



## APPENDIX B: CONTRIBUTING STUDIES AND PLANS

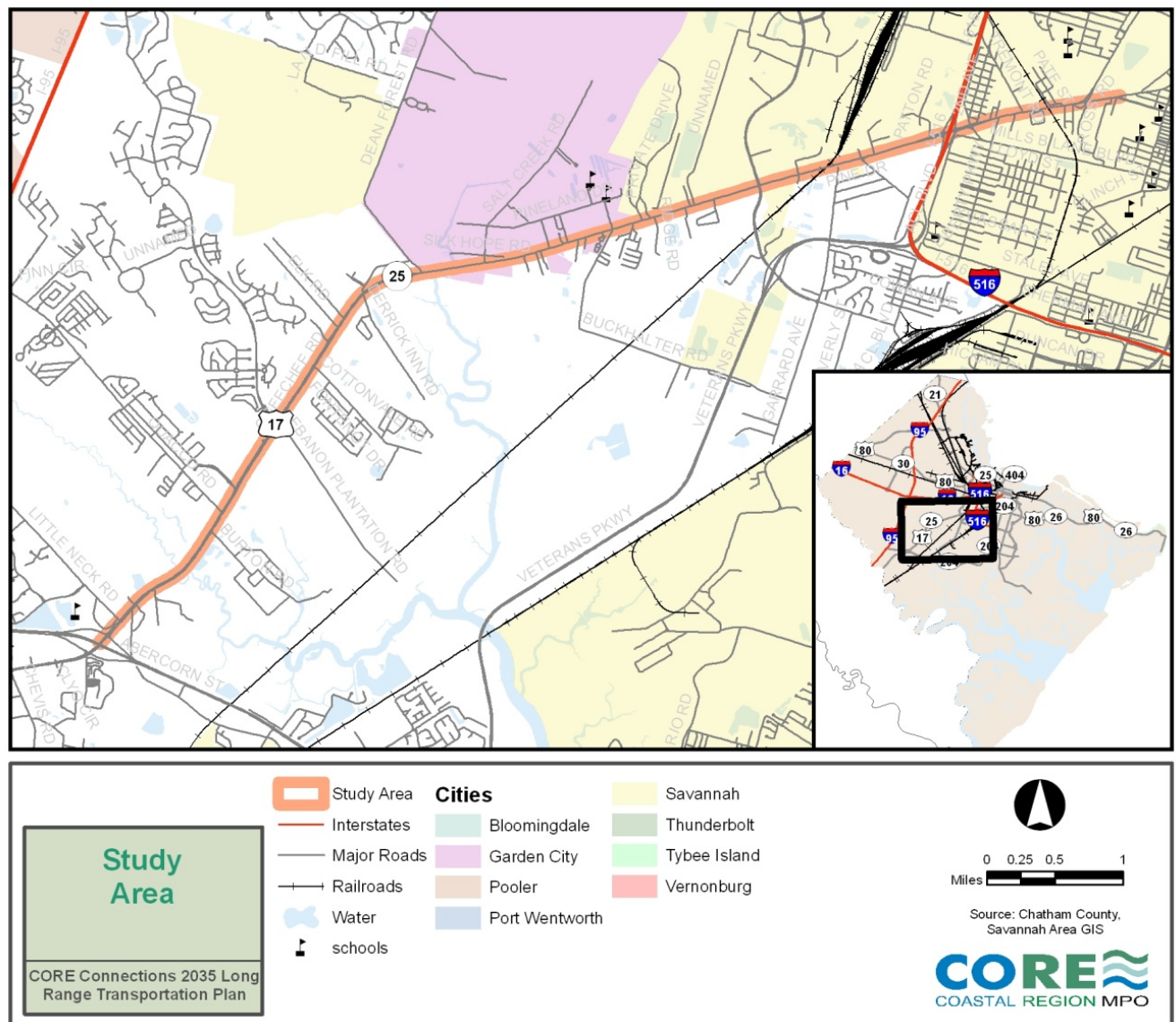


## Sector Planning

As part of the Total Mobility Plan, the CORE MPO undertook two specific planning efforts: the Ogeechee Road Sector Plan and the Victory Drive Sector Plan. The sector planning process is one of the tools available to develop a detailed future plan for specific areas and provides a conceptual, long term approach that addresses existing and anticipated needs.

### Ogeechee Road / US 17

The Ogeechee Road sector plan assessed the performance of Ogeechee Road/US 17 from Abercorn Extension/SR 204 in southside Savannah to US 80/Victory Drive just west of the downtown historic district. The plan identified the existing conditions, and in coordination with the non-motorized and thoroughfare plans, identified transportation strategies to preserve and enhance community character, accommodate pedestrians and bicyclists, and preserve the capacity of the roadway as the area develops and/or redevelops. The study area for the Ogeechee Road sector plan is shown in the map below.



