing roadway network, traffic counts, existing bridges, roadway amenities, alternative modes of transportation, pedestrian facilities and freight and rail movement in order to make recommendations for Chatham County and the City of Savannah. The plan notes that transportation in the region is closely linked to land use decisions. As recommendations and policies are made regarding the placement of land uses such as commercial centers and residential areas, the surrounding transportation network is inevitably affected, and vice versa.

Successful comprehensive planning requires all other plans in the planning area to be consistent with the goals and objectives set by the comprehensive plan. The *Tricentennial Plan* identifies these goals and objectives for the region that all other planning efforts should incorporate. These goals and objectives are further detailed in Table 4.2.

The Community Agenda Report identified multimodal efficiency as one of the ten primary issues/opportunities in the region. It noted that automobile travel should not be overly relied upon, and that it is important for the region to continue to diversify the transportation system. The plan recommended accomplishing this through policies that:





- Establish a pedestrian/transit priority area where walking and utilizing transit are encouraged through development standards and zoning.
- Enhance downtown mobility by moving people through the greater downtown Savannah area in a more effective fashion with an east-west streetcar line that links areas with the central business district.
- Identification of corridors for protection and preservation so that the quality of life for all residents is enhanced as the region grows.

Additional issues/opportunities identified by the *Tricentennial Plan* are also critically linked with transportation, including:

- Downtown Vitality and Sustainability,
- Historic Neighborhood Vitality and Sustainability,
- Mixed-use Development,
- Commercial Expansion,
- Westward Expansion Areas,
- Environmental Protection,
- Quality of Life,
- · Economic Advancement for All Citizens, and
- Effective Planning.

To address these issues and opportunities, the Community Agenda established goals relating to land use, economic development, housing, historic and cultural resources, natural resources, transportation and community facilities. These goals are shown in Table 4.2.

Table 4.2 Goals of MPC Tricentennial Community Agenda

Category	Goals
	Establish a foundation for comprehensive planning and zoning.
	Establish a foundation for downtown area growth and enhance its role as the economic,
	cultural and governmental hub for the region.
	Establish a foundation for neighborhood and community planning.
Land Use	Establish a foundation for environmental resource protection.
	Establish a foundation for historic and cultural resource protection.
	Establish a foundation for preserving and enhancing the public realm.
	Reduce automobile dependence and associated congestion and pollution by providing a
	broad range of land development options.
	Foster a positive environment that provides opportunities for all businesses, including small,
	minority and women-owned businesses.
	Recruit diverse and environmentally sensitive, clean industries that pay wages that foster self-
Economic	sufficiency.
Development	Enhance and maintain the economic vitality of existing businesses and create economic
Development	development through expansion and retention of existing businesses.
	Expand the international market through the involvement of existing businesses.
	Work toward a community with a skilled workforce, earning a self-sufficiency wage that is
	capable of supporting a diverse group of businesses.





Category	Goals
	Enhance and maintain the economic vitality of the tourism industry through planned
	management that promotes economic growth while preserving natural and historic resources.
	Work toward becoming a community with economically vibrant, safe neighborhoods and commercial centers.
	Coordinate efforts of Westside communities to provide infrastructure and long-range capital
	improvements plan for anticipated growth.
	Streamline the site plan and building permit approval process to provide a one-stop process for the City and County.
	Work toward a community that provides the transportation infrastructure and increases the mobility options that are necessary to support planned growth countywide.
	Improve the quality of life and safe living environment in all neighborhoods.
	Achieve neighborhood stability whereby all homeowners, regardless of income, can improve and continue to live in their homes without undue financial hardship.
	Provide affordable housing for all levels of income within the community.
Housing	Provide housing for citizens with special needs, such as disabled, elderly and homeless people.
	Create opportunities for economically diverse neighborhoods.
	Improve coordination and delivery of housing services.
	Integrate housing, transportation and land use planning to create better communities and neighborhoods.
	Preserve culturally and historically significant buildings, landscapes and sites (resources)
	throughout Chatham County.
Historic and	Establish broad public awareness of and support for the preservation of resources.
Cultural	Promote tourism and contribute to the economic well-being of the community through
Resources	recognition of historic resources.
	Establish ordinances and public policies that enable the protection of resources and support an effective ongoing program.
	Preserve and protect natural resources through appropriate development standards and review procedures.
	Preserve and protect coastal resources, including marshlands, back barrier islands, tidal creeks and estuaries.
	Maintain adequate and open floodplains to prevent property damage from floodwaters.
	Preserve, protect and restore open space, conservation areas, and threatened endangered
Natural	plant and animal habitat.
Resources	Preserve existing trees and encourage the planting of new trees.
	Protect surface freshwater resources.
	Reduce the quantity and improve the quality of stormwater runoff.
	Protect groundwater resources.
	Prevent dangerous and excessive lighting in new developments and encourage the
	retrofitting of substandard lighting in old developments.
	Improve solid waste management countywide.
	Work toward a community that has a safe and efficient multimodal transportation system.
Transportation	Develop a transportation system that is compatible with existing and future land use. Develop a road system that maintains and preserves unique characteristics of neighborhoods
	and of the coastal area.





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Category	Goals
	Work toward a regional public transportation system that provides all residents, regardless of
	their age, income or special needs, access to employment centers, institutions, commercial
	areas, recreational facilities and other destinations.
	Deliver neighborhood services in a planned and efficient manner.
	Plan and operate utility systems through regional cooperation.
	Provide recreational programs and opportunities throughout the community.
	Organize recreational programs to meet the special needs of women, elderly and
Community	handicapped citizens.
Facilities	Preserve the use of Chatham County's waterways for public recreation.
	Provide a system of public open spaces including parks for passive recreation activity as well
	as natural areas.
	Provide a transportation network that efficiently facilitates movement into and within
	Chatham County.

Source: MPC Tricentennial Plan Community Agenda, December 2005

Southwestern Chatham Sector Plan

Sector planning is utilized to develop detailed future transportation and land use plans for specific planning areas. The *Southwestern Chatham Sector Plan* provides a conceptual, long term build-out scenario designed to identify impacts on both a regional and local scale. The planning area is bounded by I-95, I-16 and the Ogeechee River. Jurisdictions included in this planning area include the City of Savannah, the City of Pooler and the City of Bloomingdale. This plan was developed in the context of the comprehensive planning effort, but is focused on a smaller, more specific area to address the specific growth and development of that area. The sector planning process included an inventory of existing conditions, assessment and evaluation of future conditions, coordination with existing plans and participation of community members and stakeholders and the recommended plan.

The Southwestern Chatham Sector Plan provides a strategic template for decision-makers in their day-to-day activities in dealing with other high growth areas, and focuses on sustainable growth and development integrated with an efficient and effective transportation system and supporting infrastructure.

The recommended plan includes several key elements:

- Roadway infrastructure needs and cost estimates;
- Roadway functional classifications and minimum right-of-way requirements;
- Policy recommendations including access management and multimodal transportation system integration; and
- Potential funding mechanisms.

Tables 4.3 and 4.4 present the *Southwestern Chatham Sector Plan's* recommendations for roadway improvements. A map of these improvements is also displayed in Figure 4.3.





Table 4.3 Recommended Improvements for Existing Roadways within the Southwestern Sector Area

Existing Roadway	Existing Lane Configuration	Recommended Improvements	Proposed Functional Classification	Approx. Length (miles)
	2 lanes	Widen to 4 lanes from I-95 to New Hampstead Parkway/Roadway 1	Major Arterial	4.07
Little Neck Road		Widen to 6 lanes from New Hampstead Parkway/Roadway 1 to John Carter Road	Major Arterial	2.18
		Widen to 8 lanes from John Carter Road to I- 16	Major Arterial	0.20
Pooler Pkwy/ Quacco Road	2 lanes	Widen to 6 lanes within the SW Sector Area	Major Arterial	3.38
Fort Argyle	2 lanes	Widen to 6 lanes from I-95 to Belford Spine/ Roadway 3	Major Arterial	2.44
Rd/GA 204		Widen to 4 lanes from Belford Spine Road/ Roadway 3 north to John Carter Road	Major Arterial	5.05
John Carter	2 lanes	Widen to 4 lanes from Little Neck Road to Old River Road/Fort Argyle Road/GA 204	Minor Arterial	3.04
Road	2 lattes	Segment South of Old River Road - not recommended for widening	Major Collector	0.78
Old River Road	2 lanes	Widen to 4 lanes from John Carter Road to I- 95 (beyond SW Sector Area)	Major Collector	2.75
Bush Road (S&O Canal)	2 lanes	Not recommended for widening	Local Road	2.49

Source: CORE MPO Southwestern Chatham County Sector Plan

Table 4.4 Recommended Improvements for New Roadways within the Southwestern Sector Area

Roadway ID/Name	New Facility Description	Recommended No. of Lanes	Proposed Functional Classification	Approx. Length (miles)
1/Highgate Boulevard	New Hampstead Parkway to Fort Argyle Road (SR 204)	4	Minor Arterial	3.11
1/New Hampstead Parkway	Little Neck Road to Fort Argyle Road (SR 204)	4	Minor Arterial	1.98
1/Sawdust Pile Road	Highgate Boulevard/Roadway 1 to new I-16 interchange	4	Minor Arterial	3.15
2/Little Neck Road - Fort Argyle Road Connector	Connecting Quacco Road with Little Neck Road	4	Minor Arterial	2.54
2/Little Neck Rd - Quacco Rd Connector	Connecting Quacco Road with Little Neck Road	6	Minor Arterial	1.06
3/Belford Spine	Connector between Fort Argyle Road (SR 204) and New Roadway 5	2	Major Collector	1.81





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Roadway ID/Name	New Facility Description	Recommended No. of Lanes	Proposed Functional Classification	Approx. Length (miles)
3/Belford Spine	Connector between New Roadway 5 and Little Neck Road	4	Major Collector	0.72
4	New roadway parallel to Little Neck Road from intersection of Belford Spine/Roadway 3 to intersection of John Carter Road	4	Major Collector	3.52
5	New roadway from I-95 west to New Hampstead Parkway/Roadway 1 intersecting Bush Road, and the Belford Spine/Roadway 3	4	Major Collector	4.75
Scenario Improvement #1: New interchange at I-16	New interchange at I-16 with extension of Sawdust Pile Road	N/A	N/A	N/A
Scenario Improvement #2: Old River Rd to Sawdust Pile Road Extension Connector	New roadway connecting Old River Road and Sawdust Pile Road Extension	2	Major Collector	1.19
New interchange and Frontage Roads at I-95 with Quacco Rd and Little Neck Road	Add new partial interchanges at I-95 and Quacco Road and Little Neck Road with one-way frontage road system	2 (per each direction of frontage road system)	N/A	1.08

Source: CORE MPO Southwestern Chatham County Sector Plan





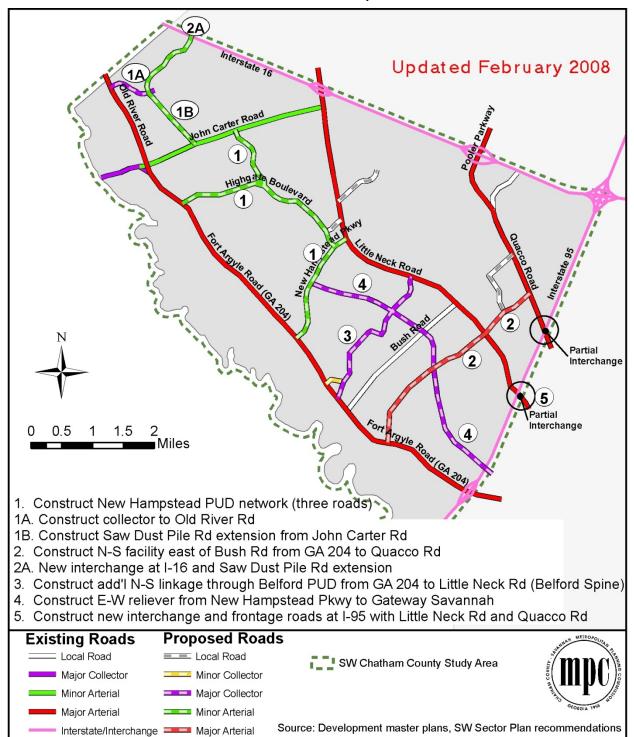


Figure 4.3 Southwestern Chatham Sector Plan Recommended Roadway Improvements





President Street Concept Development Report

President Street is located in downtown Savannah, and runs toward the eastern islands. It is experiencing a significant amount of development pressure due to the growth of both undeveloped, exurban areas as well as infill within the central city. The City of Savannah and the CORE MPO have sought a planning approach for this area that focuses on adequate transportation systems and mobility that are fully integrated with land use and urban design elements. The *President Street Concept Development Report* was compiled to address the existing traffic needs, as well as the expected traffic increases generated from planned developments in the area.

The report centered on the integration of transportation and land use to fully address the transportation needs in the study area. This included providing adequate capacity, viable modal alternatives, and the development of a connected and functional network. It was important to the City and the CORE MPO that context sensitive design elements were used as well as designs being fully compatible with the historic district. The report also focused on the creation of an appropriate eastern gateway into the historic district along President Street. Project stakeholders included:

- CORE MPO,
- City of Savannah,
- Savannah Development and Renewal Authority,
- Amblin (Developer of Savannah River Landing, on north side of President Street),
- North Point (Developer on property on south side of President Street),
- Morris Communications (owner and developer of Trustees Gardens site), and
- Savannah Housing Authority.

Recommendations for President Street were developed into a phased construction plan that provided for efficient mobility in the interim years before construction of the full recommendation. The recommendations included the following elements:

• Phase 1:

- Reconstruction of existing President Street into a six lane boulevard facility with landscaped median and pedestrian and bicycle facilities adjacent to the roadway.
- The inside and middle lanes built at 11 feet and the outside curb lane built at 12 feet and paved with an alternative material, such as stamped asphalt. This treatment differentiates the outside curb lane from the beginning of the project.

Phase 2:

- Upgrade of Randolph Street in a landscaped boulevard configuration.
- Extension of Liberty Street in a boulevard configuration, with landscaped median and pedestrian and bicycle amenities.

• Phase 3:

- The construction of a new interchange with Liberty Street at Truman Parkway.
- The outside curb lane on President Street reverts to on-street parking.
- Closure of General McIntosh Boulevard to create a connecting greenspace.





4.3 State, Regional, County and Citywide Studies

State, regional, county and citywide studies have also been consulted throughout the development of CORE Connections - 2035 LRTP. These plans are described below.

Statewide Freight & Logistics Plan

Existing freight plans and the forthcoming *Statewide Freight and Logistics Plan* by the Georgia Department of Transportation (GDOT) will analyze options and strategies to address short-term and long-term freight and logistics needs in Georgia. This plan will guide the state's policies and practices regarding the flow of commerce into, out of and through Georgia. The study will incorporate several modes of transportation, including truck movements, rail, air and port activities.

Chatham County Interstate Study

This study was completed by a team led by GDOT in August of 2008 in an effort to evaluate the existing interstate system in Chatham County and develop a list of prioritized potential system improvements. Congestion, development impacts, truck and freight traffic, port access, and potential impacts to historic, community, and natural resources were all considered throughout the evaluation process. The limits for this study were the interstates completely contained within Chatham County, including I-95, I-16 and I-516. The study included a baseline conditions and needs assessment report, an evaluation of scenarios/conceptual layout development, and final report recommendation and phasing plan. Potential projects for recommendation were identified, and following a detailed analysis, they were prioritized for possible inclusion in the CORE MPO's Long Range Transportation Plan. The projects were prioritized using travel demand modeling, traffic analysis and a set of previously identified performance measures. The 12 prioritized project recommendations are shown in order in Table 4.5.

Table 4.5 Chatham County Interstate Study Prioritized Projects

Project Location	From	То	Project Type
I-95 @ SR 21	Vicinity of Interchange		Interchange Reconstruction
I-16 @ I-95	Vicinity of Interchange		Interchange Reconstruction
I-16 @ SR 307/Dean Forest Road	Vicinity of Interchange		Interchange Reconstruction
I-95	US 17 (Bryan Co.)	I-16	Widening
I-95 @ SR 204	Vicinity of Interchange		Interchange Reconstruction
I-16 @ Chatham	Minimite of lateral and		Interchange Reconstruction
Parkway	Vicinity of Interchange		Interchange Reconstruction
I-95 @ US 80	Vicinity of Interchange		Interchange Reconstruction
I-95	I-16	SR 21	Widening
I-16	I-95	I-516	Widening
I-16 @ I-516	Vicinity of Interchange		Interchange Reconstruction
I-16	Old River Road	I-95	Widening
	(Effingham Co.)		0
I-516	Veterans Parkway	Mildred Street	Widening

Source: Chatham County Interstate Needs Analysis and Prioritization Plan, August 2008





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GDOT Statewide Truck-Only Lanes Needs Identification Study

This study was completed by a team led by GDOT in April 2008 in an effort to understand and quantify the feasibility of truck—only lanes statewide and in Chatham County in the vicinity of the Port of Savannah. Study metrics include corridor-wide reduction of peak period congestion, benefits, costs, and location of truck-only lanes.

The study observes that 82% of the nation's industrial market and 79% of the nation's consumption market is within two trucking days distance from the Port of Savannah. In 2006, 5,550 truck transactions per day were observed at the Port of Savannah main gate. By the fall of 2007, the Port had set a record-topping 8,200 gate transactions, illustrating the very high growth rate at the Port of Savannah.

The GDOT Statewide Truck-Only Lanes Needs Identification Study identified the following potential projects in the Savannah area:

- Port Connector Road as a mixed vehicle facility, not truck only;
- Operational improvements at various locations in and around the Port of Savannah.

Other key study findings of the statewide (Atlanta) study are as follows:

- A network of truck-only lanes would require an intense level of development;
- Corridor level congestion is not alleviated. Truck only lanes in the Atlanta area would only increase traffic speeds by an average of 10 mph;
- Congestion improvement is delivered primarily to trucks in truck-only lanes, which represent a small portion of peak-period motorists;
- Benefits of constructing a truck-only lane network outweigh costs, but significant congestion benefits are narrowly distributed to only a small portion of motorists (i.e. trucks travelling in truck-only lanes.

It was concluded that truck-only lanes are only one of several strategies available to address current and future truck and non-truck volumes. GDOT will focus on a managed lane system concept that will yield significant benefits to all travelers, such as high occupancy vehicle lanes (HOV), high occupancy toll lanes (HOT), truck-only lanes (TOL), truck-only toll lanes (TOT) and express toll lanes (ETL).

Chatham Area Transit (CAT) Transportation Development Plan (TDP)

The CAT TDP, completed in February 2008, provides a comprehensive review of CAT's operations and the demographics and attitudes of its users to analyze system strengths and opportunities for improvement in the next five years. The plan synthesizes data and public and stakeholder input on all facets of CAT's services to provide a sound approach to short and medium term improvements based on operating efficiencies, public interest and market patterns.

Baseline CAT operating statistics are shown in Table 4.6. CAT ridership demographics are depicted in





Figure 4.4, and Teleride operating statistics are shown in Table 4.7.

Table 4.6 CAT Operating Statistics FY 2005

	Weekday	Saturday	Sunday
Average Daily Ridership	11,482	10,033	3,468
Cost per Mile	\$5.76	\$5.68	\$5.76
Passengers per Mile	1.44	1.46	1.18
Farebox Recovery	20%	20%	16%

Figure 4.4 CAT Ridership Demographics

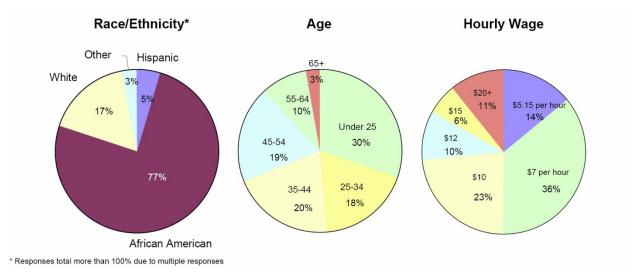


Table 4.7 Teleride Operating Statistics FY 2005

	Weekday	Saturday	Sunday
Ridership	247	75	49
Revenue Miles	1,627	519	435
Revenue Hours	121	41	35
Peak Vehicles	16	7	7

Source: National Transit Database 2005

Currently, CAT provides fixed route transit services on 19 individual routes. Service modifications recommended by the TDP are depicted in Figure 4.5. The majority of the TDP service plan recommendations are anticipated to be completed in the first two years. Other aspects of the TDP, such as fare policy changes and Teleride policy review should be considered throughout the five-year timeframe of the TDP.





Transportation Development Plan Port Wentwor for Chatham Area Transit Authority: Modifications to CAT System Structure Legend odified Routes osed Express Route liminated Routes/Sec CAT Service Area Chatham County 2 Miles

Figure 4.5 TDP Modifications to CAT System Structure

The TDP provides six conclusions:

- CAT's existing route structure is effective and serves downtown Savannah well.
- Expansion of the Transit Service District should be considered to provide true regional service.
- Modest enhancements to current routes can improve efficiency and customer convenience.
- Transit must increasingly address the needs of shift work and non-traditional work hours.
- CAT's fare structure requires change to achieve better equity and customer convenience.
- Regional parking and development policies encourage automobile use over transit and should be addressed.

CORE MPO Bikeway Plan

The purpose of the *CORE MPO Bikeway Plan* is to update the 1992 Bikeway Plan by further developing a countywide on-road bikeway system. The plan consists of an inventory of existing facilities, an analysis of the suitability of the existing and planned bicycle routes and facilities, and a recommended bikeway system. Types of facilities recommended in the plan vary depending upon location, and they include





shared lanes, paved shoulders, wide curb lanes, bike lanes, and bike paths. Cost estimates are provided and possible funding sources are noted. Recommendations for roadway treatments that could be incorporated into new road construction projects, such as bicycle lanes or shoulders, are included as well as interim treatments such as route signage and restriping. Figure 4.6 maps the bikeway corridors selected in the *CORE MPO Bikeway Plan*, and Table 4.8 lists each of the segments.

