



Charting a Course to 2040

SOUTH CAROLINA MULTIMODAL TRANSPORTATION PLAN

Technical Memorandum

REVIEW OF CURRENT PLANS

Prepared for:



Prepared by:



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TABLE OF CONTENTS

- 1. Introduction 1
 - 1.1 Report Purpose 1
 - 1.2 Report Structure 1
- 2. Statewide Multimodal Transportation Plan Update 2
 - 2.1 Multimodal Plan Goals..... 2
 - 2.2 Recommendations for Individual Plan Components 3
 - 2.3 Rail Right of Way Inventory 4
 - 2.3.1 Rail Right-of-Way Recommendations 5
- 3. Statewide Strategic Corridor Plan 7
 - 3.1 Corridor Plan Goals 7
 - 3.2 Corridor Identification Criteria..... 7
- 4. Statewide Interstate Plan 10
- 5. Statewide Public Transit and Coordination Plans..... 11
 - 5.1 Transit Needs and Strategies 11
 - 5.2 Financial Resources for Transit and Recommendations..... 11
- 6. State Rail Plan 13
 - 6.1 Existing System 13
 - 6.2 Rail Project Funding Needs 13
 - 6.3 Federal Funding Sources..... 14
 - 6.4 Recommendations of the State Rail Plan..... 15
- 7. Strategic Highway Safety Plan 17
 - 7.1 Safety Goals 17
 - 7.2 Safety Strategies 18
- 8. SCDOT Public Participation Plan 19
 - 8.1 Goals and Objectives..... 19
- 9. SCSPA Strategic Plan Update 21
 - 9.1 The Updated SCSPA Mission Statement 22
 - 9.2 Strategic Initiatives 23
- 10. Transportation Cost Competitive Analysis 25
 - 10.1 Issues..... 26
 - 10.1.1 South Carolina..... 26
 - 10.1.2 Freight Competition with Georgia 26
 - 10.1.3 SCSPA is Expanding Capacity..... 27



10.2 Conclusions 27
 10.2.1 SCSPA Inland Markets 27
 10.2.2 Port has “Surge” capability 28
 10.3 Recommendations 28
 10.4 Next Steps 29

LIST OF TABLES

Table 3-1: South Carolina Strategic Corridors 8

LIST OF FIGURES

Figure 3-1: 2008 Strategic System Plan Corridors 9



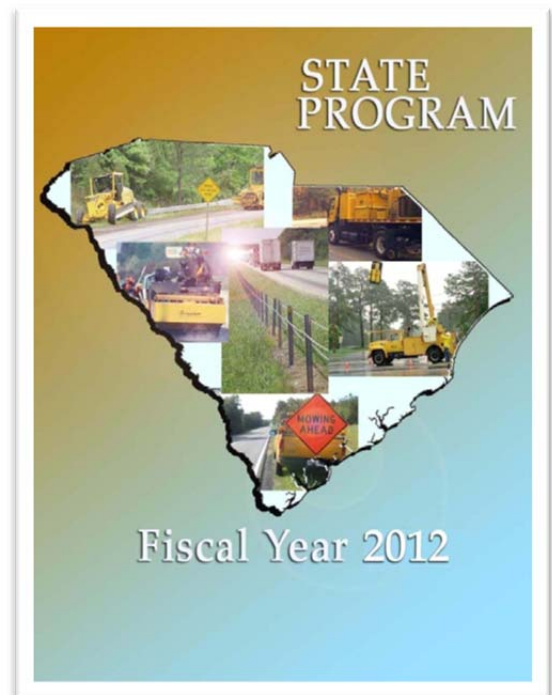
1. INTRODUCTION

This report was prepared during development of the South Carolina Multimodal Transportation Plan for 2040.

1.1 Report Purpose

The purpose of this report is to summarize the results and recommendations included within the following previously developed statewide transportation related plans and programs:

- Statewide Multimodal Transportation Plan Update,
- Statewide Strategic Corridor Plan,
- Statewide Interstate Plan,
- Statewide Public Transit and Coordination Plans,
- Statewide Rail Plan,
- Strategic Highway Safety Plan,
- State Public Involvement Plan,
- State Port Authority Strategic Plan, and
- Transportation Cost Competitive Analysis.