There are a number of issues that were identified within the corridor as part of the planning process. These issues include the following:

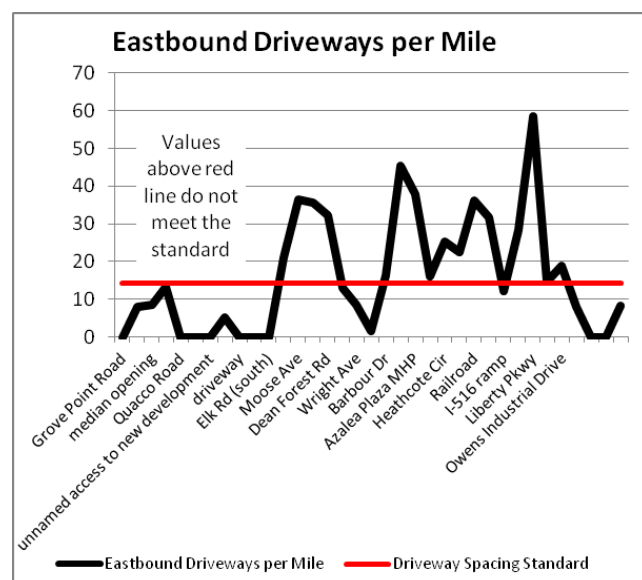
1. Lack of parallel facilities; lack of inter-parcel access
2. Two-way left turn lane conflicts, safety and traffic impacts
3. Density of access points (driveways and intersections) reduces capacity of roadway; some areas with open curbs to parking rather than driveways
4. Some areas of blight, lack of building and site maintenance
5. Corridor aesthetics, signage, and landscaping
6. Lack of pedestrian facilities, in particular a lack of sidewalks linking bus stops with destinations
7. Lack of pedestrian and transit amenities such as shelters, trees, benches, lighting
8. Compatibility of light industrial uses, warehousing, junk yards, auto-oriented uses with residential, recreation, hotel/motels, commercial areas that generate increasing pedestrian trips

In addition, there were also a number of opportunities within the sector area that were identified. These opportunities include:

1. Redevelopment potential of adjacent parcels creates an opportunity to increase access management and provide pedestrian facilities as the area redevelops
2. New or recent developments with frontage roads or other parallel facilities
3. Currently used by autos, transit, bicyclists, and pedestrians
4. Transportation strategies to increase mobility for lower income population (e.g., mobile home parks)
5. Widening project in constrained 2035 LRTP to extend four-lane section from I-516 to Victory Drive
6. Natural resources in area and scenic vista amenity corridor on two segments

To address the issues and take advantage of the opportunities and develop recommendations, the effort was coordinated with the Thoroughfare Plan and projects were identified for implementation of the appropriate complete streets and context sensitive design approach. These projects identified along Ogeechee Road / US 17 were then incorporated into the planning process and the development of the balanced Cost Feasible Plan and the Vision Plan, or

*Roadside pedestrian paths in commercial areas indicate that sidewalks would be a welcome improvement for people walking in the sector area. Sidewalks would also improve access to bus stops.*