Table 4.8 CORE MPO Recommended Bikeways

Route	Segment Description		
Abercorn Extension Corridor			
Middleground Rd	Abercorn St. to Shawnee St		
Shawnee St	Middleground Rd to Rio Rd		
Rio Rd	Shawnee St to Abercorn St		
Abercorn St/SR 204	Rio Rd to US 17		
Bloomingdale/Little Neck Corridor	<u> </u>		
Little Neck Rd	US 17 to Bloomingdale Cross Rd		
Bloomingdale Cross Rd	Little Neck Rd to Pine Barren Rd		
Cloverdale/West Gwinnett Corridor	<u> </u>		
Bull St	Forsyth Park to Anderson St		
Gwinnett St	MLK Jr Blvd to Forsyth Park		
Gwinnett St	W. Boundary St to MLK Jr Blvd		
Gwinnett St	Crosby St to W. Boundary St		
Crosby St	Winburn St to Gwinnett St		
Cynthia St	Chevychase Rd to Belair St		
Belair St	Cynthia St to Stiles Ave		
Skidaway Island Corridor	, ,		
Diamond Causeway	Old Whitefield Ave to Ferguson Ave		
Diamond Causeway	Ferguson Ave to McWhorter Dr		
Skidaway Island	Diamond Causeway to Skidaway Island State Park		
McWhorter Dr	Diamond Causeway to Skidaway Institute of		
	Oceanography		
East West Corridor			
LaRoche Ave	Tompkins Rd to Ward St		
Ward St	Laroche Ave to 52 nd St		
52 nd St	Ward St to Montgomery St		
52 nd St	Montgomery St to Hopkins St		
52 nd St	Hopkins St to Ross Rd		
52 nd St	Ross Rd to Ogeechee Rd		
Henry/Anderson-Thunderbolt Corridor			
Anderson St	May St Park to Pennsylvania Ave		
Henry St	May St Park to Pennsylvania Ave		
Florida, Ohio, Tennessee Avenues	Pennsylvania Ave to Maryland Ave		
Dogwood Ave/River Dr	Mechanics Ave to Falligant Ave		
Falligant Ave	River Dr to Tompkins Rd		
Tompkins Rd	Falligant Ave to LaRoche Ave		
Hopkins St Corridor			
Hopkins St	52 nd St to Victory Dr		





Route	Segment Description
Isle of Hope Corridor	
Skidaway Rd	Montgomery Cross Rd to Wormsloe
Skidaway Rd	Wormsloe to Parkersburg Rd
Parkersburg Rd	Richmond Dr to Bluff Dr
Bluff Rd	Parkersburg Rd to LaRoche Ave
Johnny Mercer Corridor	<u> </u>
Johnny Mercer Dr	US 80/SR 26 to Robert McCorkle Bikeway
Jimmy Deloach Corridor	· · · · · · · · · · · · · · · · · · ·
Jimmy Deloach Pkwy	I-16 to US 80
Jimmy Deloach Pkwy	US 80 to I-95
Jimmy Deloach Pkwy	I-95 to SR 21
Lake Mayer Corridor	
Eisenhower Dr	Hodgson Memorial Dr to Sallie Mood Dr
Sallie Mood Dr	Eisenhower Dr to Lake Mayer bike path
Montgomery Cross Rd	Lake Mayer bike path to Skidaway Rd
Lathrop and Stiles Corridor	, , ,
E. Lathrop Ave	Bay St to Louisville Rd
Louisville Rd	E. Lathrop Ave to Stiles Ave
Stiles Ave	Louisville Rd to Ogeechee Rd
Coastal Route Corridor	<u>, </u>
Chatham Pkwy	Telfair Place to US 17
March to the Sea/Trans Georgia/Savannah River Run/G	Coastal Route
US 80	Effingham Co. to Cherry St
Cherry St	US 80 to Bloomingdale Cross Rd
Bloomingdale Cross Rd	Cherry St to Pine Barren Rd
Pine Barren Rd	Bloomingdale Cross Rd to US 80
US 80	Pine Barren Rd to Old Louisville Rd
Old Louisville Rd	US 80 to Dean Forest Rd
Old Louisville Rd	Dean Forest Rd to Heidt St
Heidt St	Old Louisville Rd to Chatham Pkwy
Chatham Pkwy	Heidt St to Telfair Pl
March to the Sea/Trans Georgia Corridor	
Telfair Pl	Chatham Pkwy to Telfair Rd
Telfair Pl	Telfair Pl to Louisville Rd
Louisville Rd	Telfair Rd to Stiles Ave
Louisville Rd	Stiles Ave to Boundary St
Louisville Rd	Boundary St to MLK Jr Blvd
Liberty St	MLK Jr Blvd to Bull St
Bull St	Liberty St to President St
North-South Corridor (Habersham)	
Habersham St	Liberty St to Gaston St
Habersham St	Gaston St to Henry/Anderson Streets
Habersham St	Henry/Anderson Streets to Victory Dr
Habersham St	Victory Dr to 52 nd St
Habersham St	52 nd St to Columbus Dr
Habersham St	Columbus Dr to DeRenne Ave
	DeRenne Ave to Stephenson Ave





Route	Segment Description	
Stephenson Ave	Habersham St to Hodgson Memorial Dr	
Hodgson Memorial Dr	Stephenson Ave to Eisenhower Dr	
Hodgson Memorial Dr	Eisenhower Dr to Mall Blvd	
Hodgson Memorial Dr	Mall Blvd to Montgomery Cross Rd	
Edgewater Rd	Montgomery Cross Rd to Dunwoody Dr	
Dunwoody Dr	Edgewater Dr to Dyches Dr	
Dyches Dr	Dunwoody Dr to Hillyer Dr	
Hilyer Dr	Dyches Dr to Dyches Dr	
Dyches Dr	Hilyer Dr to Lorwood Dr	
Lorwood Dr	Dyches Dr to White Bluff Rd	
Tibet Ave	White Bluff Rd to Largo Dr	
Largo Dr	Tibet Ave to Windsor Rd	
Windsor Rd/Science Dr	Largo Dr to Abercorn St	
North-South Corridor (Lincoln)	1 . 0	
Lincoln St	Bryan St to Oglethorpe Ave	
Lincoln St	Colonial Park to Liberty St	
Lincoln St	Liberty St to Gaston St	
Lincoln St	Gaston St to Henry/Anderson Streets	
Lincoln St	Henry/Anderson Streets to Victory Dr	
Penn Waller Corridor		
Penn Waller Rd	Johnny Mercer Dr to Walthour Rd	
Quacco Rd/Fort Argyle Corridor	Johnny Mercer 21 to Martinear Na	
Abercorn St/SR 204	US 17 to I-95	
Fort Argyle Rd	I-95 to Bush Rd	
Bush Rd	SR 204 to Little Neck Rd	
Quacco Rd	Bush Rd to Pine Barren Rd	
SR 25 Corridor		
US 80	Chatham Pkwy to SR 21	
SR 21	US 80 to Rommel Ave	
SR 21	Rommel Ave to Bourne Ave	
SR 21	Bourne Ave to Bonnybridge Rd	
SR 25	Bonnybridge Rd to Savannah National Wildlife	
Bonnybridge Rd	SR 21 to SR 25	
Tybee Island Corridor	, 51133 W 51134	
Saffold Dr	River Dr to Bryan Woods Dr	
US 80	Bryan Woods to Bull River	
US 80	Bull River to Lazaretto Creek	
US 80	Lazaretto Creek to Campbell St	
US 80	Campbell St to 6 th St	
US 80	6 th St to 19 th St	
Washington Avenue Corridor	1	
Washington Ave	Waters Ave to Bee Rd	
Bee Rd	Washington Ave to 52 nd St	
Washington Ave	Habersham St to Waters Ave	
US 17 Corridor		
US 17	Ogeechee River to Hwy 204	
US 17	Hwy 204 to Quacco Rd	
00 17	11Wy 204 to Quacco Nu	





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Route	Segment Description	
US 17	Quacco Rd to Dean Forest Rd	
US 17	Dean Forest Rd to Chatham Pkwy	
US 17	Chatham Pkwy to Stiles Ave	
US 17	Stiles Ave to Henry St	
Wilmington Cross Connectors		
Cromwell Rd	Winchester Dr to Wilmington Island Rd	
Deerwood Rd	Cromwell Rd to Penn Waller Rd	
Windsor Forest Corridor		
Largo/Plantation/Old Mill/Mill	Windsor Rd to Coffee Bluff	
Robert McCorkle Corridor		
Catherine Dr	Sea Island Dr to Port Royal Dr	
Port Royal Dr	Catherine Dr to Penn Waller Rd	
Historic District Corridor		
Gordon St	Barnard St to Lincoln St	
Lincoln St	Gordon St to Liberty St	
Lincoln St	Liberty St to Colonial Park	
Perry St	Lincoln St to Abercorn St	
Abercorn St	Perry St to Oglethorpe Ave	
Oglethorpe Ave	Abercorn St to Lincoln St	
Lincoln St	Oglethorpe Ave to President St	
President St	Lincoln St to Houston St	
Houston St	President St to Bryan St	
Bryan St	Houston St to Bull St	
Bull ST	Bryan St to State St	
State St	Bull St to Barnard St	
Barnard St	State St to York St	
York St	Barnard St to Bull St	
Bull St	York St to Harris St	
Harris St	Bull St to Barnard St	
Barnard St	Harris St to Gordon St	
Historic District Extension Corridor		
Lincoln St	President St to Bay St	
Bay St	Lincoln St to Lincoln St Ramp	
Lincoln St Ramp	Bay St to River St	
River St	Lincoln St to E Broad St Ramp	
E. Broad St Ramp	River St to Factors Walk	
E. Broad St Ramp	Factors Walk to Rossiter St	
Rossiter St	E. Broad St Ramp to Houston St	

Source: CORE MPO Bikeway Plan, 2000





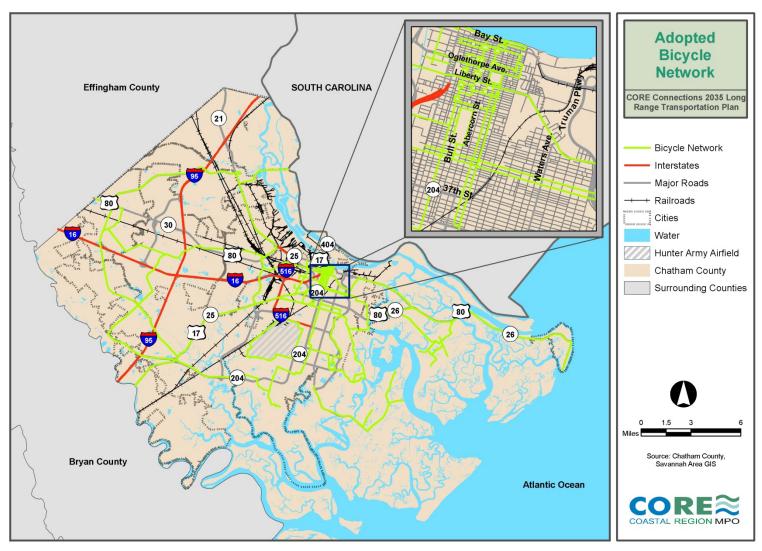


Figure 4.6 CORE MPO Bikeway Plan Recommended Bikeways





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Coordinated Public Transit - Human Services Transportation Plan

The Coordinated Public Transit - Human Services Transportation Plan (adopted October 2007, revised April 2009) seeks to coordinate funding and services for human services transportation, as mandated by the Safe, Accountable, Flexible, and Efficient Transportation Equity Act - A Legacy for Users (SAFETEA-LU). The purpose of this plan is to guide funding decisions, broaden dialogue and support further collaboration between human services agencies and transportation providers. The primary goals of this plan include:

- Improve services to the elderly, handicapped and limited-income populations. These services include transportation services for accessibility and mobility, public information and customer service.
- 2) Improve the efficiency of transportation services by minimizing duplicate services, pooling resources and improving the overall cost-effectiveness of service.
- 3) Improve the coordination of services and planning efforts. Coordination of both planning and services will facilitate public information, ease of use and cost-efficiency.

Needs identified through this plan include customer service improvements, on-demand transit scheduling, additional public outreach and information for transportation services, and ongoing coordination with the Coastal Regional Commission (CRC) for services between the CRC service area and the Savannah urbanized area.

CORE MPO 2030 Long Range Transportation Plan, Volume 4, SAFETEA-LU Revisions

As previously discussed in Section 1.0 - Introduction, SAFETEA-LU is the federal transportation bill that replaced TEA-21 in 2005. With this new bill, some changes and additions were made, and LRTPs were required to be updated to reflect these changes. SAFETEA-LU places an emphasis on improving safety and security, reducing traffic congestion, improving efficiency in freight movement, increasing intermodal connectivity and protecting the environment. Volume 4 of the CORE MPO 2030 LRTP, completed in August of 2005, served as the interim revision to the 2030 LRTP to ensure that all SAFETEA-LU requirements were met. This revision included the planning and programming requirements of SAFTEA-LU specifically focused on revisions or additions to the previous TEA-21 bill, as well as the steps taken by the CORE MPO to comply with the regulations.

4.4 2009 CORE MPO Congestion Management Process Update

The 2009 CORE MPO Congestion Management Process (CMP) Update was developed to evaluate and address congestion in Chatham County. The CMP seeks to address congestion and improve the transportation network using a streamlined approach. This was accomplished through identified performance measures and tools, as well as goals established in the previous 2004 Congestion Management Process (CMP) Report. Goals from the 2004 CMP include: 1) identifying problem areas through the use of travel-time studies, and 2) presenting recommendations to improve the traffic flow on the transportation system as whole, as well as on specific corridors. Performance measures identified through the CMP process are both quantitative and qualitative, and include:





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- Congestion Index;
- Approach Level of Service;
- Preservation of regional mobility through the implementation of alternative access improvements to enhance local mobility;
- Implementation of sustainable development through the incorporation of mixed-use, pedestrian-oriented design that helps to minimize trip length; and
- Promotion of multimodal connectivity through the implementation of transit, bicycle, and pedestrian enhancements.

The CMP recommended addressing congestion through an ongoing process involving improving traffic operations and management on existing roads and adding capacity, among other strategies. These improvement tools should be used to address roadway system performance, land use and development impacts, and freight system service. Table 4.9 shows the top 20 congested segments in the region, as identified through the 2004 CMP, and the recommendations made by the 2009 CMP.





Table 4.9 Top 20 Congested Segments in CORE MPO Region

Rank	Route & Direction	Roadway	2004 CMP Recommendations	2009 CMI	P Update
Kalik	Route & Direction	Segment	2004 CIVIP Recommendations	Status	Recommendations
1	Waters/Whitefield/Dia mond Causeway - NB	Stephenson to DeRenne	Corridor will improve with extension of Truman. Study in next CMS; review in E-W Study.	Project not completed - Whitefield (from Old Whitefield to Ferguson) and Diamond Causeway (from Ferguson to McWhorter) programmed for construction between 2008-2013	Implement programmed improvements by 2013
2	Habersham - SB	Johnston to Stephenson	Currently under construction on Stephenson. Stephenson widening will help Habersham.	Project completed	Continue to monitor for improvement
3	Bull/White Bluff - SB	Eisenhower to Abercorn	Constrained due to canopy. NB/SB left turns very light; consider restricting them, add NB right turn overlap	Project not completed	Monitor and study in next CMP Update
4	Mall Blvd - WB	Mall Way to Abercorn	Planned intersection TIP. Consider change in lane use for shared dual left; study addition of NB right turn.	Project completed (Abercorn St. at Oglethorpe Mall intersection improvement)	No further action required
5	Bull/White Bluff - NB	Hampstead to DeRenne	Constrained due to canopy. Improvements limited to optimizing signal operations; study in E-W study.	Project not completed	Short-Range: Signal re-timing or implement ACS-Lite software (or similar) - see note below Long-Range: Study in next CMP Update or DeRenne Ave Congestion Mitigation improvements to be constructed by 2013
6	Habersham - NB	Johnston to DeRenne	Cross street delay expected; study further in E-W study for improving DeRenne.	Project not completed	Study in next CMP Update or DeRenne Ave Congestion Mitigation improvements to be constructed by 2013





Rank	Route & Direction	Roadway	2004 CMP Recommendations	2009 CM	P Update
Kalik	Route & Direction	Segment	2004 CIVIP Recommendations	Status	Recommendations
7	Waters/Whitefield/Dia mond Causeway - SB	DeRenne to Stephenson	Corridor will improve with extension of Truman. Study in next CMS.	Project not completed - Whitefield (from Old Whitefield to Ferguson) and Diamond Causeway (from Ferguson to McWhorter) programmed for construction between 2008-2013	Implement programmed improvements by 2013
8	Abercorn - SB	Veterans Pkwy to King George	Priority IC - Widen 4-6 between King George and Rio; Priority II - Widen 6-8, widen King George approach.	Project not completed - SR 204/Abercorn widening from King George to Rio Road scheduled for construction 2021-2030	Study in next CMP Update
9	SH 21/I-516/DeRenne - EB	Montgomery to Bull	Once traffic is metered through Montgomery, signals should be coordinated for progression. Consider in E-W study.	Project not completed	Short-Range: Signal re-timing or implement ACS-Lite software (or similar) - see note below Long-Range: Study in next CMP Update or DeRenne Ave Congestion Mitigation improvements to be constructed by 2013
10	Ogeechee/US 17- WB	Quacco to SH 204 WB Ramp	Currently under construction. Study in next CMS.	Project completed	Continue to monitor for improvement
11	SH 21/I-516/DeRenne - EB	Cross Gate to SH 25	Currently is a detour due to construction on SR 25. Study next CMS.	Project not completed; scheduled for construction between 2014 and 2020	Implement programmed improvements by 2020
12	SH 21/I-516/DeRenne - WB	SH 25 to Cross Gate	Currently under construction on SR 25.Study in next CMS.	Project not completed; scheduled for construction between 2014 and 2020	Implement programmed improvements by 2020
13	Abercorn - SB	Apache to Rio	Priority IC - Widen 4-6 from Rio to Truman, optimize Rio to King George.	Project not completed - SR 204/Abercorn widening from Rio Road to Truman Parkway Phase V scheduled for construction 2008 - 2013	Implement programmed improvements by 2013
14	Skidaway - SB	La Roche to DeRenne	Corridor will improve with extension of Truman and widening of Skidaway. Study in next CMS.	Project not completed -Skidaway operational improvements (between Rowland Ave. and Ferguson Ave. scheduled for construction between 2008-2013	Implement programmed improvements by 2013





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Rank	Route & Direction	Roadway	2004 CMP Recommendations	2009 CM	P Update
Kalik	Route & Direction	Segment	2004 CIVIP Recommendations	Status	Recommendations
15	Bull/White Bluff - SB	61st St. to DeRenne	Constrained due to canopy. Improvements limited to optimizing signal operations.	Project not completed	Signal re-timing or implement ACS-Lite software (or similar) - see note below
16	Montgomery Cross - EB	Tibet Ave to Abercorn	Funded project for construction FY 2004-06. PI #550570 will widen from 2-4 lanes between Abercorn & Abercorn, study approach at Abercorn.	Project completed	Continue to monitor for improvement
17	Montgomery Cross - WB	Sallie Mood to Waters	Signal operations - coordination between Waters and Abercorn.	Project not completed	Signal re-timing or implement ACS-Lite software (or similar) - see note below
18	Abercorn - NB	Private Drive to DeRenne	Priority IB - Operational - Optimize DeRenne and Abercorn will improve, NB right turn lane planned.	Project not completed	Short-Range: Signal re-timing or implement ACS-Lite software (or similar) - see note below Long-Range: Study in next CMP Update or DeRenne Ave Congestion Mitigation improvements to be constructed by 2013
19	Dean Forest/Bourne - SB	SH 25 to SH 21	High percentage of trucks and many stopped for queuing at Port - widen shoulder to provide storage.	Project not completed; problem confirmed through completion SR 21 analysis for 2009 CMP Update	Implement proposed project and study in next CMP Update
20	Abercorn - NB	Pine Grove to King George	Priority II - Widen 4-6 from US 17 to King George, acceleration lane for EB rights, widen King George approach.	Project not completed - SR 204/Abercorn widening from US 17 to King George scheduled for construction 2021-2030	Study in next CMP Update

Source: CORE MPO 2009 CMP





4.5 Traffic Impact Assessment Process

The CORE MPO is currently in the process of finalizing a traffic impact assessment (TIA) program for proposed developments. This effort is focused on addressing the shortcomings of the existing process which includes a lack of consistent thresholds, identified report requirements and clearly defined agency roles and responsibilities. An update of the CORE MPO's TIA process was undertaken in order to:

- Establish a set of thresholds to determine when a TIA is required;
- Establish consistent study requirements including the content and extent of analysis for TIAs that meet established thresholds;
- Establish a formalized submission process that includes timelines and requirements for applicants and reviewing agencies;
- Establish a method of identifying potential transportation impacts and determining appropriate mitigation techniques to address these impacts; and
- Establish a streamlined, unbiased process for applicants.

Several steps have been completed in the development of the draft TIA program. These steps have included a review of the existing TIA approval process, a detailed peer region review, development of a recommended TIA program that is currently being vetted through the development community, and a proposed ordinance to support the recommended process.

4.6 Multimodal and Intermodal Transportation System

The Chatham County - Savannah region offers a variety of multimodal and intermodal transportation opportunities for the movement of people and goods throughout the region. These opportunities include transit, the Port of Savannah, the Savannah International Airport, other freight and rail opportunities, transit, and bicycle and pedestrian opportunities. Together, these methods of transportation provide connections throughout the County, and also link it to other regions throughout the United States. The following sections describe these opportunities in detail. Figure 4.7 shows the locations of intermodal transportation facilities in Chatham County.

4.6.1 Transit

Transit service in the study area is primarily provided by the Chatham Area Transit Authority. Additional services are available for senior citizens through Senior Citizens, Incorporated. These transit providers are described in detail in the following sections.

Chatham Area Transit Authority

The Chatham Area Transit (CAT) Authority is the primary transit provider for the Chatham County - Savannah area, including the City of Savannah, unincorporated Chatham County and a portion of Garden City. CAT operates fixed-route services as well as fare-free services throughout the area. Because it does not serve other jurisdictions in Chatham County (Bloomingdale, a portion of Garden City, Pooler, Port Wentworth, Thunderbolt, Tybee Island and Vernonburg), it is not a true County-wide transit provider. CAT receives funding from GDOT, the Federal Transit Administration, a local transit tax and





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farebox revenues.

A map of CAT's fixed-route services is shown in Figure 4.8. Additionally, CAT operates several fare-free services, including the CAT Shuttle in Historic Savannah, the Savannah Belles Ferries - an alternative to the Talmadge Bridge linking Savannah to Hutchinson Island, a shuttle from the Liberty Street parking garage in downtown Savannah, and the Dot Downtown Transportation System. There are also options for those with special needs. Teleride is a paratransit service available to those who have registered for service through the Americans with Disabilities Act in Chatham County. Teleride is operated by a contracted service operator. The CAT Half-Fare Program is available to eligible disabled individuals and persons 65 years of age and older.

Senior Citizens, Incorporated

Senior Citizens, Inc. provides multiple services to senior citizens throughout Chatham County. Transportation services are operated on a demand-response basis, consisting of assistance with trips such as medical appointments and grocery store shopping. The Sterling Rides Service, also operated by Senior Citizens, Inc., is similar to its traditional transportation service, but it is a volunteer-based transportation program that also assists riders at appointments or with shopping, if requested.

LogistiCare, Incorporated

LogistiCare, Inc. began in Georgia in 1997 and manages a network of coordinated transportation services throughout the nation. Its clients include state/government agencies, managed care organizations, hospitals, and other agencies that provide transportation for eligible Medicaid members. Eligible members include those who require access to covered medical services, welfare-to-work populations, commercial and senior members, special needs students and ADA paratransit riders. A regional office is located in Savannah, which manages service in the east region of the State, where approximately 175,000 Medicaid members are serviced through approximately 600,000 trips annually.

4.6.2 Bicycle and Pedestrian

The CORE MPO area has a significant number of pedestrian facilities, particularly within the downtown and mid-town area of the City of Savannah. The downtown and mid-town areas of Savannah are extremely pedestrian friendly and these facilities also provide the needed access to the transit system. The City of Savannah develops a sidewalk priority list on an annual basis and pedestrian needs, particularly with regard to safety for all users, is an important consideration.

The CORE MPO also has an existing bikeway plan discussed in detail in Section 4.3. This plan includes facilities throughout the County and incorporates a variety of facility types. These facilities include shared roadways, designated bicycle lanes, and separate bike paths or multi-use paths and are targeted at serving both transportation and recreational needs. The transit system is also accessible to bicyclists, including bike racks on their transit vehicles.





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4.6.3 Port of Savannah

The Port of Savannah consists of two major facilities or terminals: Garden City, which is designated as a container terminal, and Ocean Terminal, which is responsible for loose material (break bulk) and roll onroll off (RoRo) shipments. These terminals are owned and operated by the Georgia Ports Authority (GPA), which is the state organization responsible for all ports in the State of Georgia. The Port of Savannah is ranked the fourth largest container port in the United States. Imports and exports from the port can be directly transported intermodally by rail or truck freight.

Since 2000, container tonnage has increased by 56 percent, and to manage the increase, port capacity improvements have been made through facility upgrades including an addition of a 40,000 square foot on-dock storage facility and new ship-to-shore container cranes. The river that channels the ships to the port terminals is 42 feet deep with a width ranging from 400 to 600 feet.

The Garden City Terminal is the largest facility at the port, located 24.7 miles from the sea buoy at the delta into the Savannah River from the Atlantic Ocean. It is the largest single-terminal operation in North America. The cargo type serviced from this facility is container cargo that transports consumer products. Garden City Terminal is accessed by both rail and roadway facilities. This intermodal system provides access to markets across the US. Rail services are provided by CSX and Norfolk Southern Railroad. Although the Interstate system is not directly adjacent to the port facilities, access is provided over the state highway system to I-16 going west (6.3 miles from the port) or I-95 which runs north/south (5.6 miles from the port).

Future expansion of the Garden City Terminal is planned in order to be consistent with the current growth rate. Over the next 10 years, two high speed container cranes will be added every 18 months, to reach a total of 25 cranes. To accommodate larger traffic associated with demand, GPA is studying the feasibility of increasing the depth of the Savannah River channel from 42 to 48 feet mean low water (MLW). The plans for improvement are predicted to increase the capacity from 2.62 million 24 equivalent units (TEUs) to 6 million TEUs in 2018.

The Ocean Terminal is located about 22.2 miles from the sea buoy at the delta into the Savannah River from the Atlantic Ocean. The terminal provides a number of opportunities for growth due to open land surrounding the terminal.

There are 17 private distribution centers that are represented by large retail companies including Target and IKEA. The pattern of distribution is mainly in the southeast, but distribution also ranges into midwestern and northwestern states.

The growth in the Port of Savannah has been significant over the last 40 years. In 1969, the port reported 15,286 annual cargo loads, and in 1970, 18,910 cargo loads were reported - a 24% increase in only one year's time. The port has a current annual capacity of 2.62 million TEUs. By 2018, the port is projected to increase its capacity to six million TEUs which is a 48.3% increase in the current port capacity. Over the last 10 years the growth has been more significant and the port has become more complex. Between 2002 and 2006, the port has experienced 78 percent growth in container throughput. Table 4.10 shows growth through this five year period.





Table 4.10 Port of Savannah Container Throughput, 2002-2006

Year	Throughput (in 1000s of TEUs)	Percent Change from Previous Year
2002	1,145,016	-
2003	1,505,379	31.5%
2004	1,572,734	4.5%
2005	1,761,102	12.0%
2006	2,041,789	15.9%

Source: Georgia Ports Authority

To keep up with this growth, the Port of Savannah has planned multiple major improvements, totaling a capital cost of over \$1 billion.

The frequency of trucks and tractor trailers, particularly near the ports, is an important element in the overall efficiency of the transportation system. Table 4.9 displays traffic count stations near the port and their associated truck traffic. The locations of count stations are shown in Figure 4.11. The three count stations with the highest truck percentage are station 107 at 33.3 percent, 649 at 17.3 percent, and 383 with 15.8 percent truck traffic.