1.2 Report Structure

This report is divided into the following sections:

1. Introduction
2. Statewide Multimodal Transportation Plan Update
3. Statewide Strategic Corridor Plan
4. Statewide Interstate Plan
5. Statewide Public Transit and Coordination Plans
6. Statewide Rail Plan
7. Strategic Highway Safety Plan
8. State Public Involvement Plan
9. SCSPA Strategic Plan
10. Transportation Cost Competitive Analysis



2. STATEWIDE MULTIMODAL TRANSPORTATION PLAN UPDATE

The South Carolina Statewide Comprehensive Multimodal Transportation Plan addressed federal and state requirements in this comprehensive planning process and addressed multimodal project priorities for the SCDOT. The plan included over \$48 billion of transportation needs through the year 2030 for local, regional and statewide level needs. The Plan was approved by the Commission in May 2008.

The multimodal plan provided recommendations for investments to fund and support passenger and freight transportation needs, and intermodal needs in transportation facilities through the year 2030.

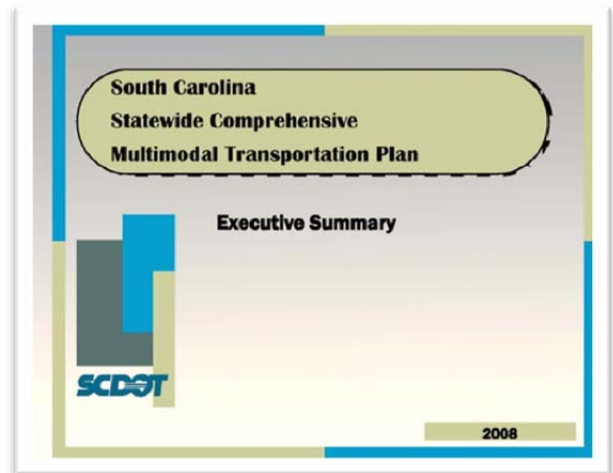
The seven elements of the 2008 plan were:

- Bridge needs and maintenance,
- Interstate plan,
- Public transit plan and human services transportation coordination plans,
- Metropolitan planning organization and councils of governments plans,
- Railroad right-of-way preservation inventory,
- Safety plan, and
- Statewide strategic corridor plan.

2.1 Multimodal Plan Goals

The eight key strategic goals considered for the plan were:

- Mobility,
- Accessibility,
- Safety,
- Security,
- Economic Vitality,
- Community Vitality,
- Environment, and
- Equity.



2.2 Recommendations for Individual Plan Components

Safety Upgrades – Implement the “Essential 8” key strategies from the Strategic Highway Safety Plan including:

- Collaborate with other agencies to improve safety and licensing legislation;
- Effective targeting alcohol and other drug impaired drivers;
- Improve and expanding roadway clear zones and visibility features;
- Expand shoulder and centerline rumble strips, protective barriers, and wider shoulders;
- Improve communication strategies;
- Improve data systems and analysis systems;
- Increase enforcement and education; and
- Increase occupant restraint usage.

System Preservation and Maintenance – Develop funding alternatives to provide adequate resources for the Department's Maintenance Program to eliminate the current backlog of highway maintenance work in five years.

- **Primary and Secondary Highway System Needs:**
 - Implement Statewide Strategic Corridor project needs based on available funding consistent with Act 114 project prioritization process
 - Implement Metropolitan Planning Organization (MPO) and Council of Government (COG) project needs based on available funding consistent with Act 114 project prioritization process
- **System Management:**
 - Create stronger partnerships with local governments, COGs, MPOs to ensure that highway capacity expansion is consistent with local land use desires
 - Work with local governments to manage driveway access to principal arterial routes and develop collector street plans to help keep local trips off of regional principal arterial routes
 - Ensure that all modes are reasonably accommodated in highway improvements. Work with local governments to ensure that walking, bicycling and transit are developed as viable travel options where feasible
- **Transit:**
 - Close the gap between funding needs and available funding levels
 - Improve efforts to leverage federal dollars
 - Allow greater flexibility for local jurisdictions to generate funds
 - Provide local control options for transit funding sources
 - Increase state funding for transit
 - Engage non-traditional partners
 - Increase coordination among providers
 - Expand transit service
 - Accommodate the influx of elderly
 - Target gaps in rural areas
 - “Right size” urban systems
 - Increase commuter based services