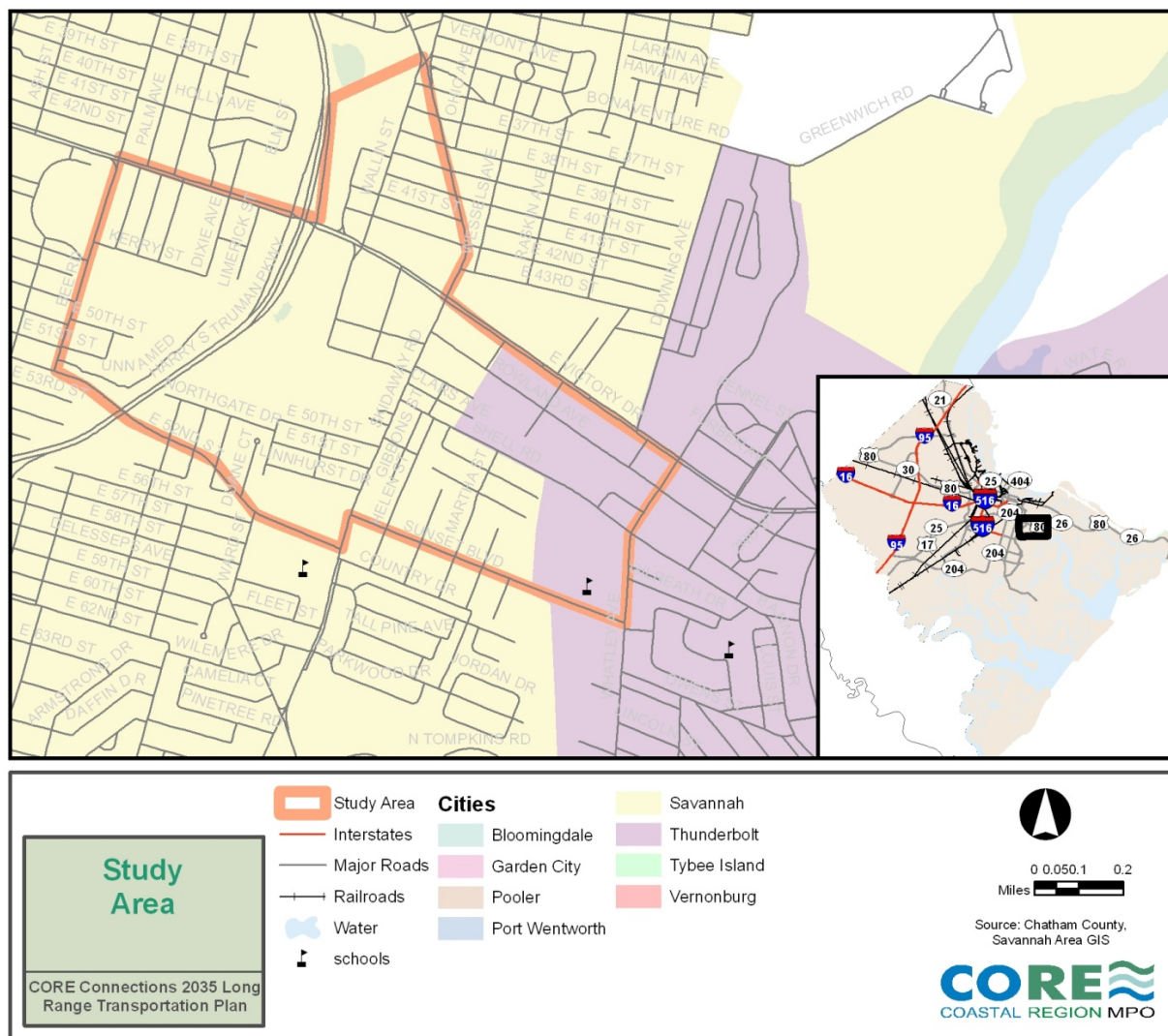




unfunded needs list. Visit <https://www.thempc.org/docs/lit/corempo/studies/OgeecheeUS17.pdf> for more information.

## Victory Drive - Skidaway Sector Study

The Victory Drive Area Sector Plan focuses on the area surrounding Victory Drive/US 80 at Truman Parkway due to the key transportation facilities that connect in the area, its role as a gateway between the islands and downtown Savannah, transportation system impacts of recent commercial development, and active development proposals in various stages. The plan resulted in recommended transportation strategies to preserve and enhance community character, accommodate pedestrians and bicyclists, and preserve the capacity of major roadways as the area redevelops. The study area is shown in the map below.



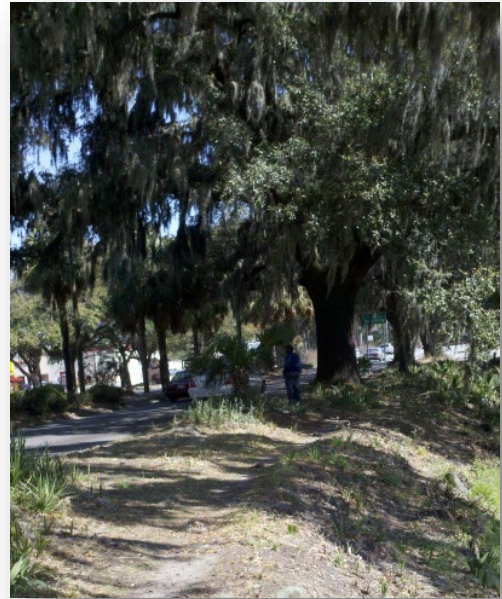
There were a number of issues identified in the sector planning area which include the following:

- Truman Parkway serves as a barrier to traffic, limiting east-west movements to 52<sup>nd</sup> Street or Victory Drive/US 80.

- High level of access intersections to Victory Drive/US 80 and Skidaway Road via driveways and limits the capacity for through traffic.
- There is a bottleneck at the Truman Parkway and Victory Drive interchange due to traffic volumes, including both local traffic to shopping centers and through traffic between islands and Savannah.
- Constrained land area limits improvements that can be made without significant impacts to natural resources or private property.

In addition, there were also a number of opportunities within the sector area that were identified. These opportunities include:

- Development and redevelopment opportunities
- Proposed and planned bicycle/pedestrian facilities
- Historic character and oak trees make Victory Drive a signature route in Savannah
- City of Savannah Economic Development Department activities to provide detailed plans on strategic corridors
- The County has a planned project to improve Skidaway Road through the study area
- Improved local road connectivity through road projects or redevelopment



Several recommended operational improvements have been completed in the area in order to accommodate the new developments and address any impacts in the area. As with the Ogeechee Road sector plan, this effort was fully coordinated with the Thoroughfare Plan to identify the complete streets/context sensitive design solutions. In addition, the long term option of additional access to the shopping area across Truman Parkway from the west and upgrading facilities for parallel capacity east of Skidaway along Victory Drive were identified for further study. Visit



<https://www.thempc.org/docs/lit/corempo/studies/VictorySkidaway.pdf> for more information.