Table 4.11 Port of Savannah Average Annual Daily Traffic (AADT) Report (2006)

Count Station	Route Type	Route Number	AADT	Truck %	Beginning Intersection	Ending Intersection
107	State Road	21	1,190	33.3%	Atlantic Coastal Hwy	Gypsum Rd
126	State Road	26	5,910	18.7%	Louisville Rd	Atlantic Coastal Hwy
137	State Road	421	52,430	4.7%	Ogeechee Rd	Tremont Rd
138	State Road	421	54,500	3.5%	Mildred St	Liberty Pkwy
376	State Road	404	20,130	5.3%	Gwinnett St	Montgomery St
383	State Road	405	67,730	15.8%	James L Gillis Mem Hwy	SB on FM Louisville Hwy
649	County Road	680	2,780	17.3%	Alfred St	Magazine St
132	State Road	421	32,140	7.9%	Gwinnett St	SB on FM Augusta Ave
834	County Road	59700	3,370	5.2%	ACL Blvd	Garrard Ave
815	City Street	103407	1,500	6.5%	MLK Jr Blvd	Tattnall St





Count Station	Route Type	Route Number	AADT	Truck %	Beginning Intersection	Ending Intersection
218	City Street	150507	8,850	5.0%	37 th St	32 nd St
481	City Street	N/A	1,710	3.6%	E Broad St	E 40 th St

Source: Georgia Department of Transportation

4.6.4 Airports

The Savannah/Hilton Head International Airport is located between I-95 and SR 21/Augusta Road in the City of Savannah. It serves all of Coastal Georgia and South Carolina's Lowcountry. Airlines operating from the Savannah Airport include American Eagle, Continental Express, Delta, Delta Connection, United Express and US Airways.

In 2008, the airport saw 988,929 enplanements, down slightly from 2007, which saw 1,011,815 enplanements. In 2007, a Terminal Expansion Project was begun. This project consisted of five new gates in anticipation of the arrival of larger regional jets, and an expansion of the terminal. In an additional project, a new parking garage was opened in October 2007, adding 1,690 new parking spaces.

A foreign trade zone is located at the airport. Foreign trade zones are areas designated for domestic and international merchandising where customs and taxes do not have to be paid for items in transport. This zone encourages international commerce and is an important component to the Port of Savannah.

The Hunter Army Airfield (HAAF) is located inside the city limits of Savannah. It serves the Fort Stewart military complex which is located in nearby Liberty County, providing air transport and operational support to Fort Stewart. HAAF covers 5,400 acres and houses the longest army runway on the east coast.

4.6.5 Freight and Passenger Rail

The Chatham County - Savannah region is served by both passenger and freight rail. Amtrak offers passenger rail service that links the region to the rest of the Southeast and the nation by rail. The Silver Star and Palmetto lines serve the Savannah Amtrak station, located just west of I-516. The Silver Star serves Savannah as it connects from Miami to New York City. The Palmetto begins in Savannah and terminates in New York City. There are multiple freight rail facilities running in and through Chatham County, particularly in the western portion of the County and surrounding the Port of Savannah. There are approximately 170 miles of freight rail track throughout the County, the majority of which is utilized by CSX Transportation and Norfolk Southern. Others who utilize the track in Chatham County are Atlantic Coast Line (ACL), Georgia Central Railroad and the Savannah and Atlanta Railroad. Principle commodities that are transported in and through Chatham County by rail include pulp and paper, furniture and fixtures, tobacco products, rubber and plastics, leather, clay, concrete, glass and stone products, fabricated metal products, non-electrical and electrical machinery, instruments, waste and scrap materials and miscellaneous manufacturing.





Framework Mobility Plan

4.6.6 Intercity Bus

The Greyhound Bus Line provides intercity bus transportation, linking Savannah to other cities throughout the Southeast. The Greyhound station is located in downtown Savannah. More than 30 buses depart the Savannah terminal daily.





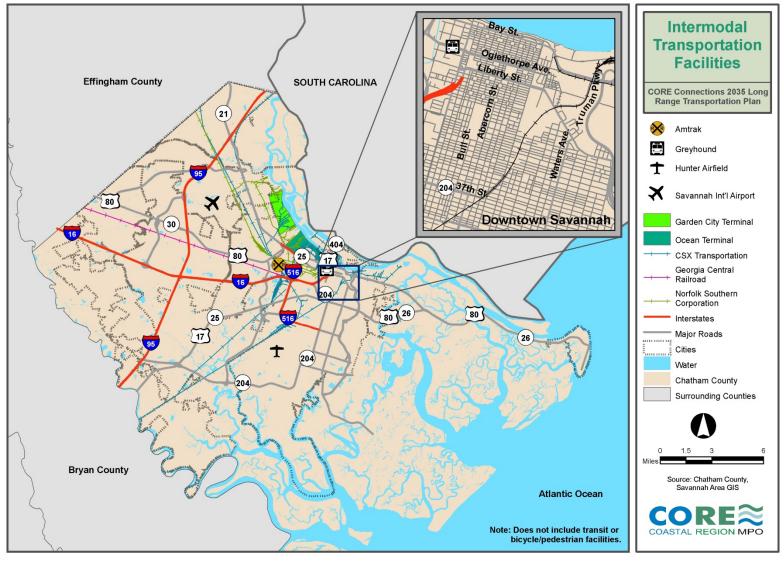


Figure 4.7 Intermodal Transportation Facilities





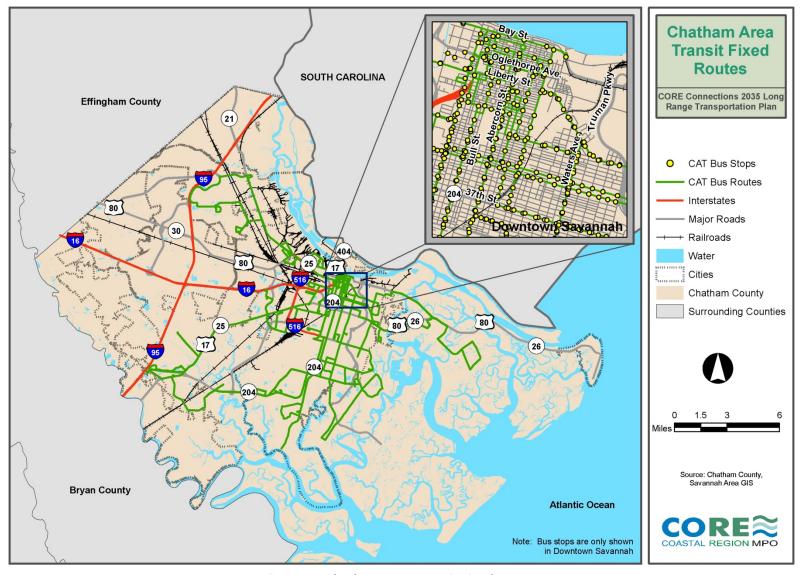


Figure 4.8 Chatham Area Transit Fixed Routes





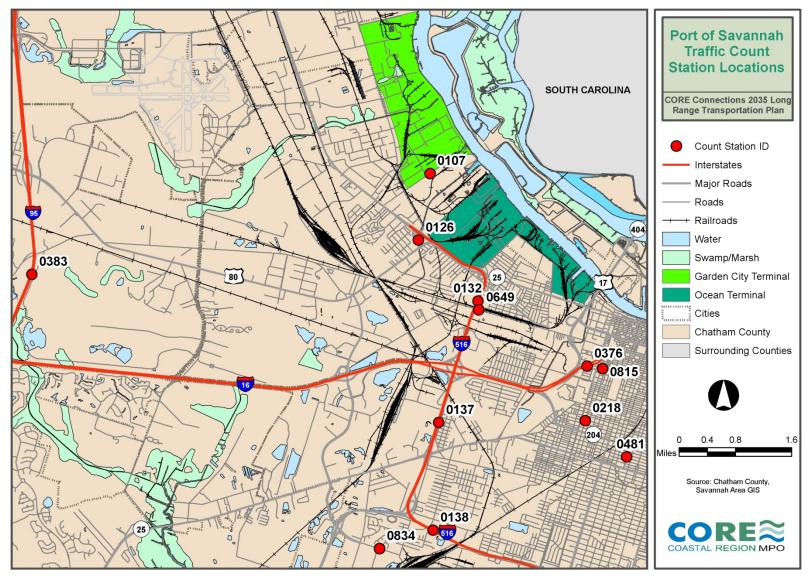


Figure 4.9 Port of Savannah Traffic Count Station Locations





5.0 Agency Consultation and Public Outreach

The most effective transportation plans are driven by the needs and input of the community and have broad buy-in by all segments of the population. As discussed in Section 2.0, the study team consulted extensively with local stakeholders and members of the general public during the development of the plan. The following sections discuss the agency consultation and public outreach activities as well as the results of these efforts.

5.1 Identification of Issues and Development of Goals

In early June 2009, a Stakeholder Advisory Committee meeting and a public meeting were held regarding the Framework Mobility Plan of the LRTP. The Stakeholder Advisory Committee is comprised of approximately 60 federal, state, regional and local agencies and groups that have a vested interest in transportation and growth-related issues within the CORE MPO region. The two meetings held on June 1 and June 2, 2009, respectively, followed a similar format. Participants first viewed a brief presentation about the LRTP. This presentation explained the planning process and why it is vital to the region, presented draft goals for the Framework Mobility Plan, and outlined the schedule of the plan.

The next activity was a small group discussion facilitated by the study team members. Participants were asked to respond to two questions:

- (1) What are the major transportation issues of the region?
- (2) Do you concur with the Draft Goals for the Framework Mobility Plan?

The major transportation issues identified by the Stakeholder Advisory Committee and the public are presented in Table 5.1. Additional issues identified by the Savannah Airport Commission and received by the CORE MPO staff on September 17, 2009 are identified by an asterisk (*). Input given regarding the draft goals were used to refine the goals of the Framework Mobility Plan, displayed in Table 5.2.





Table 5.1 Summary of Identified Issues and Needs for Framework Mobility Plan

Safety and Congestion

General Comments

- Widening of bridges and highways (i.e., US 80)
- Safe transportation movement east and west
- Lack of traffic calming
- Enforcement of speed limits
- Enhance Safe-Routes-To-School program
- Improve drivers education course content to include non-motorized vehicle interaction
- Need refresher drivers education courses with mandatory re-testing of individuals at a future age
- Improve age-specific education (i.e., crossing streets at cross walks, etc)

- Trucks downtown, along Bay Street in particular
 (2)
- SR 21, especially during peak hours (2)
- West Bay Street
 - Safety from the viaduct to I-516
 - Mix of congestion, which includes trucks, tourist traffic and a high proportion of the population that is elderly and/or disabled
 - Safety for pedestrians and bicyclists, including a lack of adequate facilities
- Assess possible safety issues along US 80 entering Tybee Island
- Congestion along the Victory Drive Corridor
- Congestion along the DeRenne Corridor
- SR 204 from Savannah Mall to King George Boulevard
- Safety issues and congestion associated with Hunter Army Airfield
- Congestion to/from Effingham County
- Congestion at I-95 and Airways Boulevard
- Congestion at SR 21 and I-95 interchange area
- Access and congestion at Georgia Ports Authority
- Peak hour congestion at I-16 and I-95
- I-516/I-16 interchange





Network Connectivity

General Comments

- Lack of intermodal connectivity
- Construct less "car-centric" planned developments (i.e., in the southwest portion of the County)
- Construct more grid-style developments

Specific Comments

- Need to ensure adequate accessibility for isolated communities, especially Tybee and Skidaway Islands (3)
- Need to complete Truman Parkway to a loop around Savannah to tie into I-95 on the south, as well as north of Savannah (2)
- Need Benton Boulevard / Effingham Parkway construction (2)
- Need connection from Skidaway Island to Wilmington Island
- Need the extension of Jimmy DeLoach Parkway
- Southwest Bypass and Truman Parkway should connect with any secondary road connections
- Connections between Savannah and South Carolina / Hilton Head – Bluffton area
- Connection between I-516 and I-95
- Reconstruct US 80 bridges
- Existing configuration of I-16 into downtown

Access

General Comments

- Need wider lanes / lane engineering for emergency vehicles
- Freight routing / movements (both rail and truck)
- Improve access to hospitals

Specific Comments

- Need a second bridge over Savannah River
- Truck routing from Jimmy DeLoach Parkway
- Ensure adequate and coordinated planning for Jasper Port

Community / Land Use

General Comments

- Need to incorporate context sensitive design solutions into projects (3)
- Need to better integrate land use and zoning relative to transportation (2)
- Need to encourage mixed-use development/convenience to other modes to reduce auto dependency
- Need to establish more neighborhood schools that promote walking and less driving/busing

- Need a Bay Street gateway/entrance into downtown for tourists
- Need to ensure the preservation of intown/mid-town neighborhoods





Multimodal: Bicycle/Pedestrian

General Comments

- Need to expand bicycle facilities (bike lanes, bike paths) as well as other multimodal facilities (5)
- Need better education for drivers, pedestrians, and bicyclists (e.g., vehicles must stop for pedestrians according to Georgia law)
 (4)
- Need better pedestrian safety, especially around Forsyth Park, Bay Street (2)
- Need better bicycle safety, especially downtown (2)
- Need better synchronization of audible pedestrian signals (2)
- Need to increase pedestrian crossing times at crosswalks
- Need to improve pedestrian crosswalk design
- Need better multimodal connectivity and access
- Need improved accessibility for the disabled (e.g., better sidewalks)
- Need integrated, safe bicycling facilities
- Need greenway network
- Need to implement the 2000 Bikeway Plan
- Need to install traffic signals that can be tripped by bicycles

- Lack of sidewalks outside of core area
- Need bike lanes, which is an efficient and resourceful use of limited funding
 - President Street
 - Victory Drive
 - Gulfstream Road
- Bridge planning should include bicycle and pedestrian facilities (2)
 - US 80 to Tybee Island
 - Delesseps Avenue





Multimodal: Transit

General Comments

- Need expanded transit service (both service frequency and geographic area) (3)
- Need express bus routes with park-and-ride lots (2)
- Need for more intermodal services (e.g., bus and ferry)
 - Need a regional transit service
 - Need bus terminal for Greyhound
- Need intercity bus service
- Need better signage at transit stops
- Need improved public awareness of public transportation
- Need smart card technology (transferring from one mode to the next)
- Need to expand transfer stations
- Need to develop a holistic prioritization system for ranking roadway projects together with transit projects

Specific Comments

- Bus transportation to Tybee Island and other recreational areas
- Need shuttle service from downtown to the airport

Multimodal: Rail

General Comments

- Need commuter rail for short and long trips (e.g., AMTRAK) (3)
- Need to plan for future freight and passenger rail service
- Diagonal railroad across town blocking traffic (not just specific to peak commute times)
- Need freight and passenger rail service to the airport*

- Rail connection to downtown from the airport
 (2)
- Improve operations/traffic flow along President Street where trains block traffic during peak commute times
- Need streetcar expansion into the downtown/mid-town area
- Need freight and passenger rail service to the airport*





Infrastructure

General Comments

- Need to have audible traffic signals for the sightimpaired at intersections throughout the area (2)
- Street flooding
- There are many dark areas that need better lighting
- Re-examine street lighting standards with regard to height of lights
- Need Better signal timing
- Need Better/more parking downtown
- Improve the flexibility of traffic flow (i.e., ability to make real-time adjustments to surface streets and provide alternate routing)
- Expand and enhance use of "smart" message signs, sized to the appropriate application
- Establish a prioritization process for implementing signal pre-emption networks across the region

Specific Comments

 Lynes Parkway off of I-16 onto DeRenne Avenue should be reconfigured to form a gateway into mid-town Savannah

Coordination

General Comments

- Need a regional technical coordinating committee, especially with regard to corridors (2)
- Improve regional transportation planning (outside of CORE MPO region)
- Integrate two-way communications between various agencies

Specific Comments

None

Travel Demand Management

General Comments

- Construct additional park-and-ride facilities and promote ride sharing (2)
- For the region's major industries, enforce a mandatory ride share program and improve shift management strategies for personnel

Specific Comments

None

Environment

General Comments

 Need to implement air emissions testing – do not wait until air quality worsens and government enforces monitoring

Specific Comments

None





Funding and Process				
General Comments	Specific Comments			
 Lack of funding (2) 	None			
 GDOT planning process 				
Project prioritization				
• Fully integrate the results of the Project				
DeRenne study into the process				
 Cost of developing land 				
 Need a regional transportation tax 				
 User fees to help fund transportation 				

Table 5.2 Framework Mobility Plan Proposed Goals

	1
4. François Astista	Support the economic vitality of the region, in concert with the
1. Economic Activity	community's goals, especially by enabling local, regional and
	global competitiveness, productivity and efficiency.
	Ensure and increase the safety of the transportation system for
2. Safety	all users, including motorized vehicles, bicyclists and
	pedestrians.
	Ensure and increase the security of the transportation system
3. Security	for all users, including motorized vehicles, bicyclists and
	pedestrians.
4. Accessibility, Mobility and	Ensure and increase the accessibility, mobility and connectivity
Connectivity	options available to people and freight, and ensure the
Connectivity	integration of modes, where appropriate.
5. Environment and Quality of Life	Protect, enhance and sustain the environment and quality of
3. Environment and Quanty of Life	life, promote energy conservation and address climate change.
6. System Management and	Assess the transportation system to determine what works well,
Maintenance	what does not work well, and potential improvement options.
	Ensure coordination in the transportation planning process
7. Intergovernmental Coordination	between intra- and inter-regional partners, including both state
	and local agencies.

5.2 Prioritization of Transportation Investments and Development of Objectives

The second round of outreach activities was held in late July. A public meeting was held on July 21, 2009, and the Stakeholder Advisory Committee met on July 22, 2009. The two meetings again followed similar formats. An overview presentation outlining the development of the Framework Mobility Plan thus far, as well as results of travel demand model and road safety analyses were presented. Next a facilitated small group exercise entitled "CORE Bucks" was conducted where participants were given "play" money and asked to spend the money on different types of transportation projects. There were no restrictions on how the money could be "spent." The eight categories of transportation improvements included the following:





- Implement Complete Streets;
- Improve safety;
- Construct new roadways;
- Improve traffic operations;
- Construct/improve sidewalks, bike lanes and greenways;
- Improve transit service;
- · Fund maintenance; and
- Widen existing roads.

The purpose of the activity was to provide insight into the types of projects the community preferred and how the community should prioritize its transportation investments. The results of the exercise from each of the meetings are presented in Tables 5.3 and 5.4. The results indicate that the participants would like to see the greatest transportation investments in complete streets; sidewalks, bike lanes, and greenways; and improved transit service.

Table 5.3 CORE Bucks Exercise Results from Public Meeting (July 21, 2009)

Project Type	CORE Bucks Spent
Implement Complete Streets	\$40
Construct/Improve sidewalks, bike lanes and greenways	\$35
Improve transit service	\$30
Improve safety	\$14
Construct new roadways	\$10
Fund maintenance	\$8
Widen existing roads	\$2
Improve traffic operations	\$1

Table 5.4 CORE Bucks Exercise Results from Stakeholder Advisory Committee Meeting (July 22, 2009)

Project Type	CORE Bucks Spent
Implement Complete Streets	\$27
Construct/Improve sidewalks, bike lanes and greenways	\$25
Improve transit service	\$16
Fund maintenance	\$11
Improve traffic operations	\$11
Improve safety	\$9
Widen existing roads	\$6
Construct new roadways	\$5





Participants also gave feedback regarding potential draft objectives for the goals of the Framework Mobility Plan. The input received from the Stakeholder Advisory Committee and the public are summarized in Table 5.5. This information was used to refine the draft objectives of the Framework Mobility Plan, which are displayed in Table 5.6.

Table 5.5 Feedback on Framework Mobility Plan Objectives from Stakeholder Advisory Committee and Public Meetings (July 2009)

Goal	Considerations for Development of Objectives
	Need to get out of the roadway mindset
	Make very clear that the term "user" is multimodal in scope and not just referring to drivers; also needs to be clear that it includes freight
	Need to clearly communicate the intent of the objective
	It is important to support economic activity within the area, but not to the detriment of the community
Economic Activity	Need to recognize that bicycle paths and facilities do have a positive economic impact and benefit
	Need to understand that economic activity is critical to the vitality of the community
	Need to ensure that economically developing areas are adequately served and accessible
	Need to ensure that the strategies encompass providing workers with the ability to get to jobs
	Recent studies show that vehicular accidents may occur because of driver inattention, such as the use of cell phones, texting, make-up, etc., so widening roadways may not have the desired impact
	Bridges and overpasses should be safer for bicyclists and pedestrians
	Strategies must include audible signals
	Need to include bridge accommodation for non-motorized users (e.g., DeLesseps Avenue over Truman Parkway)
	Separation of traffic types is important (e.g., mass transit, heavy trucks, bicycle/ped)
Safety	For pedestrian safety and the visually impaired, hybrid and electric vehicles are too quiet
	Encourage non-SOV (single occupant vehicle) travel in order to decrease the speed or number of objects on the roadways, leading to a decrease in severity and probability of crashes
	Need increased pedestrian crossing signage at unsignalized intersections
	Need increased signage indicating "Share the Road" • Employ "sharrows", which designates the bicycle routes without specifically designated larges. Would work well in Savannah because of the
	specifically designated lanes. Would work well in Savannah because of the street design and configuration.





Goal	Considerations for Development of Objectives
	Ensure trees and limbs overhanging sidewalks are adequately maintained; these
	are hazards to visually impaired pedestrians.
	Ensure proper curb cuts that include tactile surfaces are used
Security	US 80 roadway and bridges should be widened for hurricane evacuation
	Develop and publicize the evacuation process for the disabled
	Need to implement existing bicycle plans
	Address the lack of bicycle and pedestrian connectivity
Accessibility,	Better bridge/overpass connectivity for bicyclists and pedestrians
Mobility and	Need to examine connectivity and accessibility for all modes, not just motorized
Connectivity	vehicles
	More sidewalks and connections within neighborhoods and between
	neighborhoods and activity centers, especially outside of the urban core area
	Need intergovernmental coordination with regard to connectivity Complete Streets approach should incorporate context sensitive design principles
	Need to include protection of the tree canopy
	Complete Streets can be in competition with other goals, so coordination among
	goals must be ensured
F	Promote non-SOV travel
Environment and	Maintain the character of areas and neighborhoods (should be included in the
Quality of Life	goal)
	Encourage transit use
	Provide commuter options such as park-and-ride lots
	Need to change "Address climate change" to "Adapt to climate change"
	Use ITS for educational messages as well as for roadway/travel information
	Use ITS to let motorists know of alternate routes that may be less congested (e.g.,
	DeRenne Avenue)
	Develop a road system that maintains and preserves unique characteristics of neighborhoods and of the coastal area
	Work toward a regional public transportation system that provides all residents,
	regardless of their age, income or special needs, access to employment centers,
	institutions, commercial areas, recreational facilities and other destinations
System	Ensure adequate maintenance of facilities, which prolongs their life and is a more
Management and	efficient use of dollars
Maintenance	Need better quality control of maintenance, including materials, to ensure the
	project is done right the first time
	Efficiently use resources for maintenance
	Maintain clean streets/ensure adequate street sweeping for bicycle safety
	Major roadways are well-maintained; the status quo on maintenance is adequate,
	and could even be a little less. The biggest maintenance issue is for local facilities.
	Promote non-SOV travel
	Focus on all modes
	 Need to expand "highways and bridges" to include all types of facilities





	Coordination among all of the entities is a very difficult effort					
	Coordination within the entire coastal Georgia region					
	Coordination with the Coastal Regional Commission of Georgia					
Intergovernmental	Expand partners to include organizations in addition to governmental entities and					
Coordination	agencies					
	Utilize innovative approaches for funding bicycle and pedestrian facilities, such as					
	public-private partnerships					
	Intermodal coordination					

Table 5.6 CORE Connections – Framework Mobility Plan Objectives and Performance Measures

	Economic Activity: Support the economic vitality of the region, matching the community's goals, especially by enabling local, regional and global competitiveness, productivity and efficiency.				
GOAL 1	 Objectives: Minimize work trip congestion Promote projects which provide the maximum travel benefit per unit cost 	Performance Measures: Project cost/vehicle miles of travel (VMT) Work trip vehicle hours of travel (VHT) Sustained or increased funding status Increased sustainable development incorporating mixed-use, pedestrian-oriented design			
	· · · · · · · · · · · · · · · · · · ·	ansportation system for all users, including motorized sts and pedestrians.			
GOAL 2	Objectives: Eliminate at-grade railroad crossings Minimize frequency and severity of vehicular accidents Minimize conflicts and increase safety for non-motorized users	 Performance Measures: Total accidents per million miles traveled involving all user types Injury accidents per million miles traveled involving all user types Fatal accidents per million miles traveled involving all user types Implementation of transit and other safety projects Number of increased bike and pedestrian facilities Number of at-grade crossings reduced 			





	Security: Ensure and increase the security of the transportation system for all users, including motorized vehicles, bicyclists and pedestrians.			
GOAL 3	Objectives: Promote projects which aid in hurricane evacuation Adequately prepare for coordinated responses to incidents Monitor vulnerable infrastructure through visual and other inspection methods	Performance Measures: Hurricane evacuation route status Improved emergency responses (e.g., ambulance travel times to hospitals) Maximize transportation system mobility during disruptive events (such as reductions in time to clear major crashes from through lanes) Reduction in vulnerability of the transportation system (such as implementation of monitoring infrastructure for major transportation system)		
	connectivity options available to people and frei	nsure and increase the accessibility, mobility and ght, and ensure the integration of modes, where priate.		
GOAL 4	Objectives: Minimize congestion delays Maximize regional population and employment accessibility Provide efficient and reliable freight corridors Minimize delays in corridors served by transit Encourage use of transit and non-motorized modes, focusing on areas with low rates of automobile ownership or high population of elderly and/or disabled populations Expand transit service area and increase service frequency	Performance Measures: Base year vs. future year volume/capacity ratios for various modes Percent of population within ½ mile of transit route or facility connecting to regional activity center(s) Daily freight truck use/lane Operational performance of transit system (buses arriving/departing on schedule) Percent of population within ½ mile of bicycle facility connecting to regional activity center(s) Transit ridership		
GOAL 5	-	Performance Measures: Impacts to natural environment (such as rate of development of greenspace compared to the rate of greenspace preservation Impacts to historic and cultural resources (such as the strengthening of regulations to protect historic and cultural resources) Strengthening of regulations promoting infill and brownfield development Project utilization of green infrastructure Vehicle miles of travel (VMT) Energy consumption trends Air quality trends		





		Assess the transportation system to determine what vell, and potential improvement options.
	Objectives: • Maximize efficiency of signalized intersections	Performance Measures: • Average Daily Traffic (ADT) per lane
GOAL 6	Expand use of Intelligent Transportation	Congestion Index (CI)
Ğ	Systems (ITS) Continue existing levels of maintenance for	Level of Service (LOS)ITS coverage of region
	highways and bridges	Roadway pavement ratings and bridge sufficiency ratings
		Bicycle and pedestrian facility surface conditionsTransit user satisfaction (such as reliability)
		coordination in the transportation planning process ners, including both state and local agencies.
\	Objectives:	Performance Measures:
GOAL	Enhance coordination between CORE MPO,	CORE MPO represented at all project
0	Georgia Department of Transportation, County	development meetings
	departments and with other City governments	 Establishment of coordination policies to promote communications between various agencies

5.3 Agency Consultation and Mitigation of Impacts

Per the "Agency Consultation Process" (October 2006) issued by the Georgia Department of Transportation's Office of Planning, the Framework Mobility Plan has complied with Section 6001[G] of SAFETEA-LU. This directive requires states to consult "as appropriate" with "State and local agencies responsible for land use management, natural resources, environmental protection, conservation, and historic preservation" as well as economic development in planned growth, in the development of transportation plans and transportation programs. The purpose of this consultation is to identify potential environmental and social impacts of the Framework Mobility Plan, and who or what that may affect.