- Apply incremental approach with sustainability
- Coordinate transportation and land use decisions
- Upgrade passenger rail service
- **Rail Facilities:**
 - Coordinate with appropriate state agencies and rail providers to develop a comprehensive statewide rail plan that considers freight and passenger rail needs
- **Railroad Right-of-Way Preservation:**
 - Monitor railroad activity to ensure that no right-of-way is abandoned and lost for future public use
 - Evaluate the need for potential changes in legislation to better enable SCDOT to preserve rail corridors for future public use
 - Evaluate the need for dedicated funding to purchase abandoned rail right-of-way that has been identified as having future transportation applications
- **Pedestrian and Bicycle Facilities:**
 - Work to provide paved shoulders on routes in statewide bicycle tour network
 - Work with each MPO to implement low-cost bike improvements wherever feasible, such as restriping 5-lane roadways to include bike lanes when these routes are resurfaced
 - Include bike/pedestrian provisions in new projects wherever appropriate or where requested by local government officials
- **Intermodal Connections:**
 - Work with MPOs and COGs to consolidate passenger transportation services -- intercity rail, intercity bus, local transit, and taxi service -- in single station or transfer facility, where feasible and compatible with state and local plans
 - Establish strong ground transportation links to commercial passenger airports
 - Work with local and state agencies to develop an intermodal plan that considers area specific recommendations for improving freight mobility in the Charleston metropolitan area
- **Freight Movement:**
 - Continue working with the South Carolina Ports Authority to manage access to the port facilities and ensure that traffic impacts of port facilities are addressed
 - Implement MPO and COG projects that address freight needs based on available funding and consistent with Act 114 project prioritization process
- **Funding:**
 - Seek necessary funding on the state and local levels to close the gap in highway and local mass transit needs over the next 20 years

2.3 Rail Right of Way Inventory

Rail Right of Way Inventory, which was conducted as one element of the 2008 Statewide Multimodal Transportation Plan Update, was an assessment of rail corridors to identify opportunities for future transportation use. The effort involved conducting an inventory of rail corridors throughout the State,

and identifying their status. The intent was to find “at-risk” lines and take steps to acquire them or preserve them using State and Federal legislation in place for that purpose.

There are three general categories of rail corridor status including:

- **Active Lines**
 - These are rail corridors that are currently in use or for which no discontinuance of service or abandonment filings have been initiated.
- **Abandoned Lines**
 - These are lines for which formal abandonment filings had been made. The corridors are likely in control of the adjoining property owners and would be difficult to reassemble.
- **Inactive Lines not Abandoned**
 - This includes railroad corridors that have:
 - Been preserved intact or partially intact by rail banking or rail trail designation,
 - Have filed for discontinuance of service but not for abandonment, and
 - Status cannot be determined without knowledge of ownership.

The inventory activities included potential criteria for prioritizing efforts and funds should a corridor become available. Suggested criteria for prioritizing rail corridors for acquisition included:

- Potential availability,
- Correlation with Long Range Transportation Plan, and
- Partnering with trail groups.

2.3.1 Rail Right-of-Way Recommendations

Recommendations that could be implemented by the State:

- Monitor STB proceedings, such as notices for abandonment, discontinuance of service, or other service modifications within the boundaries of South Carolina, or railroad company activities that may affect the rail operations in South Carolina.
- Implement coordination procedures with the Department of Revenue, Division of Public Railways and Division of State Development within the Department of Commerce, the Office of Regulatory Staff, and the Division of Mass Transit within the Department of Transportation. Establish relationships with Class I and short line rail carriers operating in South Carolina.
- Obtain all Railroad operation documentation previously provided to the State, including financial and tax documentation from the Office of Regulatory Staff and Department of Revenue, respectively.
- Contact the Office of Governmental and Public Affairs with the Surface Transportation Board, and request all documentation referencing South Carolina, establishing a point of contact for SCDOT.
- Request System Diagram Maps and narratives, if available, from Class I and III carriers identifying lines that have a pending abandonment or discontinuance pending, subject for abandonment within 3 years, or subject for future abandonment in accordance to the ICC

Termination Act. If System Diagram Maps are not available, solicit a formal request on an annual basis to provide such information and mapping of the identified lines, if applicable. This is a process that may require some time to develop, since it has not been a practice for railroads in South Carolina for many years.

- Solicit Car Loading Data from Class I and III rail carriers to establish tonnage information to determine the level of service on rail lines within the state.
- Establish regular correspondence with Class I and III rail carriers.
- Monitor existing and proposed industrial development through the Department of Commerce, or other public interest groups.
- Monitor rail trail and conservancy activity by public and private environmental and recreational organizations such as, the Department of Parks and Recreation, Palmetto Conservation, Upstate Forever, etc.
- Present legislation that accomplishes the following:
 - broadens SCDOT authority to acquire and own railroad rights of way for all transportation uses, or
 - broadens SCDOT authority to acquire and own railroad rights of way for all transportation uses, and
 - provides SCDOT with the authority to acquire, own and maintain rail rights of way to the fullest extent available in the federal law.
- Become an active participant in the Statewide Rail Plan process. See Section 6 for a review of the 2008 State Rail Plan. From the viewpoint of SC Public Railways, this plan will be freight oriented. It should, however, accomplish preservation whether or not the value of at-risk corridors is immediately recognized.
- It is important to evaluate programs currently operational in other states and establish a “lessons learned” approach to developing a South Carolina Program. Correspondence with the State of Georgia and the Surface Transportation Board has indicated the cooperation from rail companies has been difficult, and it is recommended that the SCDOT should utilize relationship already established by the Division of Public Railways, the SCDOT Division of Mass Transit, and other Departments of South Carolina government.