## Summaries of Other Studies and Plans

The CORE MPO has undertaken a number of other planning initiatives to address specific transportation needs within the region. These planning studies have informed for the Total Mobility Plan and are incorporated as part of the planning process. These studies include the following:

### SR 21 Corridor Study

The SR 21 corridor is a key thoroughfare in Chatham County that serves commuter traffic between Effingham County and Savannah and provides a primary means of access to major industries and the Port of Savannah. SR 21 is vital to the local and regional economy and serves a strategic purpose as a hurricane evacuation route. Recommended projects from the study include the following:

PROJECT	THROUGHFARE PLAN CROSS SECTION	TERMINI	ESTIMATED COST	WORK TYPE
SR-21 Widening	Major Arterial - Suburban	Effingham Co. to I-95	\$147,463,000	ROW CST
SR 21 Elevated Lanes	N/A	North of SR 30 to Jimmy DeLoach Connector		
Jimmy DeLoach Connector Express Lanes	N/A	Jimmy DeLoach Connector	\$119,897,000	PE ROW CST
SR 21/Augusta Road Improvements	Major Arterial - Suburban	Smith Avenue to SR 307/Bourne		
SR 21 Elevated Lanes	N/A	Bourne Avenue to South of Minus Avenue	\$136,921,000	PE ROW CST
SR 21 Reconstruction	Major Arterial Urban	Smith Avenue to Minus Avenue		

Visit <https://www.thempc.org/Core/Sr21> for more information.

### US 80 Bridges Study

The purpose of this study was to identify potential solutions that would improve bridge and roadway conditions in a shorter time frame than was possible with the previous GDOT four-lane concept. The study was conducted to determine the feasibility of:

- Improving emergency access by replacing or modifying the existing bridges to accommodate shoulders,
- Improving access for bicyclists pedestrians to Tybee Island and McQueen's Island Trail,
- Providing additional capacity at specific locations to provide congestion or incident relief,
- Improving conditions of flood prone areas.

Six alternatives were analyzed for feasibility and compared to the GDOT four-lane concept. The evaluation criteria for recommending an alternative were: ability to improve safety, initial project cost, benefit to cost ratio, life cycle cost, maintenance of traffic, potential environmental impacts, bicycle and pedestrian access, constructability and public comment.

The recommended alternative will replace existing bridges at Bull River and Lazaretto Creek with new bridges that have a ten-foot, bikeable shoulders and a ten-foot, barrier-separated multi-use trail. The existing road will be widened with ten-foot paved shoulders. The roadway near Fort Pulaski will be restriped to allow for a left-hand and right-hand turn lane. An 18-space parking area will be constructed at the entrance to McQueen's Island Trail and have a left-hand and right hand turn lanes for improved access. The project is currently under development by GDOT. Visit <https://www.thempc.org/docs/lit/corempo/studies/us80/finalreport.pdf> for more information.

## SR 204 Corridor Study

The SR 204 corridor is the key arterial connection across the southern part of Chatham County linking I-95 to US 17, Veterans Parkway, and Truman Parkway. Recommended projects from the study include the following:

PROJECT	THROUGHFARE PLAN CROSS SECTION	TERMINI	ESTIMATED COST	WORK TYPE
SR-204 Reconstruction/Limited Access	Major Arterial - Suburban	I-95 to US 17	\$101,100,000	PE ROW CST
SR 204/Abercorn Interchange Reconstruction	N/A	At I-95	\$57,794,105	PE ROW CST
SR 204 Widening	Major Arterial - Suburban	US 17 to Rio Road	\$125,500,000	PE ROW CST
SR 204 Corridor Improvement/Elevated Lanes	Major Arterial - Suburban	West of Forest River Bridge to Truman Parkway Phase V	\$211,600,000	PE ROW CST

Visit <https://www.thempc.org/Core/Sr204> for more information.

## Non-motorized Transportation Plan

Non-motorized transportation includes walking or using a wheelchair, bicycling, skating, and using pedicabs. The Non-motorized Transportation Plan, as part of the Total Mobility Plan, will serve as an update to the MPO's Bikeway Plan of 2000 and provides a plan to address the needs of pedestrians, and other self-powered travelers. The Plan:

- Identifies needed improvements for the non-motorized modes;
- Identifies areas for amenities to help create a human-scaled environment that encourages use of physically active modes;
- Prioritizes improvements and identifying funding opportunities

The resulting prioritized lists will guide the MPO in programming the approximately \$22 million that is set aside for non-motorized transportation over 25 years in the Total Mobility Plan. The lists can also guide local governments in the development of Capital Improvement Programs, and guide organizations applying for grants in the future, under such programs as Transportation Alternatives. Visit <https://www.thempc.org/Core/Bpp> for more information.