The CORE MPO has traditionally maintained a comprehensive mailing list of elected officials, planning and engineering professionals, other governmental agencies, and members of the general public. To ensure compliance with the legislative requirement for coordination and consultation, the mailing list also includes state and local environmental resources agencies, land management agencies, and historic preservation groups. These agencies are notified of meetings and the availability of planning documents, and are also provided the opportunity to review and comment on the recommendations within the LRTP update. These agencies are encouraged to review all documents and participate in meetings to provide any comments to the CORE MPO with regard to potential environmental impacts.

In addition, the study team gathered pertinent plans, programs, and other data from these agencies that would potentially be affected by the Framework Mobility Plan. These agencies are listed in Table 5.7.





Table 5.7 Agencies Consulted for Framework Mobility Plan

Agency		
Federal Level	Local and Regional Level (cont.)	
Federal Highway Administration	City of Savannah: City Manager, Traffic Engineering, Parking and Mobility	
Federal Transit Administration	Municipality Staff: Bloomingdale, Garden City, Pooler, Port Wentworth, Thunderbolt, Tybee Island, Vernonburg	
U.S. Army Corps of Engineers	Savannah Area Chamber of Commerce	
State Level	FS/HAA Engineering representative	
Georgia Department of Transportation: Office of Planning, Intermodal Division	Georgia Ports Authority	
Georgia Department of Natural Resources: Environmental Protection Division, Coastal Resources Division, Historic Preservation Division, Wildlife Resources Division	Savannah Airport Commission	
Georgia Department of Community Affairs CSX Transportation/Rail Engineering repre		
Georgia Department of Economic Development	Norfolk Southern Resident Vice President	
Georgia Forestry Commission	Georgia Motor Trucking Association	
Local and Regional Level	The Georgia Conservancy (local office)	
CORE: MPO staff, Board, TCC, CAC, ACAT	Georgia Land Trust (local office)	
Metropolitan Planning Commission	Historic Savannah Foundation	
Coastal Regional Commission of Georgia	Savannah Bicycle Campaign	
Georgia Department of Transportation, District Five	Pedestrian Advocates of the Coastal Empire (PACE)	
Chatham Area Transit	Savannah Development and Renewal Authority (SDRA)	
Chatham Emergency Management Agency (CEMA)	Savannah Fire and Emergency Services	
Chatham County: County Manager, Engineering	Southside Fire/EMS	
Savannah-Chatham County Public School System	Savannah Ogeechee Canal Society	
Savannah Area Tourism Leadership Council	Savannah Tree Foundation	

5.3.1 Consultation with the Georgia Strategic Highway Safety Plan (SHSP)

With the passage of the SAFETEA-LU, Congress challenged states by calling for the development of comprehensive Strategic Highway Safety Plans aimed at reducing deaths and injuries associated with traffic crashes. The goal is to lower the number of traffic fatalities nationwide. The strategy is to bring together the four safety components - engineering, enforcement, education and emergency medical services ("4 E's") in each state to implement a comprehensive strategic plan.

To better coordinate safety measures with planning efforts, the CORE MPO has completed a planning-level GIS screening analysis that can be used to determine which planned/programmed projects address areas of safety concern in Chatham County, and where transportation improvements are needed in





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order to mitigate safety issues in the County. The high-level GIS screening analysis included a review and analysis of the 10 highest-crash roadway segments (by five-mile increments) within Chatham County. These locations have been identified by GDOT and represent the most recent data from the Georgia Strategic Highway Safety Plan (GSHSP). This information is presented in detail in Section 6.0 – Needs Assessment. Section 8.0 also presents the high-crash segments overlaid with the DRAFT 2035 LRTP Framework Mobility Plan projects.

5.3.2 Coordination with Emergency Management Agencies

Federal guidance requires that the transportation planning process independently consider the security of the transportation system for all motorized and non-motorized users. As a Metropolitan Planning Organization, the CORE MPO is responsible for preparing the Regional Transportation Plan and the Transportation Improvement Program, and is not the appropriate lead agency in security planning. To achieve the security objective, the CORE MPO will focus its transportation security planning on supporting and coordinating with agencies responsible for emergency management and providing them with any transportation-related information that is needed. In addition, the CORE MPO will provide these agencies with all the MPO's plans and programs for review and comment. By doing so, the CORE MPO hopes to ensure that the security goals and objectives in the MPO programs will be met and that the MPO will contribute to the increased security of the transportation system in the area.

The emergency agencies in Chatham County include Chatham Emergency Management Agency (CEMA), the Georgia Emergency Management Agency (GEMA), the Georgia Office of Homeland Security, the area's fire department, the area's police department, and others. These agencies are responsible for emergency management, disaster preparedness, and homeland security in the CORE MPO planning area. They are also responsible for providing professional mitigation and response and recovery services in the event of local emergencies or disasters. These agencies prepare disaster preparedness plans, such as the Chatham County Emergency Operations Plan, coordinate emergency responses, and work to educate the public on how to respond in emergency situations. In addition, the Savannah Area Geographic Information System (SAGIS), a department of the Chatham County-Savannah Metropolitan Planning Commission, closely coordinates with the emergency management agencies.

Besides the local emergency management agencies, GDOT has a role in evacuation planning. I-16 from Chatham County is equipped to utilize contra flow lanes during an evacuation and can allow twice the normal traffic capacity leaving the coastal area during an evacuation. Drop gate barriers at exit and entrance ramps along the interstate prevent vehicles from traveling in the wrong direction during the evacuation process. Various state routes along the coast may also be utilized as one-way routes towards inland areas of Georgia.

Chatham Area Transit Authority (CAT) is the agency that provides public transit service to the CORE MPO region. The agency is also required to address security in their planning efforts. They accomplish this through coordination with emergency management agencies by focusing on the security of the infrastructure and of the riders. The Federal Transit Administration has created a number of security program action items for transit agencies to complete. This list includes items such as a written security plan, employee training and emergency drills. CAT has developed plans and programs to fulfill these requirements and continues to implement and monitor these programs on an ongoing basis. CAT also coordinates with CEMA in their evacuation plan; in the event of an emergency, CAT buses will be used to transport evacuees to a central shelter as well as to transfer to other evacuation vehicles.





6.0 Framework Mobility Plan Needs Assessment

The needs assessment for the Framework Mobility Plan consists of an analysis of the performance of the existing Chatham County - Savannah region's multimodal transportation network and the projected performance of the network over the next 25 years if no improvements are made (the "no build" or "do nothing" scenario). This analysis is an intensive process, incorporating input from the community, stakeholders and agencies, as well as extensive technical analysis. The needs assessment results in the identification of current deficiencies and needs so that they can be addressed as projects and programs are prioritized for the Framework Mobility Plan. The following subsections provide information on the transportation network needs and deficiencies by mode, including roadways, transit, bicycle and pedestrian accommodations and intermodal facilities.

6.1 Roadways: Overview of Existing and Future Needs

The predominant travel mode in the Chatham County - Savannah region is the single occupant motor vehicle, making roadways the major component of the transportation network. It is anticipated that vehicular travel will remain as the primary mode of travel, resulting in the need to adequately address existing and future needs. However, the provision of viable choices is an important focus of the Framework Mobility Plan, and it is recognized that the roadway network must accommodate all users safely and effectively. Projections for the performance of the roadway network to 2035, the planning horizon year, are determined using a travel demand model as a quantitative assessment tool. This software tool is widely utilized by transportation planners to evaluate overall system performance and test various improvement scenarios. With "real world" inputs such as employment and population data, the computer model is used to predict future travel patterns and conditions for a region. The model used in the Framework Mobility Plan was developed by the Georgia Department of Transportation (GDOT) with socioeconomic data provided by CORE MPO staff.

6.1.1 Level of Service Analysis

Level of service (LOS) is a measure of how a transportation facility accommodates the use or amount of travel. LOS is calculated utilizing a number of factors that affect the quality of travel, for example travel speed, level of congestion, and roadway characteristics. LOS is represented by the letters A (no congestion/free-flowing traffic) through F (extreme congestion/gridlock). The CORE MPO has identified LOS A, B and C as desirable, LOS D as marginal, and LOS E and F as deficient.

The base year and horizon year LOS conditions for the roadway network are based on the volume-to-capacity ratio (v/c ratio). The v/c ratio is a measurement of roadway travel performance. It is calculated by dividing the demand flow rate by the capacity for the traffic facility. The demand flow rate is the number of vehicles passing a point on a lane or roadway during some time interval. The capacity is the maximum rate of flow of the roadway under ideal conditions. The CORE MPO considers those facilities with a v/c ratio greater than 0.85, or LOS E and F, to be deficient.

Table 6.1 shows the deficient segments with v/c ratios greater than 0.85 during the base year (2006). Figure 6.1 shows the LOS for 2006 along with deficient roadway segments during the base year. Table 6.2 shows the deficient segments with v/c ratios greater than 0.85 during the horizon year (2035) with existing and committed projects in place. Figure 6.2 shows the corresponding LOS for 2035 (with





existing and committed projects) along with deficient roadway segments during the horizon year.

Table 6.1 Deficient Roadway Segments Based on V/C Ratio (2006)

Road	From	То	Maximum V/C Ratio Observed	LOS
Victory Drive	Truman Parkway	River Drive	1.32	E, F
US 17	Bryan County	Dean Forest Road	1.31	E, F
Whitefield Avenue	Montgomery Cross Road	Ferguson Avenue	1.31	E, F
Fort Argyle Road	Ogeechee Road	SR 204	1.23	E, F
Waters Avenue	52nd Street	Stephenson Avenue	1.22	E, F
Oglethorpe Avenue	MLK Jr. Boulevard	Whitaker Street	1.21	E, F
Robert B. Miller, Jr. Road	Dean Forest Road	Gulf Stream Drive	1.17	E, F
Wallin Street	Victory Drive	Skidaway Road	1.16	E, F
Middleground Road	San Anton Drive	Tibet Avenue	1.14	E, F
Montgomery Street	Leanard Street	DeRenne Avenue	1.10	E, F
Skidaway Road	Pennsylvania Avenue	LaRoche Avenue	1.08	E, F
SR 21	I-95	Effingham County	1.07	E, F
Quacco Road	US 17	Winding Way	1.07	E, F
SR 21	Jimmy Deloach Parkway	Bonnybridge Road	1.07	E, F
Abercorn Street	Rio Road	Veterans Parkway	1.07	E, F
Broughton Street	MLK Jr. Boulevard	Whitaker Street	1.06	E, F
Stephenson Avenue	Waters Avenue	Strachan Drive	1.03	E, F
Montgomery Cross Road	Waters Avenue	Middleground Road	1.01	E, F
Ramp to Oglethorpe Avenue	US 17	Oglethorpe Avenue	1.01	E, F
DeRenne Avenue	Truman Parkway	Montgomery Street	1.00	E, F
Wheaton Street	Truman Parkway	Waters Avenue	0.99	E, F
US 17/SR 25 (Ogeechee Road)	I-516	US 80/SR 26	0.96	E, F
White Bluff Road	Alpine Drive	Johnson Street	0.95	E, F
MLK Jr. Boulevard	Liberty Street	W. Taylor Street	0.95	E, F
Montgomery Street	Columbus Drive	52nd Street	0.95	E, F





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Road	From	То	Maximum V/C Ratio Observed	LOS
White Bluff Road	Montgomery Cross Road	Tibet Avenue	0.93	E, F
SR 21	Bourne Avenue	Smith Avenue	0.91	E, F
US 80	Jimmy Deloach Parkway	Effingham County	0.89	E, F
W. Bay Street	SR 25C	Tuten Avenue	0.88	E, F
Liberty Street	Montgomery Street	Whitaker Street	0.87	E, F
Gulf Stream Road	SR 21	Gulf Stream Drive	0.87	E, F
Delesseps Avenue	Waters Avenue	Truman Parkway (east side)	0.87	E, F
Skidaway Road	Montgomery Cross Road	Ferguson Avenue	0.87	E, F
Penn Waller Road	Johnny Mercer Boulevard	Sheftall Circle	0.87	E, F
White Bluff Road	Eisenhower Drive	Stephenson Avenue	0.86	E, F
Staley Avenue	Dillion Avenue	Montgomery Street	0.86	E, F
Tibet Avenue	Leeds Gate Road	Abercorn Street	0.85	E, F

Source: GDOT/CORE MPO Travel Demand Model





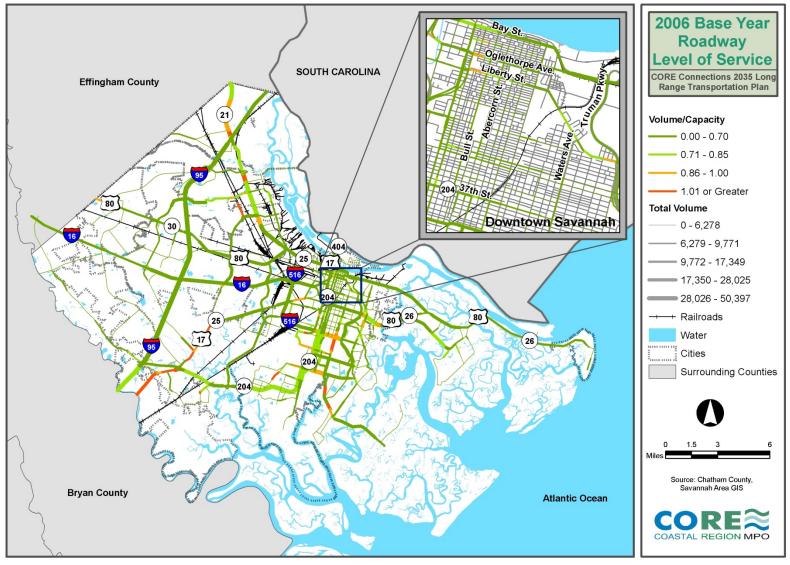


Figure 6.1 2006 Base Year Roadway Level-of-Service





Table 6.2 shows the deficient roadway segments for the horizon year 2035 and includes those improvement projects that are existing and/or committed. Figure 6.2 shows the LOS for horizon year 2035, incorporating the projects that are already committed to be constructed within that time frame.

Table 6.2 Deficient Roadway Segments Based on V/C Ratio (2035 - Existing + Committed)

Road	From	То	Maximum V/C Ratio Observed	LOS
I-95	SR 30	Effingham County	2.24	E, F
SR 21	Smith Avenue	Effingham County	2.01	E, F
US 80	Bloomingdale Road	Effingham County	1.71	E, F
Little Neck Road	Old Little Neck Road	I-16	1.71	E, F
Quacco Road	Laurel Green Court / Holiday Circle	Ogeechee Road	1.68	E, F
Fort Argyle Road	John Carter Road	I-95	1.61	E, F
Pooler Parkway / Quacco Road	Gateway Drive	Green Oak Drive	1.56	E, F
Pine Barren Road	Chippingway Circle	Brooklyn Way	1.49	E, F
Ramp to Oglethorpe Avenue	US 17	Oglethorpe Avenue	1.47	E, F
Robert B. Miller, Jr. Road*	Gulf Stream Road	Dean Forest Road	1.40	E, F
Victory Drive	Truman Parkway	River Drive	1.40	E, F
Bloomingdale Road	US 80	I-16	1.34	E, F
SR 30	SR 21	Hodgeville Road	1.32	E, F
SR 204	Veterans Parkway	Rio Road	1.28	E, F
I-95	SR 204	Bryan County	1.26	E, F
S. Coastal Highway / Main Street	Brampton Road	Bonnybridge Road	1.26	E, F
SR 204	Ogeechee Road	Veterans Parkway	1.23	E, F
Waters Avenue	63rd Street	Stephenson Avenue	1.21	E, F
Broughton Street	MLK Jr. Boulevard	Bull Street	1.20	E, F
Wallin Street	Victory Drive	Skidaway Road	1.18	E, F
Skidaway Road	Gibbons Street	LaRoche Avenue	1.17	E, F
Pine Barren Road	US 80	I-95	1.16	E, F
John Carter Road	Wade Road	Little Neck Road	1.15	E, F
Wheaton Street	Truman Parkway	Ash Street	1.15	E, F
Benton Boulevard	Godley Way	Jimmy Deloach Parkway	1.15	E, F





Road	From	То	Maximum V/C Ratio Observed	LOS
Wilson Boulevard	Strachan Drive	White Bluff Road	1.14	E, F
Little Neck Road	Private drive	US 17	1.11	E, F
Pooler Parkway	I-16	I-95	1.11	E, F
Derenne Avenue	Montgomery Street	Truman Parkway	1.10	E, F
Islands Expressway	Truman Parkway	General McIntosh Boulevard	1.10	E, F
I-95	SR 30	SR 204	1.09	E, F
US 80	Old Dean Forest Road	Wilkes Street	1.06	E, F
MLK Jr. Boulevard	Liberty Street	W. Taylor Street	1.06	E, F
Liberty Street	MLK Jr. Boulevard	Bull Street	1.04	E, F
Oglethorpe Avenue	MLK Jr. Boulevard	Bull Street	1.03	E, F
Gulf Stream Road**	Gulf Stream Drive	Ida J. Gadsden Drive	1.02	E, F
Osteen Road	Howard Drive	US 80	1.02	E, F
Bonnybridge Road	S. Coastal Hwy	SR 21	1.01	E, F
W Bay Street	I-516	Millen Street	1.00	E, F
Diamond Causeway	Skidaway Island Park Road	Ferguson Avenue	0.99	E, F
Goebel Avenue	Foster Street	Skidaway Road	0.96	E, F
President Street	E. Broad Street	Randolph Street	0.96	E, F
Bay Street	MLK Jr. Boulevard	Bull Street	0.95	E, F
I-516	I-16	SR 21	0.95	E, F
Montgomery Street	W. Victory Drive	W. 59th Street	0.94	E, F
US 17	Dean Forest Road	SR 204	0.93	E, F
Chevis Road	Ogeechee Road	Beaufort Road	0.92	E, F
I-16	Bloomingdale Road	I-516	0.92	E, F
Whitefield Avenue	Truman Parkway	Diamond Causeway	0.92	E, F
Stephenson Avenue	Habersham Street	Roundtree Circle	0.91	E, F
Dean Forest Road	Old Dean Forest Road	I-16	0.91	E, F
Whatley Avenue	Shell Road	Victory Drive	0.91	E, F
White Bluff Road	Stephenson Avenue	Eisenhower Drive	0.89	E, F
Middleground Road	San Anton Drive	Tibet Avenue	0.88	E, F
Wilmington Island Road	Johnny Mercer Boulevard	N. Cromwell Road	0.88	E, F





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Road	From	То	Maximum V/C Ratio Observed	LOS
Penn Waller Road	Johnny Mercer Boulevard	Sheftall Circle / Deerwood Road	0.86	E, F
Staley Avenue	Franklin Street	Montgomery Street	0.86	E, F

Source: GDOT/CORE MPO Travel Demand Model





^{*}Robert B. Miller Road will be extended north from its intersection with Gulfstream Road around the airport to Crossroads Parkway by the Savannah Airport Authority

^{**}Gulfstream Road is being re-routed around the airport from Robert B. Miller road intersection to Crossroads Parkway by the Savannah Airport Authority

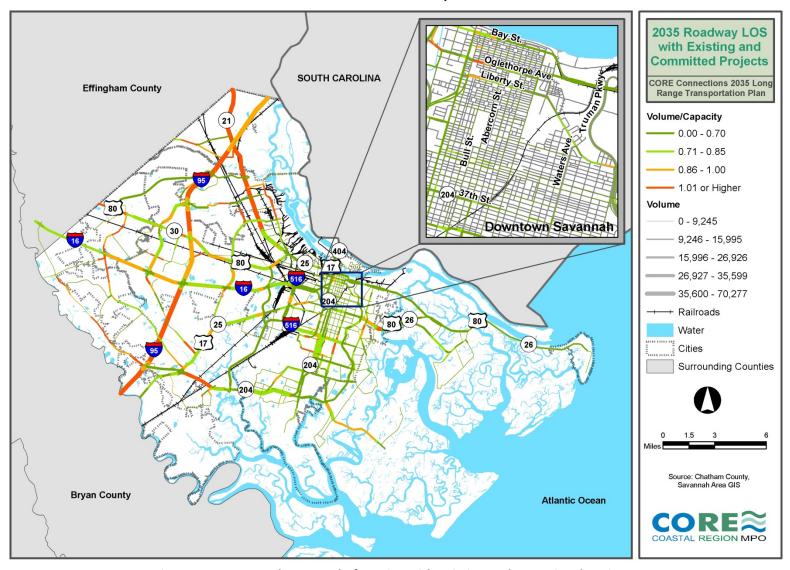


Figure 6.2 2035 Roadway Level of Service with Existing and Committed Projects





6.1.2 Traffic Operations and Intersection Improvement Needs

Traffic operations and intersection improvement needs were assessed based on input received from the City of Savannah. Table 6.3 presents these identified needs.

Table 6.3 Traffic Operations and Intersection Improvement Needs

Road A	Road B	Identified Need	Cost
Waters Avenue	Montgomery Cross Road	Intersection Improvement	\$170,000
37 th Street		Signal Upgrade	\$1,215,000
Oglethorpe Avenue	MLK Jr. Boulevard	Intersection Improvement	\$120,000
Louisville Road	MLK Jr. Boulevard	Intersection Improvement	\$330,000

6.1.3 Safety Analysis

Roadway safety analysis was conducted based upon data from GDOT and the Strategic Highway Safety Plan (SHSP). This plan seeks to reduce deaths and injuries that result from traffic crashes through the four safety components of engineering, enforcement, education and emergency medical services (4 E). For the Framework Mobility Plan, GDOT/SHSP crash data were used to assess safety needs within the CORE MPO region.

Table 6.4, shown below, provides a summary of the SHSP high crash areas in Chatham from 2006 to 2008. These high crash areas have been selected according to highest crash severity per 100 million vehicle miles traveled. Crash severity is calculated based on the following equation:

Severity = $(((Severity/Crash)/10^6)*(no. of crashes))/(no. of years*ADT (veh/day)*length of segment (mi)*365 days/yr)$

The segment with the highest crash severity is found on Telfair Place from Telfair Road to just west of the Chatham Parkway. For the 15 locations with the highest severity indices, there were a total of 612 crashes recorded. Four of these crashes resulted in fatalities, 147 resulted in injuries and 461 resulted in damage. These high crash segments are displayed in Figure 6.3.