3. STATEWIDE STRATEGIC CORRIDOR PLAN

The South Carolina Strategic Corridor System Plan, developed in 2008, identified strategic corridors to focus the limited resources of the State to assist in maintaining its position in the global marketplace and efficiently move both people and goods. The plan included the integration of different modal strategies within the development of each identified corridor.

3.1 Corridor Plan Goals

The Corridor Plan used the goals established in the strategic statewide plan. The goals included the following:

- Provide efficient connections between primary economic centers both within and outside of the state;
- Enhance South Carolina's economic vitality and economic competitiveness through the provision of an interconnected, intermodal network for the movement of freight and goods;
- Provide for a safe, secure and efficient transportation system; and
- Protect and enhance the natural, historical and cultural resources in the state.

In addition to the goals, the strategic corridor network included guiding principles that helped with the development of the plan. The guiding principles included the following:

- Coordination,
- Economy,
- System Scope and Performance, and
- Quality of Life.

While development of the strategic network was led by the goals and guiding principles, additional planning considerations were developed by local planning staff, SCDOT staff, and other transportation partners. These considerations included the following:

- The connection of major activity centers;
- Focus on the connectivity, rather than on route numbers;
- Freight and goods mobility;
- Intermodal connections and opportunities; and
- Opportunities for modal shifts.

3.2 Corridor Identification Criteria

Specific criteria were developed to evaluate the system on a point basis. The developed criteria included the following:

- Traffic volume,
- Truck traffic,
- Safety,
- Economic and trade routes,
- Emergency/disaster evacuation, and
- Tourism.

The corridor plan included identification of important system connectors. Inclusion of a connector was based on the following criteria:

- Connectivity to an Interstate so the corridor may serve as a reliever,
- Connectivity to a port or intermodal hub, and
- Connectivity to coastal areas to serve as an emergency evacuation route.

As the strategic network was developed, through development of standards, the network needs were identified using the following set of minimum standards:

- Number of lanes,
- Level of service,
- Access management,
- Safety,
- Application of context sensitive design solutions,
- Inclusion of bicycle and pedestrian facilities where feasible and appropriate,
- Inclusion of transit opportunities and coordination,
- Inclusion of strategies to address efficient freight movement and bottlenecks, and
- Coordination with local plans and policies.

The Strategic Corridors identified in the 2008 Plan are listed in **Table 3-1** and shown in **Figure 3-1**.

Table 3-1: South Carolina Strategic Corridors (2008)

CORRIDOR	LENGTH (miles)	EXISTING HIGHWAY(S) INVOLVED
Atlantic Coast	225	US 17, SC 170, SC 46, US 21, US 701
Best Friend of Charleston	120	US 1, US 78
Low Country-York	240	US 17, US 321, US 21, SC 161, SC 5
Mid-Carolina	230	US 378
Mountains to the Sea	234	US 178
Olde English-Old 96	127	SC 72
Pee Dee	146	US 52
Sandhills-Santee Cooper	172	US 521
Trans-Carolina	247	SC 9, SC 38, US 501
Upstate	121	US 123, US 29

Figure 3-1: 2008 Strategic System Plan Corridors





4. STATEWIDE INTERSTATE PLAN

The 2030 Interstate Plan was developed to help address the greatest interstate maintenance and capacity needs within the current program budget. The funding of the cost for constructing capacity or reconstruction projects is a major challenge for SCDOT. To accomplish the limited list of capacity projects in the interstate long-range plan, the interstate maintenance/operations budget was forced to remain constant at \$45 million per year from 2010 to 2028. The total program budget through 2030 was \$2.86 billion. The project lists were grouped by corridor.

The plan, developed in 2008, included all of the mainline resurfacing, drainage, signage, guardrail replacement, lighting, and Intelligent Transportation Systems (ITS) needs for maintenance on the system. Examples of capacity project needs included reconstruction of existing interstate interchanges, additional travel lanes or alternative transportation options where existing level of service has already reached capacity.