## Park and Ride Lot Study

The study area of this Park and Ride Study includes Chatham County, Bryan County, Effingham County, Bulloch County, and Liberty County in Georgia as well as Jasper County and Beaufort County in South Carolina. The primary objectives for this study are to:

- Identify major travel shed corridors and trip volumes based on current and anticipated future commuting patterns;
- Identify and evaluate potential park-and-ride lot locations within those corridors;
- Develop regional bus service plans that serve the commute corridors and park-and-ride lot locations, with service plans tailored to meet anticipated demand;
- Determine likely costs, revenues and potential funding sources;
- Identify an implementation strategy for advancing study recommendations; and
- Engage stakeholders through all phases of the project.
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Five stakeholder meetings were held during the course of this study to solicit input on study findings and recommendations. A series of stakeholder interviews were also held at the beginning of this project. The study presents a summary of the analysis conducted and recommendations developed during completion of this 12-month study. Visit <https://www.thempc.org/Core/Pr> for more information.

## Greater Downtown Savannah Mobility and Parking Study

The Chatham County-Savannah Metropolitan Planning Commission (MPC) and City of Savannah Department of Mobility and Parking Services (MPS) led a study of downtown Savannah's parking and transportation systems in 2015 and 2016. The study was intended primarily to understand current conditions in the parking system, to develop new strategic approaches to address current and forthcoming challenges, and to continue to enhance downtown mobility options for the greater downtown Savannah community. Visit <https://www.thempc.org/Core/Pm> for more information.

## Chatham Area Transit System Redesign

The Chatham Area Transit Authority kicked off its *Let's Go! Designing Better Transit Together* initiative, which will result in a system-wide redesign of the community's fixed-route bus network. This is very comprehensive and innovative process will help CAT step back from the current transit system, rethink the bus routes within our community, and design a system that reflects the values, needs, and available resources. The *Let's Go! Designing Better Transit Together* system redesign project will rely heavily on input from the community. The initiative will feature a dedicated webpage, three online surveys, and a series of community meetings. The project schedule is anticipated to conclude at the end of 2019. Visit <http://www.catchacat.org/> for more information.

## Freight Transportation Plan

This study documented the existing freight assets in the CORE MPO region and identified the needs related to freight movements in the area. Recommendations were developed on how to improve the freight infrastructure and to facilitate economic development. A detailed assessment of freight and goods movement, freight performance measures and regional freight profiles were also completed as part of the study. The study incorporated input from stakeholders and includes an Economic Development and Freight Advisory Committee which provided input and guidance throughout the planning process. Visit <https://www.thempc.org/Core/Fp> for more information.



## Advanced Traffic Management Study

The Coastal Region Metropolitan Planning Organization (CORE MPO), the transportation planning agency for the Savannah urbanized area, conducted a regional traffic management study. The study is to build upon the goals and recommendations of previous studies, particularly recommendations from the Congestion Management Process which found that updating and coordinating signal timing could improve travel times and efficiency on 15-23 percent of the congested roadways. The study was completed in two phases.

The Phase I Traffic Control Center Needs Assessment completed in 2014. The Traffic Control Needs Assessment Report summarizes an inventory and high level needs assessment of existing traffic control infrastructure in the city of Savannah, Georgia and in the surrounding region. The needs assessment is the first step toward development of the Chatham County Intelligent Transportation System (ITS) and Traffic Management Center (TMC) Strategic Plan.

The Phase II Strategic Plan is based on a five Year deployment program of a regional traffic management center, operational improvements throughout the region, and the supporting ITS infrastructure. This plan is culmination of the work contained in several technical memorandums described below. The Goals and Objectives Technical Memorandum summarizes the recommended goals and objectives in the development of the Chatham County Intelligent Transportation System (ITS) and Traffic Management Center (TMC) Strategic Plan. The three primary goals were to reduce congestion, enhance travel safety, and to improve regional transportation system operations.

The Traffic Management Improvement Options Technical Memorandum summarizes the both field and central system recommendations in the development of the Chatham County Intelligent Transportation System (ITS) and Traffic Management Center (TMC) Strategic Plan.

This Regional Traffic Management Case Studies Technical Memorandum builds upon the knowledge gathered from Traffic Management Center (TMC) scanning tours, which took place in 2013 and 2014, involving both CORE and Consultant Team. The scanning tours provided information and resources toward the justification for development of a regional traffic management strategy, including a summary of both field and central system recommendations.

Visit <https://www.thempc.org/Core/Atms> for more information.

## Urban Circulator Feasibility Study

This effort is a data driven, technical study designed to determine the feasibility of an urban circulator system, such as a modern streetcar or enhanced bus service in Savannah.