Table 6.4 Top 10 Chatham County High Crash Segments, 2006-2008

Route Name	Termini: From/To	Severity Index/100 MVM	No. of Crashes
Telfair Place	From Telfair Road to 0.4 miles west of Chatham Parkway	191.59	6
Dean Forest Road/SR 307	From Bourne Avenue to Bob Harmon Road	80.22	46
Main Street/SR 25	From Minus Avenue to South Carolina boundary	78.81	31
I-516/SR 21	From Oak Street to Flonnel Avenue	63.55	104





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Route Name	Termini: From/To	Severity Index/100 MVM	No. of Crashes	
Fountain Drive	From Main Street to end of Fountain Drive, 1 mile to the northeast	55.80	5	
Dean Forest Road/SR 307	From Ogeechee Road to Sonny Perdue Drive	49.08	35	
Congress Street	From Ann Street to directly east of Montgomery Street	48.15	8	
US 80/SR 26	From I-516 0.32 miles east of Dean Forest Road	46.78	57	
Louisville Road/SR 26	From Lynes Parkway to Shuptrine Avenue	45.37	109	
Louisville Road/SR 26	From Houston Street to 0,32 miles east of Dean Forest Road	41.80	42	
Brampton Road	From Elm Street to 0.51 miles northeast of Garden City Terminal Road	40.83	15	
Gwinnett Street	From Chatham Parkway to Stiles Avenue	30.07	7	
Jimmy DeLoach Parkway	From Augusta Road/SR 21 to 0.45 miles west of Highlands Boulevard	23.16	7	
Atlantic Coastal Highway	From Chevis Road to 0.12 miles east of Salt Creek Road	23.14	19	
Atlantic Coastal Highway	From Buckhalter Road to I-516	23.06	19	

Source: Georgia Department of Transportation





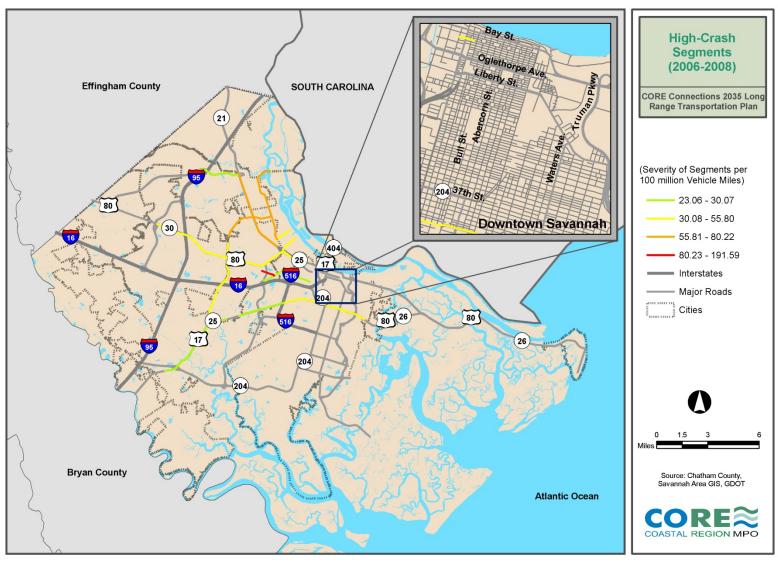


Figure 6.3 High Crash Segments (2006-2008)





6.1.4 Hurricane Evacuation Routes

Hurricane evacuation routes are designated to provide local residents the most efficient route inland in case of a coastal hurricane event. There are four major hurricane evacuation routes leading out of Chatham County:

- I-16
- SR 21
- US 80
- Abercorn Street/SR 204 to US 280.¹

I-16 is equipped with the infrastructure to provide for all lanes to be converted to westbound traffic in the case of an evacuation. These major evacuation routes are displayed in Figure 6.4.

¹ "Coastal Georgia Evacuation Routes." Georgia Emergency Management Agency. http://www.gema.state.ga.us/ohsgemaweb.nsf/1b4bb75d6ce841c88525711100558b9d/2ea10e950a1bed698525 http://www.gema.state.ga.us/ohsgemaweb.nsf/1b4bb75d6ce841c88525711100558b9d/2ea10e950a1bed698525



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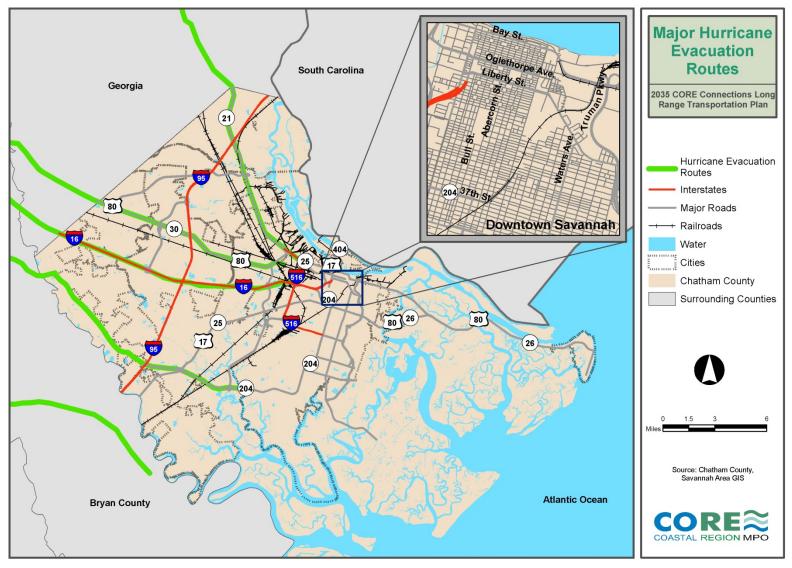


Figure 6.4 Major Hurricane Evacuation Routes





6.2 Transit: Overview of Existing and Future Needs

The latest update of the 2008-2012 *CAT Transportation Development Plan (TDP),* completed in February 2008, discusses the needs of the transit system. The needs summarized below were compiled based on the TDP, as well as stakeholder interviews, focus groups, and surveys as part of the LRTP update process. Table 6.5 presents specific needs identified for particular routes or areas, as well as more general needs identified in the TDP.

Table 6.5 Identified Transit Service Needs

Specific Needs				
Route/Corridor	Identified Need			
Route 13 - Coffee Bluff	Shorten route and increase headway.			
Route 17 - Silk Hope/Savannah Festival Outlet Center	Expand night and weekend hours of operation.			
Route 24 - Savannah State/Wilmington Island	Expand night and weekend hours of operation.			
Route 3A - Augusta Avenue/Garden City and Route 3B - Augusta Avenue/Garden City, Hudson Hill	Expand night and weekend hours of operation.			
Route 6 - Crosstown	Expand services along route.			
Route 14 - Abercorn	Improve punctuality and expand hours of operation.			
33 rd Street, Waters Avenue, 69 th Street and Paulsen Street	More amenities for patrons at bus stops (e.g., benches).			
Oglethorpe Mall to Downtown Savannah	New express bus route.			
Downtown Savannah to Airport	New express bus route.			
Tybee Island	Add new route to Tybee Island.			
Port Wentworth	Add new route to Port Wentworth.			
Genera	l Needs			
Increase frequency of transit service.	Enhance signage at transit stops.			
Improve coordination of different route	Expand hours of operation in the evening and			
schedules.	provide more weekend service.			
Provide greater access to passes and schedules.	Develop smart card technology.			
Expand the transfer stations.	Make public more aware of existing transit services.			
Expand CAT service area.	Develop express bus routes with park and ride lots.			
Develop intercity or regional transit service.	Provide a bus terminal for Greyhound Service.			
Develop a priority ranking system of road projects with transit projects.	Improve reliability of bus schedules.			
Train Teleride drivers on wheelchair restraining and similar procedures.	Provide greater flexibility in Teleride routes.			





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6.3 Bicycle and Pedestrian Facilities: Overview of Existing and Future Needs

Bikeways and pedestrian paths provide multiple benefits to the community. These facilities provide safe, alternative modes of transportation, thereby reducing congestion on the road as well as associated pollutants. Biking and walking are also recreational activities and can lead to improved public health. Furthermore, the presence of bicycle and pedestrian amenities enhance tourism and can also have a positive economic impact on the community. The following sections discuss Chatham County's existing bicycle and pedestrian infrastructure and identified needs.

6.3.1 Bikeways

The term "bikeways" is a general one that encompasses a range of facility types. Existing bikeways and those identified as future needs include the following types of facilities: shared lanes, paved shoulders, wide curb lanes, bike lanes and bike paths.

6.3.1.1 Existing Bikeway Facilities

The existing bikeway facilities in Chatham County are shown in Figure 6.5 and are discussed below.

Route 1 – Abercorn Extension Bikeway

A portion of this bikeway exists as paved shoulders on Abercorn Street Extension, from Rio Road to I-95 (approximately six miles). Other sections do not yet have the recommended facilities. Conflicts on the route include high auto traffic volume, high auto speeds, large intersections and exit and entrance ramps at Veterans Parkway. This corridor is an important link for bicyclists in the southern part of the county. Because no nearby alternative corridors exist across the marshlands in this area, future road projects in the corridor should accommodate bicyclists or create an off-road alternative.

Route 4 - East-West Bikeway

This 6.4-mile shared lane facility runs east from US 17 along 52nd Street and past Skidaway Road to Savannah State University. Conflicts on the route include high auto traffic volume, narrow segments, pavement in poor condition and conflicts with vehicles parked on the road.

Route 7 - Isle of Hope Bikeway

A portion of this bikeway exists as shared lanes on Parkersburg Road and Bluff Drive, and also on Paxton Drive and Cardinal Road. Other sections do not yet have the recommended facilities.

Route 9 – Jimmy DeLoach Bikeway

A portion of this bikeway exists as paved shoulders from just west of I-95 to SR 21. Other sections do not yet have the recommended facilities.





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Route 10 - Lake Mayer Bikeway

This is a paved, 0.75-mile multi-purpose path around Lake Mayer. Originally a bikeway, it is now primarily used by walkers and joggers.

Route 15 - Habersham Street Bikeway

This 14-mile bikeway alternates as a shared facility and exclusive bike lanes. It begins on Habersham Street in downtown Savannah. After crossing Victory Drive, it becomes exclusive bike lanes. After Stephenson Avenue, the bikeway consists of shared lanes on Hodgson Memorial Drive. Bike lanes resume on Edgewater Road, and then the facility follows several collector streets, ending on Science Drive at the Armstrong Atlantic State University campus. The bikeway travels through both residential and commercial districts. There are deficiencies in some areas, including major intersections that are difficult to cross, on-street parking, high traffic volumes and narrow lane widths.

Route 16 - Lincoln Street Bikeway

This 1.3-mile, exclusive bike lane runs one way northbound on Lincoln Street from Victory Drive to Liberty Street. The bikeway overlaps a portion of the Historic District Bikeway.

Route 22 - SR 25 Bikeway

A portion of this bikeway exists as paved shoulders on SR 21, from Bourne Avenue to Bonnybridge Road. Other sections do not yet have the recommended facilities.

Route 25 – Washington Avenue Bikeway

This bikeway consists of a wide curb lane on Washington Avenue, from Habersham Street to Daffin Park, where it uses the path along the southern edge of the park, until reaching Bee Road. Then the bikeway continues as bike lanes on Bee Road from Daffin Park to 52nd Street.

Route 24 – US 17 Bikeway

A portion of this bikeway exists as bike lanes on US 17, from a point one half-mile north of the Ogeechee River to just south of Dean Forest Road. Other sections do not yet have the recommended facilities.

Route 26 – Wilmington Island Cross Connectors

One section of this bikeway exists as bike lanes along the length of Deerwood Road. The other section exists as wide curb lanes on Cromwell Road, from Winchester Drive to Deerwood Road. A small section on Cromwell Road, northwest of Deerwood Road, currently lacks sufficient facilities.

Route 27 – Windsor Forest Bikeway

A portion of this bikeway exists as shared lanes on residential streets connecting Largo Drive with White





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Bluff Road. A section on Largo Drive, from Plantation Drive to Windsor Road (where it connects with Route 15) does not yet have the bike lanes recommended in the *Bikeway Plan*.

Route 28 – Robert McCorkle Bikeway

This three-mile path on Wilmington Island is comprised of two off-road bike path segments connected by a shared lane facility. The first segment is a path beginning near the Bull River, off Johnny Mercer Boulevard, and runs parallel to the boulevard. It then runs parallel to Concord Road to Penn Waller Road, where it becomes a shared lane facility through a residential neighborhood to the north end of St. Catherine Drive. Resuming as a bike path, it runs along Wilmington Island Road to the curve at the west end of the island.

Route 29 - Historic District Bikeway

This bikeway, which is comprised of shared lane facilities, loops through the historic district for a distance of 3.3 miles. The bikeway overlaps with a portion of the Lincoln Street Bikeway.

Route 30 - River Street Bike Path

This bike path follows River Street from East Broad Street to Jefferson Street for 0.8 miles. It is a shared lane facility from East Broad Street to Lincoln Street and a separated bike path from Lincoln Street to Jefferson Street. There is not sufficient signage indicating that it is a bikeway, and the pathway is more heavily used by pedestrians.

Route 38 – Hunter Perimeter Bikeway

This 10-mile shared lane facility runs along the Perimeter Road within Hunter Army Airfield. Hours for use are set by the military installation officials.

In addition to these bikeways, McQueen's Island Trail serves as a multi-use path. It runs along the Savannah River from Bull River to Fort Pulaski National Park. Originally a rail corridor, it was converted to a trail through a Rails to Trails project. The path is six miles long and ranges from 10 to 20 feet in width. It crosses several natural habitats and features exercise stations and picnic areas.





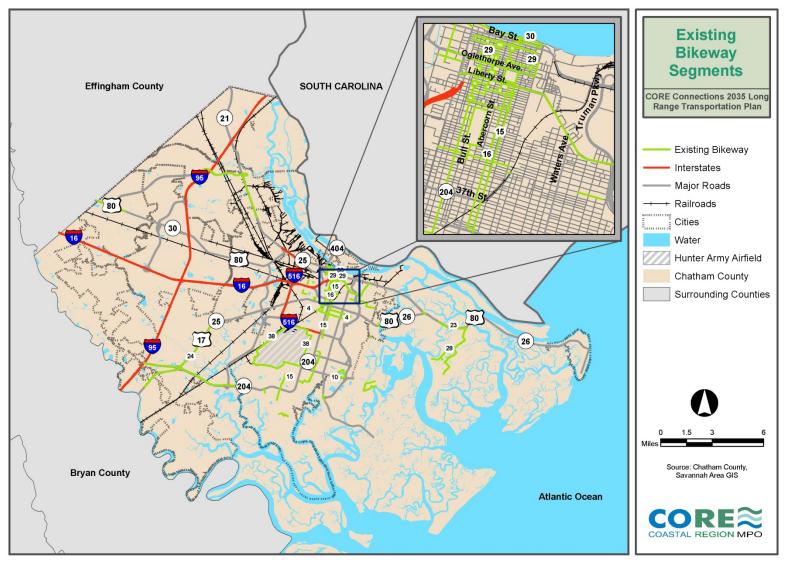


Figure 6.5 Existing Bikeway Segments





6.3.1.2 Bicycle Facility Needs

Bicycle facility needs have been assessed based on input received during the first Stakeholder Advisory Committee meeting and public meeting in June 2009. Among the needs cited are:

- Bike lanes on President Street, Victory Drive, and Gulfstream Road;
- Bridge planning that includes bicycle facilities, such as on US 80 to Tybee Island and DeLesseps Avenue:
- Expansion of bicycle facilities (bike lanes, bike paths);
- Better education for both bicyclists and motorists regarding traffic laws;
- Enhanced safety for bicyclists in downtown Savannah;
- Better multimodal connectivity and access;
- A greenway network;
- Integrated, safe bicycle facilities;
- Installation of traffic signals that can be tripped by bicycles;
- Continued implementation of the CORE MPO Bikeway Plan.

The CORE MPO Bikeway Plan proposes a recommended bikeway network to expand upon the existing bikeways in the County. Table 6.8 presents components of the network that are recommended for future installation. These are also displayed in Figure 6.6 along with existing bikeways.

Table 6.6 Planned Projects from CORE MPO Bikeway Plan

Corridor	Recommended Improvement*	Corridor	Recommended Improvement*		
52nd Street	Bike Lane	Fort Argyle Road	Paved Shoulder		
Anderson Street	Bike Lane	Gwinnett Street	Wide Curb Lane		
Anderson Street	Wide Curb Lane	Habersham Street	Bike Lane		
Benfield Drive	Bike Lane	Heidt Street	Paved Shoulder		
Bloomingdale Cross Road	Paved Shoulder	Henry Street	Wide Curb Lane		
Bonnybridge Road	Paved Shoulder	Hopkins Street	Bike Lane		
Bush Road	Paved Shoulder	Island Expressway	Bike Lane		
Chatham Parkway	Bike Lane	Island Expressway	Paved Shoulder		
Chatham Parkway	Paved Shoulder	Jimmy DeLoach Parkway	Paved Shoulder		
Cherry Street	Paved Shoulder	Johnny Mercer Drive	Bike Lane		
Cromwell Road	Wide Curb Lane	Largo Drive	Bike Lane		
Diamond Causeway	Paved Shoulder	Laroche Avenue	Paved Shoulder		
Dogwood Avenue	Wide Curb Lane	Little Neck Road	Paved Shoulder		
E. Lathrop Avenue	Paved Shoulder	Louisville Road	Bike Lane		
Eisenhower Drive	Bike Lane	Louisville Road	Paved Shoulder		
Falligant Avenue	Wide Curb Lane	McWhorter Drive	Paved Shoulder		





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Corridor	Recommended Improvement*	Corridor	Recommended Improvement*		
Middleground Road	Bike Lane	SR 21	Bike Lane		
Montgomery Cross Road	Bike Lane	SR 25	Paved Shoulder		
Old Louisville Road	Paved Shoulder	Stiles Avenue	Paved Shoulder		
Osca Road	Paved Shoulder	Telfair Place	Paved Shoulder		
Penn Waller Road	Paved Shoulder	Telfair Road	Paved Shoulder		
Pennsylvania Avenue	Bike Lane	Thunderbolt Street Car ROW	Bike Path		
Pine Barren Road	Paved Shoulder Tibet Avenue		Bike Lane		
President Street Extension	Paved Shoulder Tompkins Road		Wide Curb Lane		
Quacco Road	Paved Shoulder	Truman Linear Park	Bike Path		
Rio Road	Bike Lane	US 17	Paved Shoulder		
River Drive	Wide Curb Lane	US 17	Wide Curb Lane		
Sallie Mood Drive	Paved Shoulder	US 17 Alternate	Paved Shoulder		
Science Drive	Bike Lane	US 80	Bike Lane		
Shawnee Street	Wide Curb Lane	US 80	Paved Shoulder		
Skidaway Island	Paved Shoulder	US 80	Wide Curb Lane		
Skidaway Road	Bike Lane	Ward Street	Bike Lane		
		Windsor Road	Bike Lane		

Source: CORE MPO Bikeway Plan





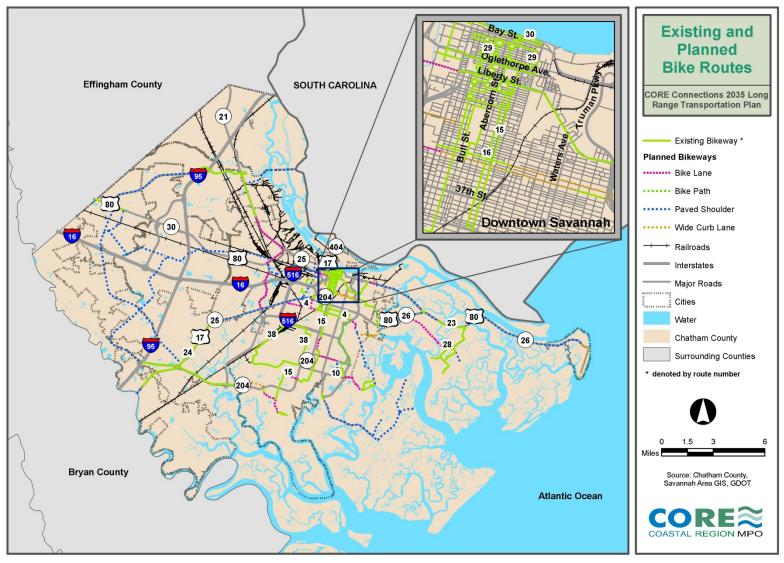


Figure 6.6 Existing and Planned Bike Routes





Framework Mobility Plan

6.3.2 Sidewalks

Sidewalks in Chatham County are primarily located in the urban core areas. The City of Savannah has a large number of sidewalks particularly in the downtown historic districts and in the mid-town area. The existing sidewalk network is displayed in Figure 6.7.

During the first Stakeholder Advisory Committee meeting and public meeting in June 2009, the need for pedestrian and sidewalk improvements was identified. Among the needs identified were:

- More sidewalks outside of the urban core area;
- Enhanced pedestrian safety measures, especially around Forsyth Park and on Bay Street;
- Better synchronization of audible pedestrian signals;
- Longer pedestrian crossing times at crosswalks;
- Improved pedestrian crosswalk design;
- Better education for pedestrians regarding traffic laws;
- Better multimodal connectivity and access;
- A greenway network.

The City of Savannah develops their sidewalk priority list on an annual basis; the above list is to be included. The Total Mobility Plan will involve a more in-depth assessment of the pedestrian facilities within the study area and will be coordinated by the City of Savannah.

6.3.3 Bicycle and Pedestrian Facilities on Bridges

There are a number of bridges in Chatham County that have incomplete or insufficient bicycle and pedestrian facilities such as bike lanes, wide curb lanes, paved shoulders and sidewalks, or paths. The deficiencies on the bridges with regard to bicycle facilities are shown in Figure 6.8. Pedestrian deficiencies on the bridges are identified in Figure 6.9.





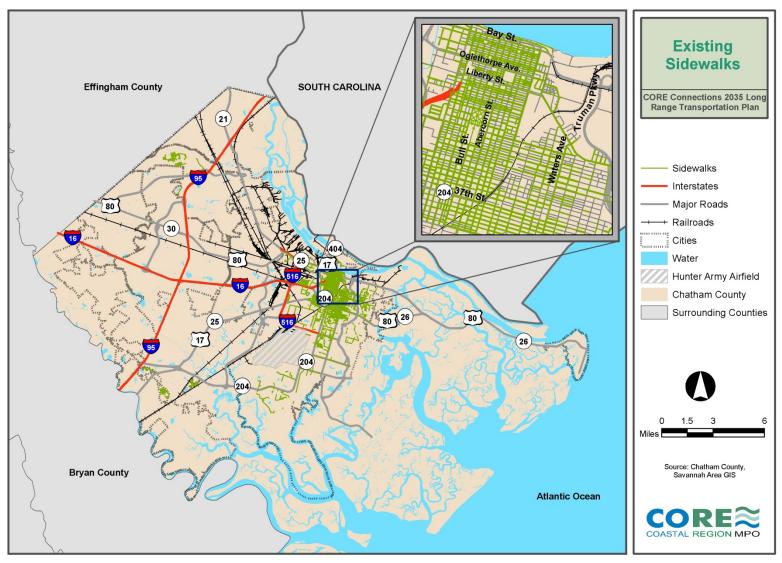


Figure 6.7 Existing Sidewalks





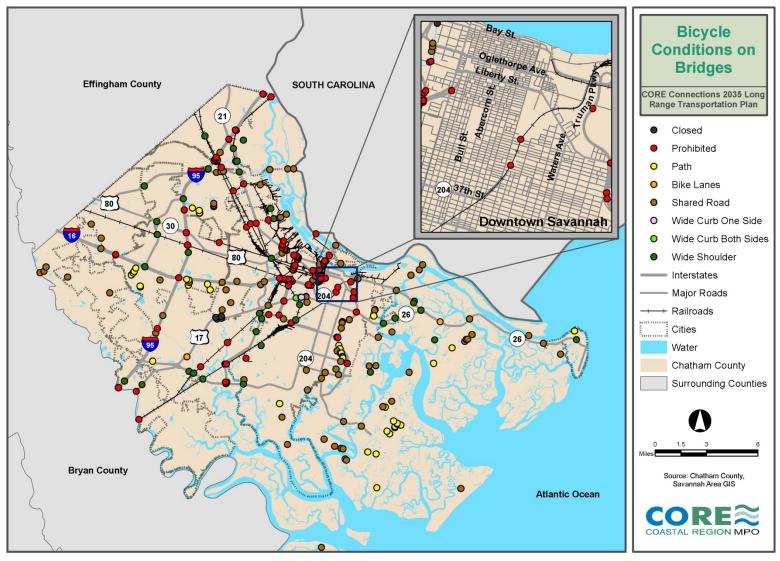


Figure 6.8 Bicycle Conditions on Bridges





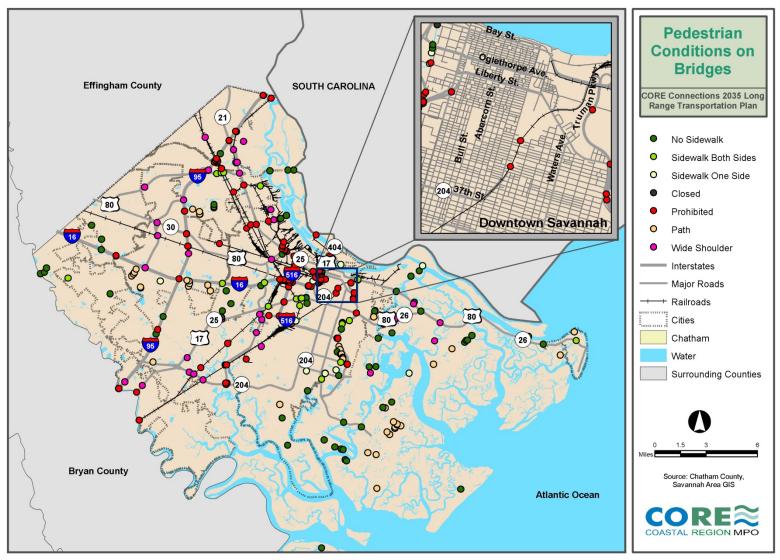


Figure 6.9 Pedestrian Conditions on Bridges





6.4 Intermodal: Overview of Existing and Future Needs

Chatham County and the surrounding region have experienced tremendous economic growth, due in part to the growth of the Port of Savannah. During fiscal year 2008, the Port of Savannah emerged as the fourth largest and fastest growing container port in the country.² There are few intermodal connectors in the region, however, that facilitate efficient movement of goods among water, railroads, and the highway. Local roads are feeling the strain of heavy truck traffic, particularly in primarily residential areas located near the port facility as well as in downtown and mid-town Savannah. Truck routes in Chatham County are shown in Figure 6.10. Other modes of freight transport are also being utilized to capacity. The Savannah River channel, which handles significant volumes of freight by ship, may be deepened in the near future to accommodate additional traffic. Rail and air have also experienced congestion, constraints on capacity, conflicts with other modes, and security issues. The overriding and common element for all modes is the dwindling availability of funds for needed improvements. Table 6.7 presents specific and general intermodal needs identified during the first Stakeholder Advisory Committee meeting and public workshop in June 2009.