To adequately address the larger interstate program project needs without extraordinary funding would require as much as an immediate 300 percent increase in traditional interstate funding, with yearly inflationary increases comparable with construction inflation. This type of increase would be difficult to achieve without a substantial increase in yearly federal program funding, as well as additional state and local funds. For that reason, other extraordinary funding avenues should be explored to supplement the program.



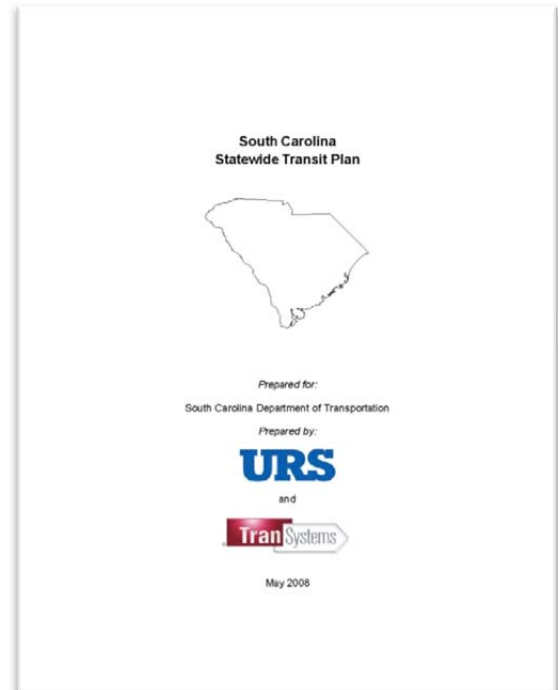
5. STATEWIDE PUBLIC TRANSIT AND COORDINATION PLANS

The South Carolina Statewide Transit Plan, developed for SCDOT in 2008, provided a long-term plan for transit. The plan highlighted the existing conditions of transit in the state, public perceptions and attitudes towards transit, transit needs, funding projections for transit, and a statewide transit action plan.

5.1 Transit Needs and Strategies

Strategies and action items for the transit plan included the following elements:

- **Service needs and strategies** – general descriptions for transit service improvements to meet the identified needs.
- **Financial needs and strategies** – funding projections for existing services, as well as proposed services. These costs were compared to funding estimates using existing sources as well as potential new sources.
- **Capital/technology needs and strategies** – projections were developed of vehicle needs, technology needs (e.g. ITS applications), and facility needs (e.g. multimodal centers).
- **Policy needs and strategies** – suggested policy revisions and general planning guidelines were addressed. Transportation coordination issues regarding human service agencies were included in this discussion.



5.2 Financial Resources for Transit and Recommendations

The Plan noted that public transit in South Carolina is funded through a combination of sources:

- **Federal Government Initiatives** –South Carolina is appropriated Federal Transit Administration funding each year. Each of the various federal programs carries specific restrictions with regard to use of the funds, so while funds may be more than adequate for needs associated with some aspects of transit service, there may be insufficient monies for other elements. Most federal funds also have a local matching requirement, and without the needed local match, federal monies cannot be drawn down.
 - To the extent that existing federal sources can be utilized within programmatic requirements, ensure that sufficient local matching funds, which can be comprised of state and / or local sources, are available to fully draw down available federal monies.

- Advocate for federal legislative changes to enable more flexibility for the use of federal funds for operational uses.
- Work to obtain discretionary funding, e.g. from the Section 5309 Bus Discretionary, New Starts, and Small Starts funding programs for major investments in the future.
- **State Government Initiatives** - State funding is currently quite limited, but has the potential to play an important role in the transit funding picture since it could be used to match federal monies that cannot be drawn down now, or could be used to cover specific types of costs (i.e. operational costs) for which federal funding is restricted.
 - Fully consider the advantages and disadvantages of various state-level funding streams, and then focus on the most palatable option for an effort to increase transit funding.
 - Although the Motor Fuel User Fee may be an appropriate source for additional transit funding, SCDOT should also consider transit needs as part of a comprehensive reassessment of how the organization’s funds are spent.
 - Grant local entities more authority to develop local funding sources for transit.
- **Local Government Initiatives** - Local funding is playing an increasingly important role in transit funding in the State, particularly as state funding has not grown in recent years.
 - Although any financial assistance from local governments is beneficial, the need for dedicated, recurring funding should be emphasized when the issue of local funding is being discussed with local leaders.
 - The types of local revenue sources considered most palatable for transit use in one area may not necessarily be desirable in another area.
- **Other Sources** - Non-governmental sources, including passenger fares and business contributions, are an important part of an overall funding package, but should not be relied upon as primary sources for revenue growth.
 - Passenger fares should be reasonable for patrons and not dissuade them from using transit.
 - Grants from private entities can be pursued for specific services or other areas of need, but are often limited in scale and are likely to be non-recurring.
 - Obtaining contributions from local businesses can help to create a stronger sense of community ownership in systems.
- Contract revenues for specialized services.
- Advertising revenue and other miscellaneous sources.