The intent and underlying goal of the study was to provide a non-biased, data driven look at the feasibility and benefit of an Urban Circulator System in order to provide the underpinning for future Federal funding applications and to provide the City of Savannah and Chatham Area Transit with the information needed to make a sound business decision. The Urban Circulator Study assessed existing conditions, potential markets for existing and induced transit ridership, feasibility of implementation of an Enhanced Bus or Streetcar system given the physical characteristics of the city and traffic patterns, capital and operating costs and economic development potential.

The results of the analysis demonstrate that Phase I of the study area has existing bicycle and pedestrian infrastructure that provide adequate facilities for the average user. There are existing bus and trolley services provided by both public and private agencies and organizations that combine to address the demand within the historic downtown. Additional analysis is needed to define the existing parking resources and demands within the historic downtown, however observation of travel patterns indicate that parking resources are available and widely utilized by residents and visitors.

The analysis results demonstrate that mobility demands for citizens and visitors are being met by the current modal options and from a transportation mobility standpoint, investment in a supplemental mode such as Streetcar or Enhanced Bus service to serve a transportation need or deficiency is not warranted. With regard to the economic benefits and potential return on investment in the downtown Savannah area, the historic district is largely built out and protected by preservation ordinances. These constraints limit the potential for economic development. While the analysis does demonstrate the potential for significant increases in property value primarily in the western part of the study area, the limitations created in the downtown by current preservation policies, coupled with a scarcity of property available for development, result in overall return on investment projections significantly lower than peer systems.

As the City of Savannah continues to assess the viability of the Savannah Streetcar or Enhanced Bus system, local financial investments will be a critical component for successful Federal and State funding applications. As various funding options are explored, key partnerships with the Chatham County Board of Commissioners, Chatham County School Board, Housing Authority of Savannah, Chatham Area Transit and the CORE MPO will be critical.

Visit <https://www.thempc.org/docs/lit/corempo/studies/urban/2015/feb/report.pdf> for more information.

## I-16 Flyover Removal

The I-16 overpass at MLK Jr. Blvd. and Montgomery Street has frequently been seen as a physical and psychological barrier to economic development, pedestrian activity and neighborhood revitalization along the corridor. While the area to the north of the flyover has thrived in recent years, the area to the south has not seen the same rate of revitalization. This study builds on previous studies conducted by the Savannah Development Renewal Authority in 1998, 2002, 2004 and 2009; and the 2008 GDOT study. The project has included a very extensive and comprehensive public participation process.

This planning study developed a preferred concept for the future removal of the I-16 overpass at Martin Luther King, Jr. Boulevard and the extension of the downtown street grid into the reclaimed land. Alternative were developed and vetted through public and stakeholder meetings and charrettes. The resulting Civic Master Plan and implementation strategy outline the desired urban form and the steps necessary for implementation. Visit <https://reclaimingoldwestbroad.org/> for more information.

## I-16 Interchange Modification Report

The interchange modification report (IMR) documents the need to modify the interchange located at the terminus of I16 at Martin Luther King (MLK), Jr. Boulevard and Montgomery Street in Savannah, Georgia and to determine the configuration, location and design of proposed improvements.

The I-16 terminal interchange was constructed in the 1960s as a partial Y-interchange with ramps connecting to MLK, Jr. Boulevard and Montgomery Street. Although the I-16 interchange was constructed as an urban renewal program, the ramps have been a barrier to development and economic recovery in the area. The current connections to I-16 are at MLK, Jr. Boulevard and Montgomery Street using Exit 167A and 167B, respectively. The existing terminal ramps begin approximately 1,600 feet south of Gwinnett Street, and extend an additional 1,500 feet to the Exit 167. The MLK, Jr. Boulevard exit ramp (167A) is approximately 700 feet long, terminating at a traffic light at the intersection of MLK, Jr. Boulevard and Gaston Street. The Montgomery Street exit ramp (167B) is approximately 1,800 feet long with a flyover bridge across MLK Jr. Boulevard. The Montgomery Street ramp directly ties into Montgomery Street on a one-way segment just south of Liberty Street.

The feasibility of the ramp removal has been determined through a series of previous planning studies, including Reclaiming Old West Broad Street (2012), studies conducted by the Savannah Development and Renewal Authority (SDRA) in 1998, 2002, 2004 and 2009; and the 2008 Georgia Department of Transportation (GDOT) I-16 Terminus/MLK Jr. Boulevard Flyover Analysis and Concept Development Study.

The purpose of an IMR is to provide the FHWA with all the necessary information to consider modifications to an existing interchange on the Interstate system. The Federal Highway Administration (FHWA) guidance for interchange modifications and justifications are targeted at increasing access or adding new access; however, this report considers removing access and modifying access within the vicinity of the I-16 terminal interchange. To support the proposed modification of the terminal ramps, this report documents:

- Existing transportation network and land use
- Forecasted future conditions
- Environmental screening
- Interchange design alternatives
- Operations, capacity and safety analysis
- Preliminary cost estimates

Visit <https://www.thempc.org/Core/Imr> for more information.