Table 6.7 Intermodal Needs Identified by Stakeholder Advisory Committee and the Public

Specific Intermodal Needs	General Intermodal Needs
Restricting access to heavy truck traffic in	
downtown Savannah, particularly along Bay	Need more intermodal connectivity
Street	
Access and congestion issues at the Port of	Need more efficient freight routing and
Savannah	movements for rail and truck traffic
Need better truck routing from Jimmy DeLoach	Need expanded intermodal services (such as bus
Parkway	and ferry)
Adequate and coordinated planning for the	Need commuter rail (AMTRAK) for both short and
upcoming Jasper Port in South Carolina	long trips
Rail connection between downtown Savannah	Need to plan for future freight and passenger rail
and the Airport	service
	Need to alleviate conflicts with vehicular traffic as
Improved railroad crossing on President Street	well as safety issues associated with the diagonal
	railroad across town
Streetcar expansion into the downtown and mid-	
town Savannah area	

² "The Port of Savannah: Strengthening Our Advantages." Georgia Ports Authority Press Release. 10/09/2008. http://www.gaports.com/corporate/Communications/PressReleases/tabid/379/Default.aspx





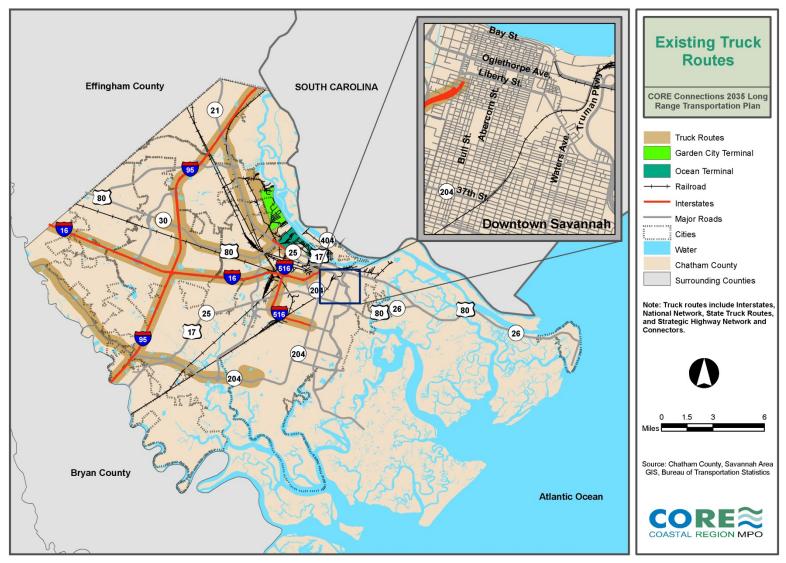


Figure 6.10 Existing Truck Routes





Framework Mobility Plan

7.0 Financial Plan

Federal transportation legislation requires that the Framework Mobility Plan be financially constrained, which means that the plan must contain only the projects that are financially feasible. The development of the financially-constrained plan is accomplished in several steps, which include projecting both the expected revenues over the time frame of the plan and estimating the costs of the projects. These revenue projections and the project costs are required to be identified in year-of-expenditure (YOE) dollars, rather than in current dollars.

In order to project future funding for transportation projects in YOE dollars, the study team employed a methodology approved by both FHWA and GDOT. A revision of the 2030 LRTP to include the revenues and costs in the YOE dollars was required by federal legislation. In this effort, projects were assigned into one of three "cost bands" that corresponded to short-, mid-, and long-range planning periods. Appropriate inflation factors, supplied by GDOT, were applied to base year project cost estimates to develop an estimated implementation year cost for each project and work type. Finally, projects where funds were currently authorized and/or spent were removed from the funding analysis. The interim update, or the YOE update, formed the framework for the initial project lists of the Framework Mobility Plan.

The following sections outline how anticipated transportation funds were calculated and used to create project lists for the Framework Mobility Plan and the Total Mobility Plan.

7.1 Funding Projections

In order to develop the amount of funding available for projects for the Framework Mobility Plan, anticipated revenue from a number of sources was considered. The federal and state funds that are expected to be available to the CORE MPO for highway projects over the 25-year funding period are approximately \$1.27 billion. This amount includes funds that are dedicated by either federal or state legislation to certain facility types, such as the Interstate system, and other types of roadway facilities. Other revenue sources considered include the Chatham County Special Purpose Local Option Sales Tax (SPLOST), which is expected to yield approximately \$174.2 million. The total amount of these funds over the 25 year funding period equals approximately \$1.44 billion. Table 7.1 shows the details of the anticipated revenues and the funding source. In addition to these funds, it is anticipated that an additional \$103 million will be available to the CORE MPO for maintenance, based on historical data and trends provided by GDOT, Chatham County and the City of Savannah.

The additional revenue estimates also included those funds dedicated specifically to transit. It is anticipated that there will be approximately \$512 million available for the Chatham Area Transit (CAT) system.

Table 7.1 Framework Mobility Plan Base Year Highway Revenues

Funding Source	Amount		
Federal and State	\$1,271,100,000		
SPLOST	\$174,192,149		
Total Roadway Funds	\$1,445,242,149		

After finalizing the estimated revenues, several categories of targeted project expenditures were identified. These identified categories were based on those identified by GDOT, as well as those identified to address specific local needs and concerns. The first category is designated "Operational/Safety", and is intended to provide funds that address smaller operational and safety issues. This category of funding includes \$25 million and will be used for these types of improvements as the need arises.

In addition to the Operational/Safety category, a second category designated "Non-Motorized" was identified based on existing plans, and the needs and priorities addressed through the participation process. Based on this input, approximately \$98.5 million was identified for non-motorized projects and improvements.

After the identification of these categorical amounts, the dedicated amounts were deducted from the anticipated total amount of project funds available. With these category deductions, the total highway project funds available are anticipated to be approximately \$1.3 billion. This total does not include the anticipated transit funding. The categories and totals are displayed in Table 7.2.

Table 7.2 Framework Mobility Plan Base Year Highway Funds Available

Project Category Expenditures	Amount		
Operational/Safety	\$25,000,000		
Non-Motorized	\$98,556,545		
Total Categories	\$123,556,545		
Total Funding	\$1,445,242,149		
Total Funding Less Category Expenditures	\$123,556,545		
Total Project Funds Available	\$1,321,685,604		

7.2 Year-of-Expenditure Funding Projections

The following section discusses how transportation project costs were calculated based on the year-of-expenditure (YOE) of the projects.

7.2.1 General Assumptions and Procedures (Roadway Projects)

 The federal/state anticipated revenues are based upon past trends for the CORE MPO as reported by GDOT. The CORE MPO has taken a conservative approach and assumes that only 85% of these estimated funds will be available through 2035, based upon uncertainties with obtaining future transportation funding. The local share of funding is based upon current

projections for the Chatham County SPLOST, which are substantially lower than projected in the 2030 LRTP. It is estimated that the revenues will be maintained at the projected levels and are assumed not to change in future planning periods; therefore, financial capacity is demonstrated based on total cost of federal, state and local dollars.

- 2. Projects whose construction phases have been authorized before June 2009 are not included in the Framework Mobility Plan.
- 3. The transportation enhancement (TE) projects have not been considered in the YOE effort since the TE funds are grant-based and not based upon expected or set levels of annual funding.

7.2.2 Roadway Project Cost Estimates (In YOE Dollars)

The following summarizes the methodology utilized to calculate the project cost estimates in YOE dollars.

 The project phases of each Framework Mobility Plan project, which include Preliminary Engineering (PE), Right of Way acquisition (ROW), Utilities, and Construction (CST), were reviewed by RS&H and CORE MPO staff to determine which of three cost band periods best matched the priority and schedule of each phase. The cost band periods are presented and described below.¹

a. 2010-2015:

- i. Coincides with GDOT's short-range planning period and the proposed FY 2010-2013 Transportation Improvement Program (TIP).
- ii. Represents phases of projects scheduled to be completed in this time range using the best available data from GDOT or the CORE MPO.
- iii. Includes project phase costs that reflect GDOT's most current project cost estimates. No inflation factor is applied to projects programmed in the TIP for years 2010-2015, since these projects are already inflation-adjusted by GDOT.
- iv. If GDOT costs were not available, the new GDOT *Cost Estimation System Tool* was utilized to develop new project costs (including preliminary engineering, right of way, utility and construction cost estimates, as applicable).

b. 2016-2025

i. Incorporates either the GDOT-obtained cost estimates, or new estimates developed using the new GDOT Cost Estimation System Tool with the appropriate escalation inflation factor calculated for YOE 2020 (the midpoint of this time band).

c. 2026-2035

- i. Incorporates either the GDOT-obtained cost estimates, or new estimates developed using the new GDOT *Cost Estimation System Tool* with the appropriate escalation inflation factor calculated for YOE 2030 (the midpoint of this time band).
- 2. If a project phase was authorized prior to the adoption of the Framework Mobility Plan, the project phase cost is not included in the plan. A matrix was developed to show the appropriate

¹ Projects that are currently in the construction phase are not included in the 2035 LRTP Financial Plan.

- project phases by time period, including details about phases already completed and/or authorized.
- 3. Funding source by project phase is not tracked; only the cost totals_by phase (PE, ROW, Utilities and CST) are calculated, since project phase funding details are not tracked by GDOT.
- 4. Project costs are calculated in YOE dollars for each appropriate time period and the cumulative total through 2035.

7.3 Process for Developing the Financially-Constrained Framework Mobility Plan

The development of the financially-constrained project list used the 2030 LRTP and the interim YOE update as a basis, including a review of previous project priorities. Early in the development of the Framework Mobility Plan, it became evident that, due to increasing project costs since 2004 combined with a slight decrease in revenues, a number of projects included in the 2030 LRTP would need to be moved to the unfunded Vision Plan list and evaluated further in the Total Mobility Plan. A review of the current status of each project was conducted, as well as a review of previously identified project termini and descriptions. This effort was completed by members of the CORE MPO Technical Coordinating Committee (TCC). Projects that were determined to have a lower priority by the TCC were moved to the vision plan, while projects with substantial progress, such as right of way funding authorized or right of way acquisition already underway, were given a higher priority. Using this methodology, projects were reviewed and incorporated into the financially-constrained Framework Mobility Plan until the total estimated expenditures for the roadway category equaled the total estimated revenues. It should be noted again that existing federal and state regulations specify the types of projects that are eligible for certain funding categories, so money allocated to one category cannot simply be moved to fund another category of projects. For example, federal money identified for interstate improvements cannot be reassigned to transit projects, nor can transit funds be spent on other types of projects.

Table 7.4 provides a brief overview of the various federal transportation funding programs available to the CORE MPO region. Table 7.5 provides a brief overview of the various state and local transportation funding programs available to the CORE MPO region.

Table 7.3 Federal Funding Programs

Funding Category	Description			
National Highway System (NHS)	Funding for improvements to rural and urban roads that are part of the NHS, including the Interstate Highway System and designated connections to major intermodal terminals/facilities. Under certain circumstances, NHS funds may be used to fund transit improvements in NHS corridors. (Source: FHWA, SAFETEA-LU Fact Sheet)			
Surface Transportation Program (STP) Funds	Funds are generally used by States and localities for any roads, including National Highway System (NHS) roads that are not functionally classified as local or minor collectors. A portion of STP funds are suballocated to the CORE MPO from state and federal transportation agencies.			
STP Set Aside for Transportation Enhancements	Funds may be used for any of the following activities: - Facilities for pedestrians and bicyclists - Provision of safety and educational items for pedestrians and bicyclists - Acquisition of easements for scenic or historic sites - Scenic or historic highway programs - Landscaping or other beautifications - Historic preservation			

Funding Category	Description				
	- Rehabilitation/operation of historic transportation buildings,				
	structures or facilities				
	- Preservation of abandoned railroad corridors				
Interstate Maintenance (IM)	Funds for resurfacing, restoration, and rehabilitation of the Interstate Highway System. These funds cannot be used for constructing new facilities or to add capacity to the existing interstate system				
Bridge Replacement (BR)	Funds for the replacement, rehabilitation, or systematic preventive maintenance of substandard bridges both on and off the federal system.				
Demonstration or High	Congressionally authorized funds, or earmarks designated for specific				
Priority Projects (HPP)	projects.				
	- Section 5307 Urbanized Area Formula Program;				
	- Section 5309 Capital Investment Programs;				
Turn sit Duranus and	- Section 5310 capital-only funding for the transportation needs of the				
Transit Programs	elderly or individuals with disabilities;				
	- Section 5316 Job Access and Reverse Commute Program; and				
	- Section 5317 New Freedom Program.				

Table 7.4 State and Local Funding Programs

Funding Category	Description
State Bonds	Revenues from State Bonds
State Motor Fuel Tax	26 cents per gallon (gasoline) (28.2 cent per gallon tax on diesel fuel) plus 4% state sales tax (1% goes to general fund) plus local option taxes on motor fuels. May not be used for transit projects.
State Aid	Includes Local Road Assistance Program (LARP) funding to local jurisdictions for resurfacing projects and State Aid funding; the amount of available State Aid funding has been drastically reduced over the past few years.
GATEway Grants	Funding for roadside enhancement and beautification projects along Georgia's roadsides.
Special Purpose Local Option Sales Tax (SPLOST)	An additional 1-cent sales tax levied by jurisdictions upon approval by public referendum. Typically, a portion of a local jurisdiction's SPLOST revenues are used to fund transportation improvements. A SPLOST program must include a specific list of projects to be completed using the revenues. SPLOSTs have been approved in Chatham County continuously since 1985.
Tax Allocation Districts (TADs)	Established for the purpose of promoting investment by financing certain redevelopment activities in underdeveloped or blighted areas using public dollars. There is one TAD in the CORE region (President Street corridor).

7.3.1. Funding Projections

Historic trends for the CORE MPO region were reviewed to help project future revenues for roadway transportation projects. Stakeholder agencies were also consulted as part of the determination of future available transportation funding. Table 7.6 presents a summary of revenues available to the CORE MPO region through year 2035 (in YOE).

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Based upon the input received throughout the 2035 LRTP development process, several specific transportation funding categories, or setasides, have been created to target funding to meet specific community needs. The first is a category for operational/safety improvements. The funds in this category are designated for traffic operation improvements (of minimal to moderate investment) at congested intersections across the region. The second category is designated to fund non-motorized improvements, such as bicycle, pedestrian and transportation amenities. The specific improvements within this category will build on the existing bicycle/pedestrian plan and will be further developed as part of the Volume 2 – Total Mobility Plan.

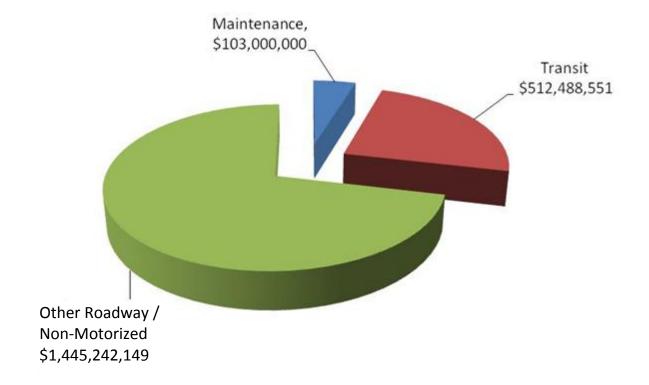
With the inclusion of the identified funding category setasides, there is a total of about \$1.44 billion available for other projects, as shown in Table 7.6.

Table 7.5 Summary of Total Revenues for Roadway and Non-Motorized Improvements

Total Roadway and Non-Motorized Transportation Funding	\$1,445,242,149
Non-Motorized Set-aside	\$98,556,545
Operational and Safety Set-aside	\$25,000,000
Funding for Named Projects	\$1,321,685,604

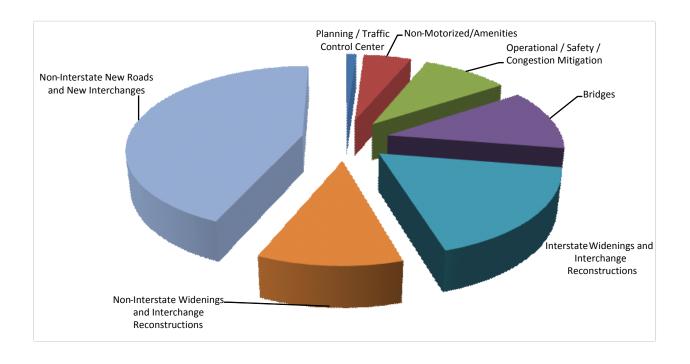
In addition to the categories identified for specific types of projects, there is also a specific funding category for transit (approximately \$512 million), as well as an identified category for maintenance (approximately \$103 million). These two funding areas are separate from the total funding for roadway capacity improvements. The funding levels for improvements to the multimodal transportation system, transit and maintenance are shown in Figure 7.1.

Figure 7.1 CORE Connections Total Anticipated Fnding



The Other Roadway/Non-Motorized component, shown in green in Figure 7.1, can be further broken down into funding for specific types of projects and/or categories. Figure 7.2 shows the further breakdown of the Other Roadway/Non-Motorized component.

Figure 7.2 CORE Connections Other Roadway/Non-Motorized Anticipated Funding

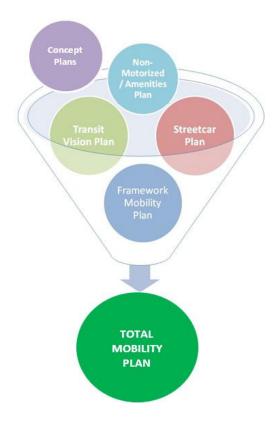


8.0 Recommended Framework Mobility Plan

The development of a long range transportation plan is a cooperative process that involves working closely with stakeholders, members of the public, representatives from local governments and agencies, transit agencies, State Department of Transportation, Federal Highway Administration and Federal Transit Administration, and the members of the Metropolitan Planning Organization. In addition to the cooperative planning process, there are other legislatively mandated requirements in the development of a long range plan, as well as identified funding levels and categories for the implementation of projects.

The Framework Mobility Plan includes both recommended policies and projects that will guide the implementation of transportation investment for the next 25 years and also meets all of the planning requirements for a long range transportation plan. The Framework Mobility Plan was developed through the cooperative process described above and in previous sections.

As discussed earlier, the Volume 1 – Framework Mobility Plan includes the general principles and recommendations that will be carried forward and further detailed as part of Volume 2 – Total Mobility Plan. In addition, there are a number of other significant projects, including the Transit Vision Plan, the Streetcar Plan and the Non-Motorized (Bicycle and Pedestrian)/Amenities Plan that will be undertaken and/or refined and incorporated into the Total Mobility Plan. The graphic below illustrates the components that will be integrated into the Total Mobility Plan.







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The recommendations included in the Framework Mobility Plan also include the federally mandated financially-constrained list of projects in year-of-expenditure dollars, and are compliant with all of the federal requirements under SAFETEA-LU. This document also includes a list of additional needed projects which could be moved to the financially-constrained Framework Mobility Plan and implemented, should additional funding become available.

8.1 Recommended Policy Statements

The Framework Mobility Plan includes both policy recommendations developed to help implement the plan's identified goals and objectives, and the overall community vision. Several policy statements have been developed based upon the input received during the June and July 2009 Stakeholder Advisory Committee meetings and public workshops, as well as review of the existing 2030 LRTP. These policy statements guided the planning process for the Volume 1 – Framework Mobility Plan and will translate into the development of the Volume 2 – Total Mobility Plan through more detailed policies and objectives.

Table 8.1 Recommended Policy Statements

- 1. Ensure that non-motorized modes are an integral part of the transportation system through funding and infrastructure design.
- 2. Provide transit options and opportunities through the upcoming Transit Vision Plan, included in Phase 2 Total Mobility Plan.
- 3. Ensure that context sensitive design process and all Complete Streets elements are an integral part of the design process for all non-Interstate Highway projects.
- 4. Budget for transportation amenities and retrofitting existing facilities to incorporate the appropriate design elements for safe and efficient multimodal usage.
- 5. Implement "Green Infrastructure" by incorporating best management practices for stormwater management, and green materials when possible.
- 6. Implement a strategic plan to address both long-term greenhouse gas emission reductions and climate change adaptation where economically feasible.

As can be seen in these identified policies, there is a major focus on a multimodal approach to mobility, rather than a sole concentration on roadways. In addition to the multimodal focus, there is also a major focus on the incorporation of context sensitive design solutions in the project development, along with a policy for the implementation of a complete streets approach.

These policies represent a community-wide commitment to the environment, sustainable economic development and a high quality of life. These policies have had a direct impact on the chosen goals, objectives and performance measures in the Framework Mobility Plan and will be further incorporated into the Total Mobility Plan.

8.1.1 Non-Motorized Modes through Context Sensitive Design

In order to meet the intent of these policies, each project included in the Framework Mobility Plan will be assessed for the incorporation of the appropriate context sensitive design solutions, viable non-motorized facilities and/or treatments and other transportation amenities. These policies and project





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approaches will be further refined and defined as part of the Total Mobility Plan effort.

The Complete Streets approach is also an important element in the identified policies. A Complete Streets approach enhances and supports the other identified policies, ensures that projects are assessed and designed to include facilities that adequately and safely meet the needs of all transportation users, regardless of mode. Examples of Complete Streets elements include transit, sidewalks, bike lanes, median islands, curb extensions and other improvements that enhance the safety of users. The Complete Streets approach will also be assessed as part of the implementation of any roadway project.

8.1.2 Transit Vision Plan

The Chatham Area Transit Authority (CAT) has recently undertaken a public-private partnership and is completing several short-term initiatives to improve the operational efficiency of the system and to provide users with better transit service. CAT has a current *Transit Development Plan* in place, but the CORE MPO will be undertaking an in-depth and extensive effort to develop a long-term vision for transit and recommendations on implementation as a key element of the Total Mobility Plan. Although the transit component of the Framework Mobility Plan is based on the current *Transit Development Plan*, it is anticipated that the upcoming visioning effort will provide a new direction for transit service in the region.

8.1.3 Environmental Policy

In 2007, Chatham County adopted a goal of becoming the "Greenest County in Georgia". In addition to this effort, there are several other initiatives which directly or indirectly affect transportation, such as the *Coastal Stormwater Supplement to the Georgia Stormwater Management Manual* and the *Coastal Comprehensive Plan*. These initiatives also recognize the sensitive environment unique to the Georgia coast. Policies 5 and 6 in Table 8.1 were incorporated in support of these goals and initiatives. They are further defined below.

Green Infrastructure Policy

Because transportation development projects are often designed to discharge stormwater runoff directly into streams, wetlands and other aquatic resources along the coast, transportation projects may impose significant impacts on the natural beauty, economic well-being and quality of life in Chatham County.