6. STATE RAIL PLAN

The South Carolina State Rail Plan, which began in the summer of 2008 and completed in March 2009, was much broader in scope than the previous State Rail Plan based on prior federal funding programs. The Passenger Rail Investment and Improvement Act of 2008¹, which became law during the course of the study (October 2008), established a new set of Rail Plan requirements, which were met in part, but not in whole in the 2008 update of the State Rail Plan.

6.1 Existing System

Three state agencies in South Carolina have a direct involvement with the state's railroads: Department of Commerce, Department of Transportation, and the Office of Regulatory Staff (ORS).

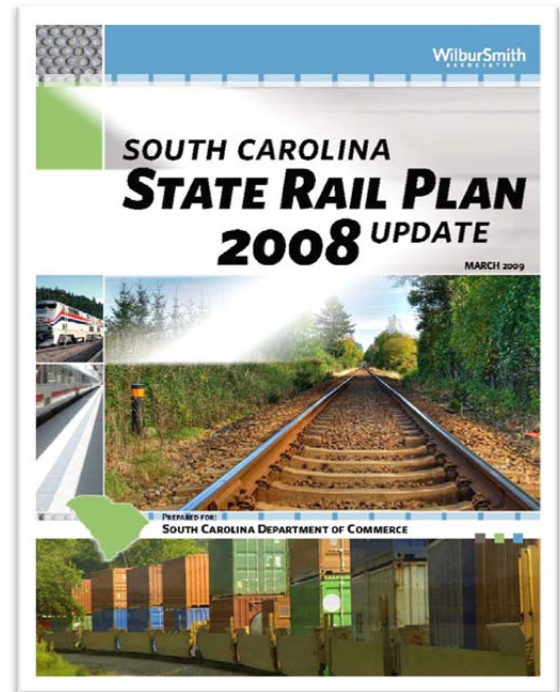
The freight rail system is operated by 11 different rail carriers, two are Class I carriers, CSX Transportation and Norfolk Southern Railway, and account for 1,928 miles or 85 percent of the state rail system, while Class III carriers or terminal companies make up the remaining 15 percent of the system. The state passenger rail service for South Carolina is run by Amtrak. The four daily trains which travel through the state are:

- Silver Star – New York/Tampa/Miami via Columbia,
- Silver Meteor – New York/Miami via Charleston,
- Palmetto – New York/Savannah via Charleston, and
- Crescent – New York/New Orleans via Greenville.

6.2 Rail Project Funding Needs

Several rail projects identified in the 2008 State Rail Plan were expected to either require or request public funding. Those that were active or thought most likely to be advanced at the time included:

- **Short Lines** – Needs of the state's short line rail carriers for capacity, rehabilitation and safety projects totaled \$134 million.



¹ H.R. 2095, The rail safety and Amtrak funding authorization bill, signed on October 16, 2008.

- **Southeast High Speed Rail Corridor** – Route costs for the Upstate line were estimated in a report from U.S. DOT’s Volpe Center at \$1.2 to \$1.4 billion.²
- **Commuter Rail** – Charleston has applied to the State Infrastructure Bank for \$206 million for capital costs. An active investigation of service between Columbia and Camden was ongoing at the time of the study. Capital costs were estimated at \$80 million in a prior study.
- **Class I Railroad Corridor Initiatives** – The Class I Corridor initiatives have been presented as public-private partnerships and following the model used in preceding projects, the state will be targeted as a public partner. CSX Transportation identified specific projects in the state, but NS did not. However, replacement of the second track removed in part on the NS main track through the Upstate will most likely be the designated improvement. Costs for these initiatives could approach \$500 million or more with the state’s share one-third or \$165 million.
- **Columbia’s Assembly Street Grade Separation Project** – Several alternatives have been developed for this railroad consolidation and improvement project. Estimated costs range from a low of \$23 million to a high of \$87 million with the most likely implementable alternative in the middle of the range.