## The Thoroughfare Plan

To achieve the goals of the Total Mobility Plan, as well as those of the updated Comprehensive Plan, the CORE MPO, together with local jurisdictions, developed a Thoroughfare Plan for the region.

This Thoroughfare Plan, coordinated with the Non-motorized Transportation Plan, is intended to:

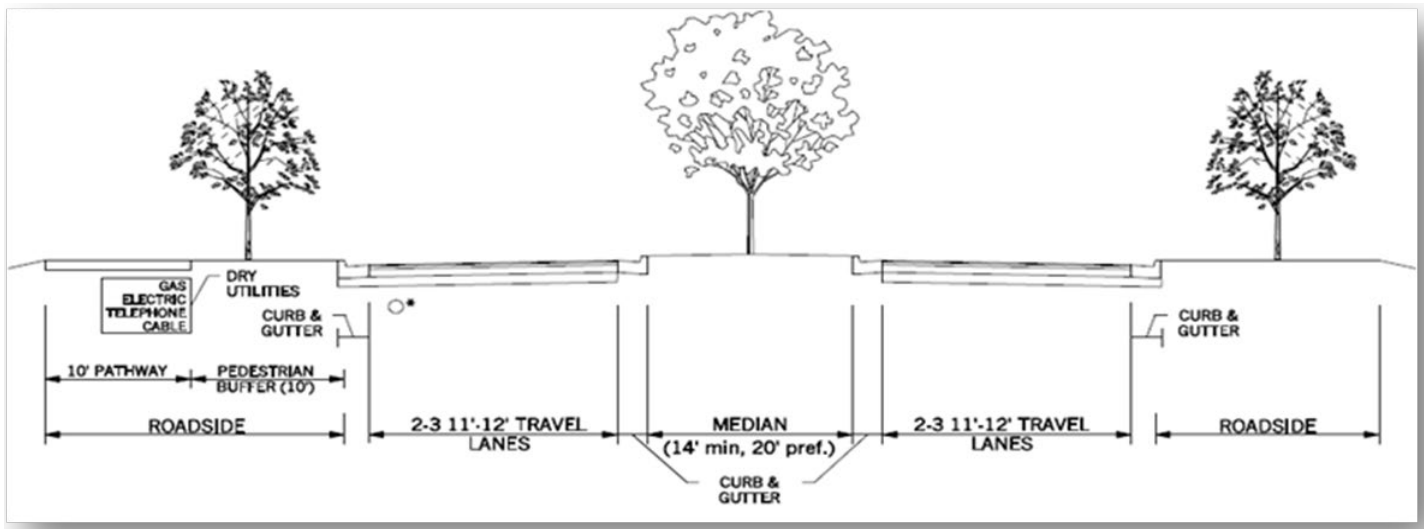
- Ensure/increase accessibility, mobility, and connectivity for people and freight.
- Promote safe and efficient travel for all users and create a framework for common sense trade-offs between automobile capacity and multimodal design elements.
- Support community development and land use goals and promote a sense of place and support activities with on-street parking, bike travel, land access, and pedestrian friendly intersections.
- Establish transparent expectations for transportation infrastructure and create consistency in code references to the road network, which provides predictable and consistent information to development community

Thoroughfare types are defined by their function in the road network as well as the character of the area they serve. The duality of transportation function and the relationship with the character, or

context, of each facility informs each thoroughfare type's recommended design parameters. Thoroughfare planning is promoted as part of a larger movement called context sensitive design or context sensitive solutions. The Institute of Transportation Engineers (ITE) defines context sensitive solutions (CSS) as follows:

*"Context Sensitive Solution is a different way to approach the planning and design of transportation projects. It is a process of balancing the competing needs of many stakeholders starting in the earliest stages of project development. It is also flexibility in the application of design controls, guidelines and standards to design a facility that is safe for all users regardless of the mode of travel they choose."*

### Thoroughfare Cross Section Example



In this planning effort, the CORE MPO worked closely with its local planning partners to identify the appropriate context sensitive parameters for each roadway classification and developed typical sections that incorporated these treatments. These desired typical sections provide the framework for identifying deficiencies in the existing network and a guideline for future infrastructure and can be found in greater detail later in the document. In addition, the Thoroughfare Plan established a consistent and transparent set of expectations for transportation infrastructure for the development community; with this information, developers are aware from the onset of a project what infrastructure requirements are in place.