The CORE MPO commits to maintaining these vital resources by establishing a policy to ensure green infrastructure techniques and best management practices in all local highway, bridge and street development projects. These best management practices reflect those recommended in the *Coastal Stormwater Supplement to the Georgia Stormwater Management Manual* and other green highway technologies. Volume II of the 2035 LRTP, the Total Mobility Plan, will examine these guidelines in correlation with Context Sensitive Design to establish principles that can be utilized in projects identified in the Framework Mobility Plan with a specific focus upon the identified constrained corridors.





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Energy Conservation and Climate Change Policy

In 2009, the United States Inventory of Greenhouse Gas Emissions revealed the generation of electricity (34 percent) and transportation (28 percent) as the largest emitters of greenhouse gases. While no specific transportation reduction goals currently exist at the state or local level, a variety of programs offered by the Georgia state government do work to address climate change through the reduction of energy consumption and increase in alternative fuel usage. On a local level, Chatham County, the City of Savannah and the City of Tybee Island have all joined the Cities for Climate Protection Campaign and are currently working on the development of strategies for reducing energy consumption and greenhouse gas emissions.

Transportation impacts on climate change result from a variety of development patterns often not governed solely by MPO planning agencies. However, the CORE MPO recognizes the significant impact travel patterns play in transportation's overarching contribution to greenhouse gas emission levels.

The CORE MPO is concerned about transportation's role in the long-term sustainability of the natural environment as it relates to energy consumption, land use and global climate change. As a result, the CORE MPO commits to developing strategies to address both long-term greenhouse gas emission reductions and climate change adaptation in transportation planning processes where economically feasible. The Total Mobility Plan will include the development of a methodology to evaluate existing conditions based on current trends, estimates of emissions resulting from LRTP alternative investment packages and a project assessment tool for changing climatic conditions such as sea level rise. This phase will also include an evaluation of existing strategies within the 2035 LRTP that address climate change mitigation and energy reduction, as well as the integration of performance measures developed in cooperation with key stakeholders to include land use planning agencies and local governments.

8.2 Recommended Projects

As mentioned previously, the Volume 1 – Framework Mobility Plan includes project recommendations that accommodate the infrastructure needs for roadways. The transit and non-motorized recommendations are based on the existing Transit Development Plan, the existing bicycle/pedestrian plan and the existing transportation amenities plan. The Volume 2 – Total Mobility Plan will build upon the Framework Mobility Plan to develop the comprehensive and integrated multimodal recommendations that will address the mobility needs of all users, as well as multimodal connectivity and accessibility.

³ The Cities for Climate Protection Campaign assists cities to adopt policies and implement quantifiable measures to reduce local greenhouse gas emissions, improve air quality and enhance urban livability and sustainability.





¹ EPA (Environmental Protection Agency). 2009. 2009 U.S. Greenhouse Gas Inventory Report. Online: http://www.epa.gov/climatechange/emissions/usinventoryreport.html

² See Georgia Environmental Facilities Authority: Transportation. Online: http://www.gefa.org/Index.aspx?page=357

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In addition to the policies presented earlier, the Framework Mobility Plan includes a draft set of project recommendations including the following categories:

- Roadway projects: Table 8.2 presents the draft list of new roadways, roadway widenings, bridges and larger operational and congestion mitigation projects included in the Framework Mobility Plan; these projects are also shown on the map in Figure 8.1. Each of these projects will be assessed for the incorporation of the Complete Streets approach and the inclusion of context sensitive design solutions. Additionally, there are also safety/operational/intersection improvements recommendations. These recommendations include projects such as improvements to Eisenhower Drive, Skidaway Road and White/Coffee Bluff Road.
- Transportation Enhancement, ARRA (apportioned), and Additional Transit Projects: Table 8.3 includes these additional projects funded by earmarks or the American Recovery and Reinvestment Act (ARRA).
- *Proposed ARRA TIGER Grant Projects:* Table 8.4 includes priority candidate projects for TIGER funding.
- Transit Service Enhancements: Table 8.5 includes projects recommended in the 2008 CAT
 Transit Development Plan. These projects will be reviewed and refined in the Total Mobility
 Plan, which includes the Transit Vision Plan.
- Bicycle and Pedestrian Improvements: Table 8.6 includes project recommendations from the CORE MPO Bikeway Plan (but not yet constructed). These projects will also be reviewed and refined in the Total Mobility Plan.





Table 8.2 Framework Mobility Plan

Project Name	# Controls	То	Deale et Tour	2010-2015		2016- 2025	LRTP Costs	2026 - 2035 LRTP Costs	
	From	10	Project Type	Total Cost	Work Type	Total Cost	Work Type	Total Cost	Work Type
Bay Street Signal and Intersection Improvements	MLK Jr. Blvd.	East Broad Street	Operational	\$1,425,000	(PE, Const.)				
Brampton Road Connector (New) *	SR 25	Georgia Ports Authority	Non Interstate - New					\$17,508,960	(ROW, Const.)
Effingham Parkway **	Chatham County line	Jimmy DeLoach Parkway	Non Interstate - New	\$290,000	(PE)				
Grange Rd Reconstruction *	SR 21	SR 25	Non Interstate - Existing	\$9,236,021	(ROW, Utilities/Const.)				
Gulfstream Road at Robert Miller Road Intersection Improvement *			Operational	\$1,689,024	(ROW, Utilities/Const.)				
Gwinnett Street Widening **	Stiles Ave	I-16	Non Interstate - Existing	\$4,816,000	(ROW, Const.)				
Houlihan Bridge Replacement *	At Savannah River		Bridge					\$42,346,074	(Const.)
I-16 Widening and Managed Lanes	I-95	I-516	Interstate	\$15,680,000	(PE)			342,340,074	(Collst.)
I-3 Studies *	Savannah	Knoxville	Interstate	\$10,000	Study				
I-516 / Lynes Parkway at I-16 Interchange Reconstruction	At I-16		Interstate	\$1,474,105	(PE)	\$6,520,000	(PE, ROW)		
I-516 / Lynes Parkway Widening	Veterans Parkway	Mildred St	Interstate			\$86,000,000	(PE, Const.)		
I-516 / Lynes Parkway Widening *	I-16	Veterans Parkway	Interstate			\$96,246,504	(Const.)		
I-95 at I-16 Interchange Reconstruction	***	344	Interstate	dr. 000 000	tor:	\$16,938,520	(PE)		
I-95 at SR 21 / Augusta Rd Interchange Reconstruction	344	2000	Interstate	\$5,800,000	(PE)	\$118,175,000	(ROW, Const.)	-	
Islands Expressway at Wilmington River Bascule Bridge **	Intracoastal Waterway		Bridge	\$100,000	(ROW)	\$40,000,000	(Const.)		
Jimmy DeLoach Pkwy (New Interchange)	At US 80		Non Interstate - New					\$146,600,105	(PE, ROW, Const.)
Jimmy DeLoach Pkwy Extension (New)	US 80 South	I-16	Non Interstate - New			\$6,526,151	(PE)		
Montgomery Cross Rd Bridge Replacement	At Casey Canal		Bridge	\$1,701,141	(ROW, Const.)				
President Street / Truman Parkway Interchange Bridge and Ramp Reconstruction	HST Parkway		Bridge	\$28,080,000	(PE, Const.)				
Savannah MPO Strategic Planning Studies	insi rainway		Planning Study	\$3,000,000	Study	\$6,400,000	Study	\$8,200,000	Study
SR 204 / Abercorn St at King George Boulevard Interchange and Operational Improvements SR 204 / Abercorn St Bridge Replacement (South of Montgomery Cross Road)	At Harmon Canal	/000	Non Interstate - Existing Bridge	\$7,925,732 \$1,822,000	(ROW)	\$53,790,000	(Const.)		
SR 204 / Abercorn St Operational Improvements	At Largo Dr		Operational	\$2,958,948	(Utilities/Const.)				
SR 204 / Truman Parkway Extension / New Highway Connecting Truman V to I-95	W. of Forest River Bridge	N. Of Wilshire Blvd	Non Interstate - New			\$12,340,411	(PE)		
SR 204 SPUR / Whitefield Ave Widening *	Haney's Creek (South of Montgomery Crossroad)	CR 767/Ferguson Ave.	Non Interstate - Existing	\$19,728,812	(ROW, Utilities/Const.)	\$12,540,411	(12)		
SR 21 / Augusta Rd at Cross Gate Road and Gulfstream Road Intersection Improvement	***		Operational	\$2,177,916	(ROW, Utilities/Const.)				
SR 21 / Augusta Road Improvements *	Smith Ave/CS 590 N (South of Bourne)	SR 307/Bourne	Non Interstate - New	\$381,000	(ROW)			\$10,263,198	(ROW, Const.)
SR 21 / DeRenne Ave Improvements / Congestion Mitigation	Mildred Street	HST Parkway	Congestion Mitigation	\$18,250,000	(PE, ROW)	\$76,610,000	(Const.)	,,	
SR 25 Conn / West Bay Street Widening	1-516	Bay Street Viaduct	Non Interstate - Existing	\$37,613,882	(PE, ROW, Utilities/Const.)				
SR 26 / US 80 / Ogeechee Rd Widening *	4 Ln E Lynes Pkwy	Victory Dr/CS 188	Non Interstate - Existing	\$20,259,000	(ROW)	\$21,798,357	(Const.)		
SR 307 / Dean Forest Rd Construct Overpass over New Port Authority Rail Line	***		Bridge	\$19,000,000	(PE, ROW, Const.)				
SR 307 / Dean Forest Rd Widening	US 17	I-16	Non Interstate - Existing	\$4,780,000	(PE, ROW)			\$30,117,250	(Const.)
Traffic Control Center Study and Construction	- mar	7222	Traffic Control Center	\$300,000	Study	\$5,000,000	(Const.)		
Truman Parkway (Phase V) (New) *	Abercom St	Whitefield Ave	Non Interstate - New	\$128,041,000	(Const.)				
US 17 / Back River Bridge Replacement *	US 17/SR 404 Spur	Back River at SC	Bridge	\$21,553,837	(ROW, Const.)				
US 80 / Victory Drive Improvements / Congestion Mitigation	Home Depot/Target Shopping Ctr	Kerry Street	Congestion Mitigation			\$35,773,039	(PE, ROW)	\$13,773,017	(Const.)
US 80 at Bull River Bridge Reconstruction	Bull River		Bridge	\$3,520,800	(PE)	\$44,010,000	(Const.)	- 5	
US 80 at Lazaretto Creek Bridge Reconstruction	Lazaretto Creek		Bridge	\$4,824,800	(PE)	\$60,310,000	(Const.)	- 1	
		TOTAL PROJECT COSTS							
		Funding Categories Operational/Safety				\$1,321,685,604 \$25,000,000			
		Non-Motorized/Amenities				\$98,556,545			
		TOTAL FUNDING REQUIRED	1			\$1,445,242,149			

^{*} PE funds previously authorized, or funded through alternative funding (e.g. ARRA, TIGER or Earmarks)

PROJECTS WITH CONSTRUCTION FUNDS AUTHORIZED BEFORE JUNE 2009						
SR 25/Ocean Hwy Bridge	SR 25/Ocean Hwy.	NS Railroad	\$4,501,577	(Const,)		
SR 204 SPUR/Diamond Causeway Bridge Reconstruction			\$36,922,000	(PE, ROW, Const,)		





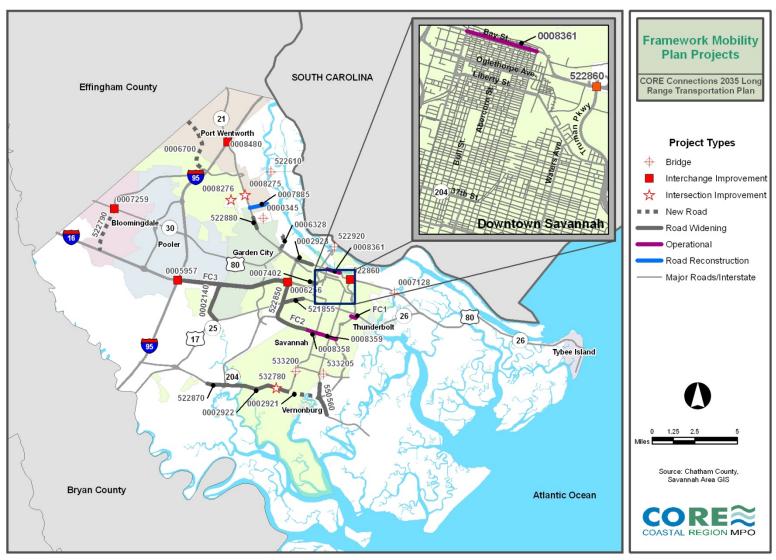


Figure 8.1 2035 Financially Constrained LRTP





There are also other projects that are included in the Framework Mobility Plan that will either be wholly funded through apportionments under the American Recovery and Reinvestment Act (ARRA), or as Transportation Enhancement projects and additional transit projects. These additional projects are shown in Table 8.3. The GDOT selection process for Transportation Enhancement (TE) projects is presented below.

Table 8.3 Additional Projects

GDOT PI Number	Project Name	From	То	Estimated Cost	Work Type
0007620	Heritage Trail Bike/Ped in Savannah	-		\$179,980	(PE, Const.)
0007631	Truman Linear Park Trail - Phase II	-	(44)	\$1,333,874	(Const.)
ERICAN RECOVERY A	ND REINVESTMENT ACT (ARRA) PROJECTS		•		
GDOT PI Number	Project Name	From	То	Estimated Cost	Work Type
M003977	I-95 From SR 25/US17/Bryan to I-16/Chatham Resurfacing/Maintenance			\$14,553,000	(PE, Const.)
0002923	SR 25 Conn/Bay Street Widening	I-516	Bay Street Viaduct	\$2,182,118	(ROW)
0007128	CR 87/I slands Expressway @ Wilmington River / Bascule Bridge	Intracoastal Waterway	1225	\$1,000,000	(PE)
0009379	Bull River and Lazaretto Creek Bicycle/Pedestrian Connections Study	-		\$250,000	(PE)
0009380	City of Savannah Pedestrian Countdown Signals	-	-	\$645,800	(Const.)
0009381	City of Savannah Audible Pedestrian Push Buttons	-	100	\$340,900	(Const.)
0009382	City of Savannah LED Signal Replacement		100	\$82,300	(Const.)
0009384	Montogmery Cross Road Signal Interconnect	-	122	\$80,000	(Const.)
0009385	City of Savannah Traffic Pre-emption			\$1,600,000	(Const.)
0009313	SR 21 / NW Parkway Corridor Study	-	-	\$500,000	(PE)
0009314	Truman Parkway Extension / SR 204 Corridor Study	W. of I-95	N. of Wilshire Blvd	\$450,000	(PE)
None	Hybrid Buses		199	\$3,886,626	(Const,)
None	Capital Maintenance Items	-	-	\$425,000	(Const.)
None	Security Equipment	-	788	\$125,000	(Const.)
None	Program Support			\$51,768	(Const.)
ERMODAL PROJECTS					
0000836	Savannah River Water Taxi Ferry ¹	-		\$1,000,000/\$2,330,000	
0007948	Chatham Area Transit Job Access Reverse Commute	-		\$1,000,000	
T002486	Norfolk Southern Wye Project ²		(44)	\$1,500,000/\$7,024,000	
None	Georgia Ports Authority - ICTF Rail Tie-In ³	-	144)	\$3,500,000/\$6,100,000	

Discretionary Grant = \$1,000,000; Total Project Cost = \$2,330,000

<u>Transportation Enhancement (TE) Projects</u>

The Georgia Department of Transportation administers the TE program in Georgia and funds projects every two years on a competitive basis by congressional district. Applications for TE funding are made directly to GDOT, and final project selections are made by the State Transportation Board. TE projects which meet current state and federal requirements for TE projects and have been duly selected for funding by the State Transportation Board are considered to be consistent with the CORE Connections 2035 Framework Plan.

The CORE MPO has also elected to support several additional high priority projects as candidates for 100% federal funding through the American Reinvestment and Recovery Act TIGER Grant program. TIGER Grant awards are still pending at the time of publication and are expected to be announced in early 2010. These additional projects are found in Table 8.4. Previously identified priority projects are not duplicated in this table.





² Federal Earmark = \$1,500,000; Total Project Cost = \$7,024,000

³ Federal Earmark = \$3,500,000; Total Project Cost = \$6,100,000

Table 8.4 Candidate Projects for American Reinvestment and Recovery Act TIGER Grant Funding

ECONOMIC STIMULUS (TIGER) GRANT PROJECTS						
0008690	Jimmy Deloach Connector	ISR 307/Bourne Ave.	Jimmy Deloach Parkway	\$121,194,590	(Const,)	
None	CAT Hybrid Electric Paratransit Vans, 25			\$3,750,000	Equipment	
None	None CAT Customer Service / Fleet Support Hybrid Vehicles, 3			\$105,000	Equipment	
None	Coastal Georgia Greenway	Chatham County Portion		\$9,000,000	(Const,)	
None	CAT Intermodal Terminal			\$10,000,000	(Const,)	

Truman Parkway Phase V is also a candidate for ARRA TIGER Grant funds. It is listed in Table 8.2

The following are a series of priority transit service enhancements identified in Chatham Area Transit's most recent *Transportation Development Plan*.

Table 8.5 Transit Service Enhancements

Route/Corridor	Identified Need
Route 13 - Coffee Bluff	Shorten route and
D 1 47 6''	increase headway.
Route 17 - Silk	Expand night and
Hope/Savannah	weekend hours of
Festival Outlet Center	operation.
Route 24 - Savannah	Expand night and
	weekend hours of
State/Wilmington Island	operation.
Route 3A - Augusta	
Avenue/Garden City and	Expand night and
Route 3B - Augusta	weekend hours of
Avenue/Garden City,	operation.
Hudson Hill	·
Davita C. Grandtown	Expand services along
Route 6 - Crosstown	route.
	Improve punctuality and
Route 14 - Abercorn	expand hours of
	operation.

Source: 2008 CAT Transportation Development Plan

The CORE MPO Bikeway Plan identified a series of priority bike lanes for implementation as funding becomes available. Table 8.6 contains a list of illustrative projects identified in the bikeway plan which have not yet been implemented.





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Table 8.6 Bicycle Illustrative Projects

Corridor	Recommended Improvement*	Corridor	Recommended Improvement*
52nd Street	Bike Lane	Heidt Street	Paved Shoulder
Anderson Street	Bike Lane	Island Expressway	Paved Shoulder
Benfield Drive	Bike Lane	Jimmy DeLoach Parkway	Paved Shoulder
Chatham Parkway	Bike Lane	Laroche Avenue	Paved Shoulder
Eisenhower Drive	Bike Lane	Little Neck Road	Paved Shoulder
Habersham Street	Bike Lane	Louisville Road	Paved Shoulder
Hopkins Street	Bike Lane	McWhorter Drive	Paved Shoulder
Island Expressway	Bike Lane	Osca Road	Paved Shoulder
Johnny Mercer Drive	Bike Lane	Old Louisville Road	Paved Shoulder
Largo Drive	Bike Lane	Penn Waller Road	Paved Shoulder
Louisville Road	Bike Lane	Pine Barren Road	Paved Shoulder
Middleground Road	Bike Lane	President Street Extension	Paved Shoulder
Montgomery Cross Road	Bike Lane	Quacco Road	Paved Shoulder
Pennsylvania Avenue	Bike Lane	SR 25	Paved Shoulder
Rio Road	Bike Lane	Sallie Mood Drive	Paved Shoulder
SR 21	Bike Lane	Skidaway Island	Paved Shoulder
Science Drive	Bike Lane	Stiles Avenue	Paved Shoulder
Skidaway Road	Bike Lane	Telfair Place	Paved Shoulder
Tibet Avenue	Bike Lane	Telfair Road	Paved Shoulder
US 80	Bike Lane	US 17	Paved Shoulder
Ward Street	Bike Lane	US 17 Alternate	Paved Shoulder
Windsor Road	Bike Lane	US 80	Paved Shoulder
Thunderbolt Street Car ROW	Bike Path	Anderson Street	Wide Curb Lane
Truman Linear Park	Bike Path	Cromwell Road	Wide Curb Lane
Bloomingdale Cross Road	Paved Shoulder	Dogwood Avenue	Wide Curb Lane
Bonnybridge Road	Paved Shoulder	Falligant Avenue	Wide Curb Lane
Bush Road	Paved Shoulder	Gwinnett Street	Wide Curb Lane





Corridor	Recommended Improvement*	Corridor	Recommended Improvement*
Chatham Parkway	Paved Shoulder	Henry Street	Wide Curb Lane
Cherry Street	Paved Shoulder	River Drive	Wide Curb Lane
Diamond Causeway	Paved Shoulder	Shawnee Street	Wide Curb Lane
E. Lathrop Avenue	Paved Shoulder	Tompkins Road	Wide Curb Lane
Fort Argyle Road	Paved Shoulder	US 17	Wide Curb Lane
		US 80	Wide Curb Lane

^{*} A corridor may have different types of improvements recommended for different segments of the corridor.

Source: CORE MPO Bikeway Plan

8.3 Analysis of Potential Impacts

The recommended roadway projects from the financially-constrained Framework Mobility Plan have been evaluated for potential impacts upon roadway safety as well as natural and historic resources. Table 8.7 shows which projects are located along roadway segments designated as high-crash areas (referenced in Section 6.1.3); which projects have a potential impact on natural resources (wetlands and conservation lands); and which projects have a potential impact on historic resources. This is shown in Figures 8.2, 8.3, and 8.4. A discussion of coordination and consultation for environmental mitigation follows.