6.3 Federal Funding Sources

Existing Federal Rail Financial Assistance Programs – A number of federal agencies administer transportation programs from which rail financial assistance is available for states, including:

- Federal Railroad Administration (FRA) Programs,
- Federal Highway Administration (FHWA) Programs,
- Federal Transit Administration (FTA),
- U.S. Department of Transportation (USDOT),
- U.S. Department of Commerce,
- U.S. Department of Agriculture (USDA), and
- Environmental Protection Agency (EPA).

Potential Sources of State and Local Rail Financial Assistance – The 2008 State Rail Plan noted that the lack of substantial federal rail assistance programs and the need for states to address outstanding highway needs with programs for which rail projects are eligible has required those states that have active rail assistance programs to develop programs from substantially state resources. Programs used by these states include:

- State Infrastructure Grant Programs,
- State Rail Infrastructure Loan Programs,
- State Rail Intercity Passenger Assistance Programs,
- State Rail Commuter Programs, and
- State Rail Industrial Access/Economic Development Programs.

² Preliminary estimate and does not include equipment nor operating costs.

6.4 Recommendations of the State Rail Plan

The 2008 State Rail Plan Update, developed for the South Carolina Department of Commerce, identified a number of rail issues in South Carolina involving both the public and the rail carriers. Several of the issues concerning rail capacity and rail passenger service can be addressed in part with state participation in the Passenger Rail Investment and Improvement Act of 2008, which became public law on October 16, 2008 after the 2008 State Rail Plan Update effort had been initiated. Participation in the various railroad corridor initiatives offered further opportunities. The Plan noted that public benefits in terms of mitigation of roadway congestion, safety, maintenance and capital investment, improvement of mobility, and economic development can result. Many other issues would need to be addressed through local or state initiatives. Recommendations contained in the 2008 State Rail Plan Update are summarized below in italics.

- **Funding**
 - *Rail Passenger and Railroad Capacity Projects - Compliance with the State Rail Plan requirements contained in the Passenger Rail Investment and Improvement Act of 2008 is necessary to obtain capital investment grants for rail passenger service and railroad congestion contained in the same legislation. The projected rail funding needs attributed to these projects contained in the 2008 plan will take some time to fully develop, providing an opportunity to meet the provisions for the new State Rail Plan requirements.*
 - *Intermodal Projects - Funding needs for intermodal projects associated with the Port of Charleston are also imminent, but public investment needs are dependent on the alternative(s) to be implemented and operating party(s) involved.*
 - *Short Line Needs - Short line needs, however, are current, in many cases immediate, and are not likely to qualify for grants available under the new 2008 Act. They require much less investment for individual projects than those associated with passenger Class I mainline projects and most can be made ready for implementation in a very short period of time. Existing programs, federal and state, should be examined for applicability and availability to address these needs.*

- **Rail Program Organization**
 - *A coordinated effort would be needed to meet the provisions for a State Rail Plan, established in the Passenger Rail Investment and Improvement Act of 2008, and to obtain funding provided in that legislation. The new requirements for a State Rail Plan require, among others, that:*
 - *“A State Rail Transportation Authority” be established or designated to “prepare, maintain, coordinate and administer the plan”; and*
 - *“A State rail plan approval authority” be established or designated to approve the plan.*
 - *It was recommended that of the two agencies then involved in rail planning, the SCDOT be selected as the “State Rail Transportation Authority”.*
 - *The “State Rail Plan Approval Authority” should be comprised of representatives of each agency involved in rail transportation. In the case of the SCDOT, it was suggested that planning and safety representatives be included.*
 - *It was also recommended that a rail advisory committee be established comprised of stakeholders - representatives from the railroad industry, the users of rail service, community and regional planners and other interested agencies such as the State Ports*

Authority. This body would function to advise the State Rail Transportation Authority during the rail plan process and function as a first line of review for proposals formulated.

▪ **Port of Charleston**

- *Rail intermodal service in general, near-dock intermodal access for the new Navy Base Container Terminal, and dual rail service for Veterans Terminal*
- *Increased capacity of the intermodal terminals of the two Class I railroads in Charleston*
- *Possible conversion of the Cooper Yard-Macalloy site into an on-dock facility.*
- *Conduct a market study to establish intermodal rail service to the Upstate.*

▪ **Rail Capacity**

- *While no significant capacity problems were revealed to currently exist in South Carolina, the railroads had corridor improvement initiatives running through the state, and regional and local rail passenger proposals will increase demand in the same corridors. The state should prepare to participate in these public-private partnership initiatives as well as both intercity and commuter rail services.*