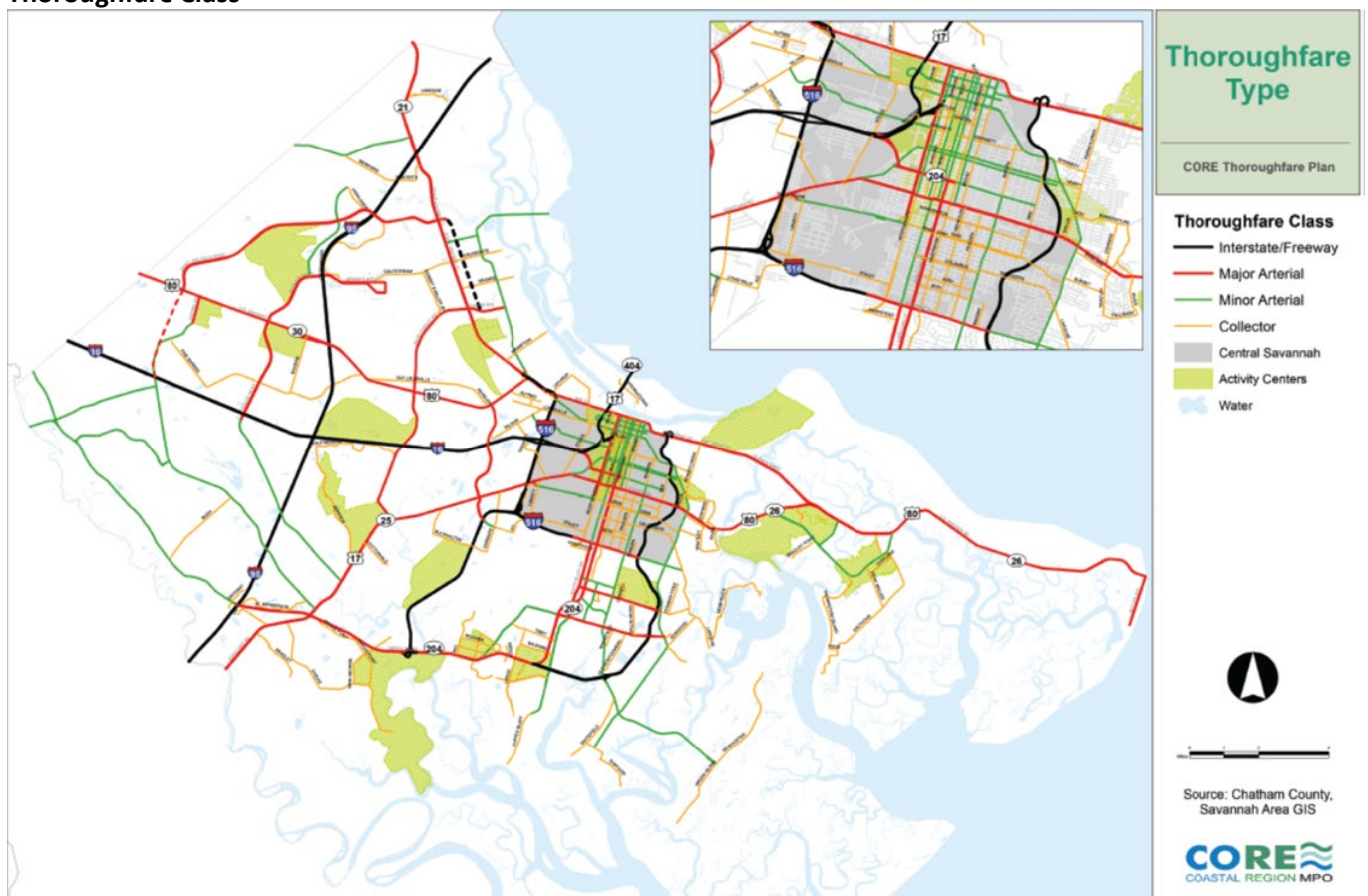




The typical sections identified include Major Arterials, Minor Arterials and Collectors. Each of these classifications is then further categorized as Urban or Suburban and the typical sections include the design elements that appropriately serve the transportation need, as well as the adjacent land uses and community character.

Each of the identified projects in the MTP has been correlated with the Thoroughfare Plan to incorporate the appropriate design elements based on the roadway typology. In addition, the Vision Plan, or unfunded projects, includes the complete list of projects identified through the Thoroughfare Plan (see Appendix F for a complete list). The Thoroughfare Plan was also coordinated with the Non-motorized Transportation Plan to ensure consistency throughout the planning efforts. Visit <https://www.thempc.org/docs/lit/corempo/studies/Thoroughfare.pdf> for more information.

### Thoroughfare Class



## Bryan and Effingham County Transportation Plans

For more information visit:

Bryan County:

[http://www.dot.ga.gov/BuildSmart/Studies/Documents/Bryan\\_County\\_Study/BryanCountyTransportationStudy.pdf](http://www.dot.ga.gov/BuildSmart/Studies/Documents/Bryan_County_Study/BryanCountyTransportationStudy.pdf)

Effingham County:

[http://www.dot.ga.gov/BuildSmart/Studies/Documents/effingham\\_county\\_study.pdf](http://www.dot.ga.gov/BuildSmart/Studies/Documents/effingham_county_study.pdf)