Table 8.7 Framework Mobility Plan Roadway Projects and Potential Impacts

GDOT PI Number	Project Name	From	То	Coincides with High- Crash Area	Potential Impact on Natural Resources	Potential Impact on Historic Resources
0008361	Bay Street Signal and Intersection Improvements	MLK Jr. Blvd	East Broad Street		Х	Х
			Georgia Ports			
0006328	Brampton Road Connector (New)	SR 25	Authority		Х	X
		Chatham County	Jimmy DeLoach			
0008811	Effingham Parkway	line	Parkway		X	X
0007885	Grange Rd Reconstruction	SR 21	SR 25		X	X
0008276	Gulfstream Road at Robert Miller Road Intersection Improvement				X	
0007402	Gwinnett Street Widening	Stiles Ave	I-16	X	X	Х
522610	Houlihan Bridge Replacement	At Savannah River	1	X	X	X
None	I-16 Widening and Managed Lanes	I-95	I-516		Х	
0007558,						
0008826,						
0008827	I-3 Studies	Savannah	Knoxville		X	X
	I-516 / Lynes Parkway at I-16 Interchange					
0006256	Reconstruction	At I-16			X	X
522850	I-516 / Lynes Parkway Widening	I-16	Veterans Parkway		X	
None	I-516 / Lynes Parkway Widening	Veterans Parkway	Mildred St		X	
None	I-95 at I-16 Interchange Reconstruction				X	
0008480	I-95 at SR 21 / Augusta Rd Interchange Reconstruction				X	
		Intracoastal				
0007128	Islands Expressway at Wilmington River Bascule Bridge	Waterway			X	X
0007259	Jimmy DeLoach Pkwy (New Interchange)	At US 80			X	
522790	Jimmy DeLoach Pkwy Extension (New)	US 80 South	I-16		X	X
533205	Montgomery Cross Rd Bridge Replacement	At Casey Canal			Х	
	President Street / Truman Parkway Interchange Bridge					
522860	and Ramp Reconstruction	HST Parkway			Х	
0008561	Savannah MPO Strategic Planning Studies				X	X





GDOT PI Number	Project Name	From	То	Coincides with High- Crash Area	Potential Impact on Natural Resources	Potential Impact on Historic Resources
522870	SR 204 / Abercorn St at King George Boulevard					
0008841	Interchange / Operational Improvements				X	
	SR 204 / Abercorn St Bridge Replacement (South of					
533200	Montgomery Crossroad)	At Harmon Canal			X	
532780	SR 204 / Abercorn St Operational Improvements	At Largo Dr			X	
	SR 204 / Truman Parkway Extension / New Highway	W. of Forest River				
0002922	Connecting Truman V to I-95	Bridge	N. Of Wilshire Blvd		X	
		Haney's Creek				
		(South of				
		Montgomery	CR 767/Ferguson			
550560	SR 204 SPUR / Whitefield Ave. Widening	Crossroad)	Ave.		X	
	SR 21 / Augusta Rd at Cross Gate Road / Gulfstream					
0008275	Road Intersection Improvement			X	X	
		Smith Ave/CS 590 N				
522880	SR 21 / Augusta Rd Improvements	(South of Bourne)	SR 307/Bourne	X	X	X
0008358						
0008359	SR 21 / DeRenne Ave. Improvements / Congestion					
0008360	Mitigation	Mildred St	HST Parkway		X	
0002923	SR 25 Conn / West Bay Street Widening	I-516	Bay Street Viaduct		X	
521855	SR 26 / US 80 / Ogeechee Rd Widening	4 Ln E Lynes Pkwy	Victory Dr/CS 188	X	X	
	SR 307 / Dean Forest Rd Construct Overpass over New					
0000345	Port Authority Rail Line			X	X	X
0002140	SR 307 / Dean Forest Rd Widening	US 17	I-16	Х	X	Χ
None	Traffic Control Center Study and Construction				Х	
0002921	Truman Parkway (Phase V) (New)	Abercorn St	Whitefield Ave		Х	
522920	US 17 / Back River Bridge Replacement	US 17/SR 404 Spur	Back River at SC		Х	
	US 80 / Victory Drive Improvements / Congestion	Home Depot/Target				
None	Mitigation	Shopping Ctr	Kerry Street	Х	X	X
None	US 80 at Bull River Bridge Reconstruction				Х	
None	US 80 at Lazaretto Creek Bridge Reconstruction				Х	





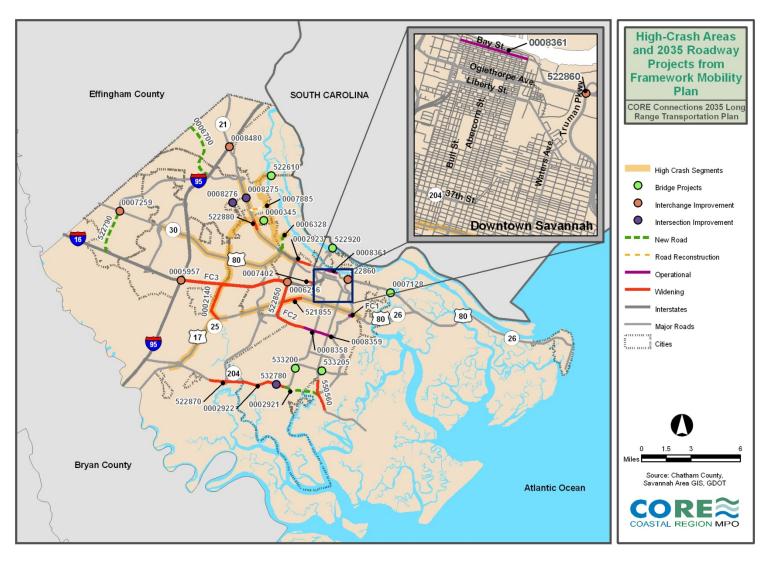


Figure 8.2 High-Crash Areas and 2035 Roadway Projects from Framework Mobility Plan





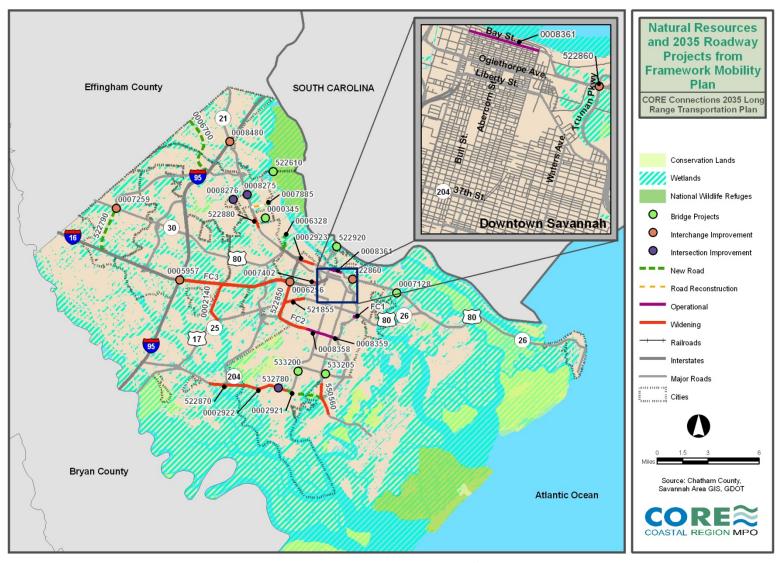


Figure 8.3 Natural Resources and 2035 Roadway Projects from Framework Mobility Plan





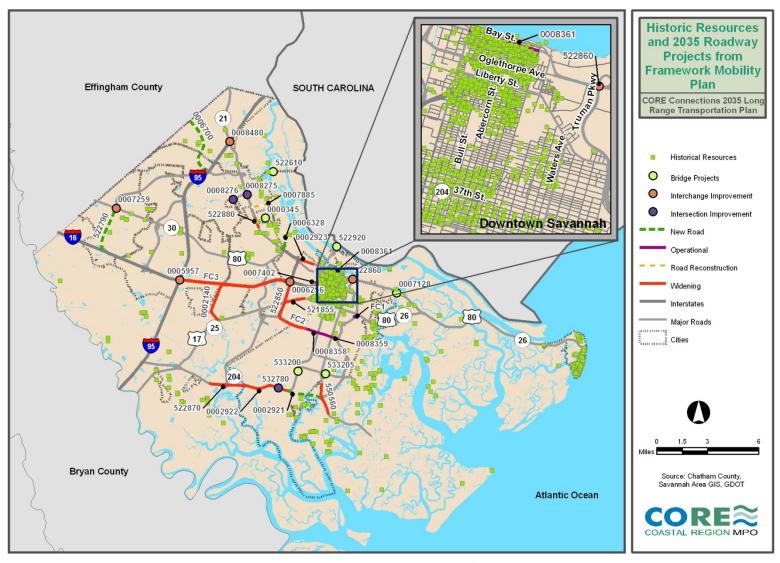


Figure 8.4 Historic Resources and 2035 Roadway Projects from Framework Mobility Plan





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8.3.1 Coordination and Consultation – Environmental Mitigation

As part of federal regulations (23 CFR 450.322), metropolitan and statewide transportation plans are required to include a discussion of environmental mitigation activities developed with Federal, State, and Tribal wildlife, land management, and regulatory agencies.

The CORE MPO has undertaken a high-level GIS screening analysis to determine the potential impacts of transportation projects on historic, cultural and natural resources. This approach meets the requirements set forth by the GDOT Office of Planning guidance titled "Agency Consultation Process". The results of this process include a visual screening of the DRAFT 2035 LRTP projects overlaid with natural and historic resource data to determine potential impacts. The maps illustrating the potential impacts are shown in Figures 8.3 and 8.4 and Table 8.7 provides a detailed list.

Any project in the 2035 LRTP that potentially has negative environmental impacts must be analyzed on a more detailed level as part of the project development process, and to meet the requirements of the National Environmental Policy Act. As projects develop further, each will be assessed more closely and a determination can then be made as to any specific negative environmental impacts and an approach developed in mitigating those impacts.

A summary of the potential mitigation measures available to the CORE MPO region are presented below.

Potential Mitigation Activities

There are a wide variety of mitigation activities that may be employed to address adverse impacts associated with transportation projects. Environmental mitigation activities are strategies, policies, and programs that serve to minimize or compensate for the disruption of elements of the human and natural environment associated with the implementation of transportation projects. Some of these potential mitigation activities that may be necessary for the CORE MPO transportation projects are discussed below. This list of potential activities is not all inclusive, but provides examples of potential strategies available to the CORE MPO.

Stream and Wetland Mitigation

Wetlands are areas where the water table stands near, at, or above the land surface for at least part of the year and are described according to the degree of wetness and the type of vegetation that the site supports. Wetlands are important elements of a watershed because they serve as the link between land and water resources. Wetlands help to curb flooding by slowing down the flow of excess rainwater and absorbing it. Wetlands also cleanse water as it filters back into the water table, and provide natural habitats for a number of plant and animal species.

Often times, transportation projects can negatively impact wetland areas. Mitigation measures strive to avoid, minimize, and mitigate impacts to streams and wetlands throughout the project development process as required by regulations. Guidelines for the development of mitigation are followed as required by the United States Army Corps of Engineers (USACE) and the Georgia Environmental Protection Division (GAEPD). Mitigation measures will also be coordinated with the coastal best





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management practices currently under development by the Georgia Department of Natural Resources.

Mitigation opportunities may include mitigation banking, stream and wetland creation, restoration, and/or preservation. Wetland mitigation banking is a process that helps limit negative impacts to wetland resources. Banking can be used when wetlands affected by development cannot be preserved or preservation would not be environmentally beneficial and typically involves the consolidation of small, fragmented wetland mitigation projects into one large contiguous site.

Noise Mitigation

For noise mitigation, freeway or major roadway projects that add lanes or replace the pavement (such as from asphalt to concrete) should include an investigation of the noise levels. The possibility of mitigation with noise walls or other buffers may be necessary.

The level of highway traffic noise depends on three conditions: (1) the volume of the traffic, (2) the speed of the traffic, and (3) the number of trucks in the flow of traffic. Generally, the loudness of traffic noise is increased by heavier traffic volumes, higher speeds, and greater numbers of trucks.

Potential noise reduction measures include creating buffer zones, planting vegetation, and constructing barriers. Buffer zones are undeveloped open spaces which border a highway. Vegetation barriers consist of vegetation planted along the highway that are dense enough that they cannot be seen over or through. Noise barriers are solid obstructions built between the highway/major roadway and adjacent land use.

Barriers can be formed from earth mounds along the road or can be manmade vertical walls. Earth berms have a natural appearance, but can require large amounts of land. Vertical walls take less space and can be built of wood, stucco, concrete, masonry, metal, and other materials. Noise walls require maintenance, and negative reactions may include a restriction of view, a feeling of confinement, a loss of air circulation, a loss of sunlight and lighting, and could be visually displeasing. While noise walls can be effective for decreasing noise levels close to a highway, the sound reflected from these walls can increase noise levels further away from that highway.

Storm Water Mitigation

Storm water runoff occurs when precipitation flows over the ground rather than settling into the ground. Impervious surfaces, such as asphalt and concrete, prevent stormwater runoff from naturally soaking into the ground.

Storm water can pick up debris, chemicals, and other pollutants and flow into a storm sewer system or directly to a lake, stream, river, or wetland. Storm water runoff can pollute water bodies and cause them to overflow and flood.

There are multiple mitigation techniques that can be used to curb storm water runoff. These techniques can include bioretention, detention ponds, grass swales, and filter strips.





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Bioretention is a practice that manages and treats storm water runoff using a conditioned planting soil bed and planting materials to filter runoff stored within a shallow depression. The method combines physical filtering and adsorption with biological processes to retain and treat surface runoff before it leaves a site.

Detention ponds are used to capture large amounts of water and slowly filter it back into the ground. Detention ponds are usually used in large residential or commercial developments.

Grass swales are grasses that line a ditch or channel near impervious surfaces that capture storm water runoff and filter it into the ground.

Vegetative filter strips and buffers are areas of land with vegetative cover that are designed to accept storm water runoff from upstream development. They can be constructed, or existing vegetated buffer areas can be used. Dense vegetative cover facilitates water filtering into the ground. Unlike grass swales, vegetative filter strips are effective only for areas with no defined channels.

Historic Resource Mitigation

Historic and cultural resource reviews during the project development phase are designed to comply with the National Environmental Policy Act (NEPA), the National Historic Preservation Act (NHPA), and applicable Georgia codes and regulations. These laws and regulations require that cultural and historic resources be considered during the development of transportation projects. An element of that consideration involves consulting with various entities including the Federal Highway Administration (FHWA), Advisory Council on Historic Preservation, (ACHP), State Historic Preservation Office (SHPO), local historic preservation groups, local public officials, and the public.

Mitigation measures developed through a Section 106 of the National Historic Preservation Act of 1966 (NHPA) Memorandum Of Agreement (MOA) consultation process provide ways to avoid, minimize, or mitigate adverse effects to historic properties impacted by projects. Historic properties include those listed, or are eligible for listing in the National Register of Historic Places (NRHP). The mitigation measures are carried through as environmental document commitments and must be completed and accounted for with SHPO and FHWA. The MOA will not be closed until all stipulations are fulfilled. A failure to meet all stipulations can potentially jeopardize a project sponsor's funding or other agreements or projects.

A plan for mitigating an adverse effect is site/property specific and requires a separate research design or approach for each historic property impacted by the project. It should be based on the context development and refinement through the environmental assessment and preliminary project design/engineering.

Mitigation measures may involve a variety of methods including, but not limited to: aesthetic treatments, avoidance, archaeological data recovery, creative mitigation, salvage and re-use of historic materials, informing/educating the public, and Historic American Buildings Survey (HABS)/Historic American Engineering Record (HAER) documentation. Approaches vary widely depending on the type of historic property, the qualities that enable the property to meet the NRHP Criteria of Eligibility, the





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location of the historic property with respect to the project and other criteria specific to the site. Mitigation plans should be developed in consultation with Georgia Department of Transportation, State Historic Preservation Office, Federal Highway Administration, local public officials, local historic preservation groups, and the public, as applicable. In special circumstances consultation may include the Advisory Council on Historic Preservation.

Environmental Justice Mitigation

There are three fundamental principles of environmental justice. These principles include the avoidance of unusually high adverse health, social and economic impacts on minority and low-income populations; the inclusion of all potentially affected communities in the decision making process; and to prevent the denial of benefits by minority and low income communities and populations.

MPOs can mitigate the adverse affects of projects on environmental justice communities in a variety of ways, including the utilization of advanced analytical capabilities to ensure compliance; the early identification of impacts on low income and minority populations and to ensure the fair distribution of both the burdens and the benefits associated with transportation investments; and to have an inclusive and active public participation process that does not provide barriers to participation by minority and low income populations in the decision making process.

8.3.2 Coordination and Consultation – System Preservation

As required by federal regulations (23 CFR 450.320 and 450.322), operations and management strategies of transportation facilities must be included in metropolitan transportation plans and long range transportation plans. Maintaining the existing transportation system is a priority of the CORE MPO planning process and federal funding is reserved in the LRTP expressly for this purpose. As part of the project prioritization process for the 2035 LRTP, the CORE MPO developed and utilized a "System Management and Preservation" goal using 2035 Average Annual Daily Traffic / 2035 Lane as a measure. This measure promotes efficient use of highway capacity and encourages improvements to those facilities that are experiencing the most severe congestion. Operational improvements, signal synchronization and intelligent transportation systems (ITS) were also a consideration as system preservation objectives in the project prioritization process.

8.4 The Vision Plan

The needed projects that were not included in the financially-constrained plan are incorporated into the Vision Plan and will be addressed further in the Total Mobility Plan. Should additional funding be identified, these projects may be brought into the Framework Mobility Plan. The projects included in the Vision Plan are shown in Table 8.8.





Table 8.8 Vision Plan

DOT PI Number	Project Name	From	То	Estimated Cost*	Work Type
None	I-95 @ I-16 Interchange Reconnstruction*	(4)		\$110,852,402	ROW, Const
0006256	I-16 @ I-516 Interchange Reconstruction*	144) 	\$103,388,328	Const.
None	SR-21/Augusta Road Widening	Northwe st Tollway	SR 30 (W. of I-95)	\$47,788,905	Const.
None	SR 307/Dean Forest Rd Interchange Reconstruction	At Veterans Pkwy		\$11,995,058	PE, ROW, Cons
None	LaRoche Ave. Operational Improvements	Skidaway Rd.	So. City Limits	\$11,681,029	PE, ROW, Cons
None	Delesseps Ave Operational Improvements	Waters Ave	Skidaway Rd	\$12,550,072	PE, ROW, Cons
0007260	SR 307/Dean Forest Rd Extension (New)	US 17	Garard St	\$58,414,040	PE, ROW, Cons
None	Quacco Rd Widening	Pooler Pkwy	I-95	\$27,119,239	PE, ROW, Cons
None	Quacco Rd @ Little Neck Rd New Interchange	At I-95		\$14,342,391	PE, ROW, Cons
None	Derenne Ave Operational Improvements	Mildred St	Abercorn St	\$11,143,000	PE, ROW, Cons
None	SR 26/US 80 Operational Improvements	At Johnny Mercer Blvd	-	\$5,752,176	PE, ROW, Cons
None	Mildred St/Hampstead Ave Widening	I-516	Abercorn St	\$80,415,904	PE, ROW, Cons
None	I-95 @ SR 204 / Abercorn St. Interchange Reconstruction		-	\$52,358,607	PE, ROW, Cons

^{*}Previous Cost Estimates from 2004 LRTP and Year-of-Expenditure Update that do not reflect updated GDOT unit costs for ROW, Utilities and CST

ADDITIONAL VISION PLAN PROJECTS 2035 LRTP UPDATE

GDOT PI Number	Project Name	From	То	Estimated Cost	Work Type
0002924	Eisenhower Drive	SR 204/Abercorn	Harry S. Truman Parkway	\$80,745,039	ROW, Const.
571060	Skidaway Road	Rowland Ave.	Fergu son Ave.	\$54,141,031	ROW, Const.
550580	White/Coffee Bluff Road	Little Ogeechee River	Willow Rd.	\$21,631,029	ROW, Const.
511165	I-95 Widening	I-16	Effingham Co./S.C.	\$267,171,794	PE, ROW, Const.
511035	I-95 Widening	I-16	Bryan County	\$152,696,625	PE, ROW, Const.
0005822	I-95 @ Pine Barren Rd Interchange Reconstruction	At Pine Barren Rd.	E	\$84,344,534	PE, ROW, Const.
522490	US 80 Widening (Note: Bridge Reconstruction are included within Constrained Plan)	Bull River	Lazaretto Creek	\$165,563,414	Const.
562165	SR 307/Dean Forest Rd Widening	Robert. B. Miller	SR 21	\$17,118,053	PE, ROW, Const.
None	South Carolina -Truman Parkway Connector (New Bridge Across Savannah River)	HST	I-95	\$2,000,000	PE
0005956	SR 307/Dean Forest Rd Interchange Reconstruction	At I-16	199	\$61,904,961	PE, ROW, Const.
None	SR 21 / NW Parkway \$\$\$	SR-21 (North of I-95)	I-16 @ I-516	\$741,709,510	PE, ROW, Const.
None	I-16 Widening / Managed Lanes \$\$\$	I-95	I-516	\$313,013,084	ROW, Const.
None	Little Neck Road Widening	1-95	I-16	\$48,598,440	PE, ROW, Const.
None	Pooler Parkway/Quacco Road Widening	Within SW Sector Area		\$30,450,376	PE, ROW, Const.
None	Fort Argyle/SR 204 Widening	1-95	John Carter Road	\$56,016,708	PE, ROW, Const.
None	John Carter Road Widening	Little Neck Road	Old River Road/Fort Argyle Road/SR 204	\$18,510,096	PE, ROW, Const.
None	New Hampstead Parkway (New Roadway 1)	Little Neck Road	SR 204/Fort Argyle Road	\$11,628,148	PE, ROW, Const.
None	Sawdust Pile Road (New Roadway 1)	Highgate Blvd/Roadway 1	New I-16 interchange	\$19,890,827	PE, ROW, Const.
None	Little Neck Road - Fort Argyle Connector (New Roadway 2)	Quacco Road	Little Neck Road	\$15,591,576	PE, ROW, Const.
None	Little Neck Road - Quacco Road Connector (New Roadway 2)	Quacco Road	Little Neck Road	\$7,490,384	PE, ROW, Const.
None	Gateway Area Connector across I-95	Belford Spine/Roadway 3	John Carter Road	\$18,306,042	PE, ROW, Const.
None	New Interchange at I-16 (Scenario Improvement)	I-16/new Sawdust Pile Rd	i=	\$9,583,200	PE, ROW, Const.
None	Study - Truman Pkwy Extension and Second Bridge across Savannah River			\$2,000,000	Study





APPENDIX A MPO Advisory Committees





MPO Advisory Committees

The **Technical Coordinating Committee (TCC)** is made up of key government and agency transportation staff members involved in technical aspects of transportation planning. The TCC reviews and evaluates all transportation studies and provides technical guidance and direction to the MPO. The TCC is comprised of staff members from local, state and federal agencies.

Technical Coordinating Committee Voting Members:

- Chatham County
- City of Savannah
- City of Garden city
- City of Pooler
- City of Bloomingdale
- City of Port Wentworth
- City of Tybee Island
- Town of Thunderbolt
- Town of Vernonburg
- Georgia DOT
- Chatham Area Transit Authority (CAT)
- Georgia Ports Authority (GPA)
- Savannah Airport Commission
- CSX Transportation
- Norfolk Southern Railroad
- Trucking Industry
- Metropolitan Planning Commission (MPC)
- Savannah Economic Development Authority (SEDA)
- Savannah Area Chamber of Commerce
- Hunter Army Airfield
- CORE MPO Citizens Advisory Committee (CAC)
- CORE MPO Advisory Committee on Accessible Transportation (ACAT)
- Bicycle Advocacy Group

The **Citizens Advisory Committee (CAC)** is composed of a cross-section of the community and functions as a public information and involvement committee. It reviews and provides recommendations on all CORE MPO programs and studies. The CAC informs the MPO of the community's perspective while providing information to the community about transportation policies and issues. There are 30 CAC members appointed by public officials in Chatham County and each municipality for two-year terms.

Citizens Advisory Committee Voting Members:

- Bloomingdale (2)
- Chatham County (9)
- Garden City (2)
- Pooler (2)





- Port Wentworth (2)
- City of Savannah (7)
- Thunderbolt (2)
- Tybee Island (2)
- Vernonburg (2)

The Advisory Committee on Accessible Transportation (ACAT) serves as the forum for cooperative decision-making with regard to accessible transportation related issues in Chatham County. ACAT acts as a liaison between the transportation planning process and the traditionally underserved communities in Chatham County (i.e., those communities with high concentrations of minority, low-income, disabled and elderly populations). ACAT advises the MPO as well as the Chatham Area Transit Authority and the Savannah-Chatham Council on Disability Issues on accessible transportation related issues. ACAT ensures that the transportation planning process is current and responsive to all applicable laws, rules and regulations, especially, but not limited to, the following: Americans with Disabilities Act of 1990 (ADA); Executive Order 12898 (environmental justice); Section 504 of the Rehabilitation Act of 1973, as amended; Older Americans Act of 1965, as amended; and Title VI of the Civil Rights Act of 1964, as amended. ACAT strives to ensure that the full array of transportation options is available to citizens with disabilities and the traditionally underserved.

Advisory Committee on Accessible Transportation Voting Members:

- Chatham Area Transit Authority (CAT)
- Chatham Association for Retarded Citizens Inc.
- Chatham County Engineering
- Metropolitan Planning Commission (MPC)
- Circle of Friends
- City of Savannah
- Coastal Center for Development Services
- Economic Opportunity Authority for Savannah Chatham County Inc.
- Georgia Council of the Blind
- Georgia Department of Transportation (GDOT)
- Georgia Infirmary Day Center for Rehabilitation
- Georgia Legal Services
- Goodwill Industries of the Coastal Empire
- Housing Authority of Savannah
- Interested Citizens
- Living Independence for Everyone (LIFE) Inc.
- National Association for the Advancement of Colored People (NAACP)
- National Federation of the Blind of Georgia
- Savannah Association for the Blind
- Savannah Fair Housing
- Senior Citizens Savannah Chatham County Inc.
- TeleRide (Laidlaw Transit Services)
- United Way of the Coastal Empire





APPENDIX B List of Acronyms





List of Acronyms

ACAT – Advisory Committee on Accessible Transportation

ACHP - Advisory Committee on Historic Preservation

ADT - Average Daily Traffic

ARRA – American Recovery and Reinvestment Act

CAC - Citizens Advisory Committee

CAT – Chatham Area Transit Authority

CI - Congestion Index

CMP – Congestion Management Process

CORE MPO– Coastal Region Metropolitan Planning Organization

CRC – Coastal Regional Commission

CSD - Context Sensitive Design

CSS – Context Sensitive Solutions

ETL- Express Toll Lane

FHWA - Federal Highway Administration

FTA - Federal Transit Administration

GAEPD – Georgia Environmental Protection Division

GDNR – Georgia Department of Natural Resources

GDOT – Georgia Department of Transportation

GIS - Geographic Information System

GPA – Georgia Ports Authority

HABS – Historic American Building Survey

HOT – High Occupancy Toll

HOV – High Occupancy Vehicle

ITS - Intelligent Transportation Systems

LOS – Level of Service

LRTP – Long Range Transportation Plan

MOA – Memorandum of Agreement

MPC – Metropolitan Planning Commission

MPO – Metropolitan Planning Organization

MVM- Million Vehicle Miles

NEPA – National Environmental Protection Act

NHPA - National Historic Preservation Act

NHS- National Highway System

NRHP – National Register of Historic Places

PE – Preliminary Engineering

ROW – Right-of-Way

SAFETEA-LU – Safe Accountable Flexible Efficient Transportation Equity Act – A Legacy for Users

SHPO - State Historic Preservation Office

SHSP – Strategic Highway Safety Plan

SPLOST – Special Purpose Local Option Sales Tax

TAD - Tax Allocation District

TAZ - Traffic Analysis Zone

TCC - Technical Coordinating Committee





Framework Mobility Plan

TDP – Transportation Development Plan

TE– Transportation Enhancement

TEA-21 – Transportation Equity Act for the 21st Century

TIA – Traffic Impact Assessment

TIGER - Transportation Investment Generating Economic Recovery

TIP- Transportation Improvement Program

TOL– Truck Only Lane

TOT- Truck Only Toll Lane

TMA – Transportation Management Area

USACE – United States Army Corps of Engineers

USDOT – United States Department of Transportation

V/C – Volume-to-Capacity

VHT – Vehicle Hours of Travel

VMT - Vehicle Miles of Travel

YOE – Year of Expenditure

3-C – Continuing, Cooperative and Comprehensive