▪ **Competitive Rail Service**

- *Since the state no longer has rail regulatory authority due to the passage of the Stagger's Rail Act, the only means it can influence competitive service is through federal legislative efforts and promoting dual access where available. Areas of the state with dual rail access potential have been identified in the 2008 State Rail Plan study. It was recommended that industrial sites in these areas be identified and protected.*

▪ **Railroad Support**

- *Once the State Rail Transportation Authority is established, it was recommended as its first duty that it address "state policy involving freight and passenger rail transportation including commuter rail operations, in the state." This is also a stated rail plan purpose.³ The 2008 State Rail Plan Update noted that a unified state rail policy did not exist but was desperately needed to guide planning and project participation including funding.*

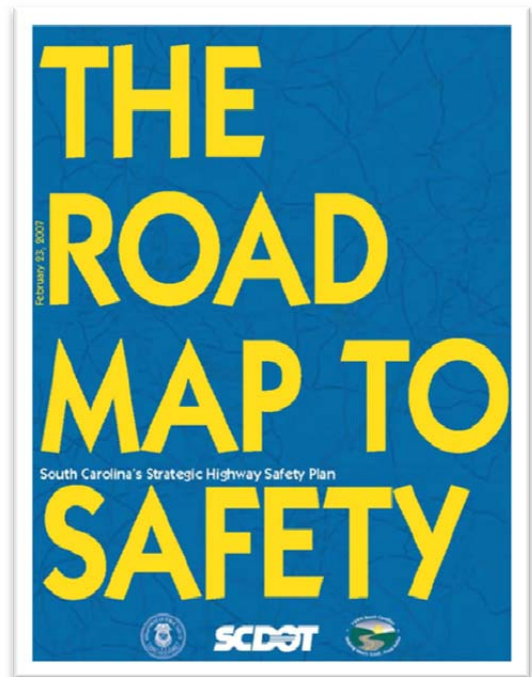
³ Section 22703 of the Passenger Rail Investment and Improvement Act of 2008.



7. STRATEGIC HIGHWAY SAFETY PLAN

The 2007 Road Map to Safety⁴ was South Carolina's first Strategic Highway Safety Plan. It identified a comprehensive set of safety strategies for SCDOT to provide guidance on improving safety and reducing the number of traffic crashes, injuries, and fatalities on the State's roads and highways. The Road Map to Safety serves as a source of guidance to increase coordination, communication, and cooperation between local, state, and federal partners concerned with highway safety throughout the State.

The implementation of the Road Map facilitates a requirement of the federal reauthorization bill, SAFETEA-LU, to integrate safety into the transportation planning process at all levels, specifically the Strategic Highway Safety Plan (SHSP), the Statewide Transportation Improvement Program (STIP) and the long-range transportation plans developed by State Departments of Transportation (DOTs) and MPOs respectively. Consistency was built between the Road Map and the Statewide Multimodal Transportation Plan by incorporating common goals, objectives, and strategies from each planning process.



7.1 Safety Goals

In 2003, SCDOT set a goal to reduce the number of traffic crash fatalities by approximately 25 percent by 2010 compared with a 2004 baseline. The goal to reduce the number of traffic crash injuries was set at 3 percent each year. Additionally, SCDOT identified the goal of endorsing and supporting efforts to increase the amount of funding for state and local traffic law enforcement safety improvements to highways, and enhanced EMS and first responder capabilities.

The good progress made toward meeting these goals is illustrated in **Table 7-1**. While the number of fatalities did not improve during the first three years, significant reductions have occurred in each of the last three years, resulting in an overall reduction by 2010 of 22.6 percent compared to 2004. Less consistency has been observed in the number of traffic crash injuries over the period from 2004 to

⁴ The Road Map to Safety, prepared by SCDOT, South Carolina Department of Public Safety (SCDPS), and South Carolina Division Office of FHWA, dated February 23, 2007.

2009, resulting in an overall reduction of 5.7 percent over this 5-year period, amounting to an average of 1.2 percent per year.

Table 7-1: Traffic Fatalities and Injuries in South Carolina (2004-2010)

Year	Traffic Fatalities	Reduction in Fatalities compared to 2004	Traffic Crash Injuries	Annual Change in Traffic Crash Injuries
2004	1,046	--	51,226	--
2005	1,093	-4.5%	49,841	2.7%
2006	1,044	0.2%	50,144	-0.6%
2007	1,077	-3.0%	49,262	1.8%
2008	921	12.0%	46,925	4.7%
2009	894	14.5%	48,303	-2.9%
2010	810	22.6%		

7.2 Safety Strategies

Eight key strategies outlined included:

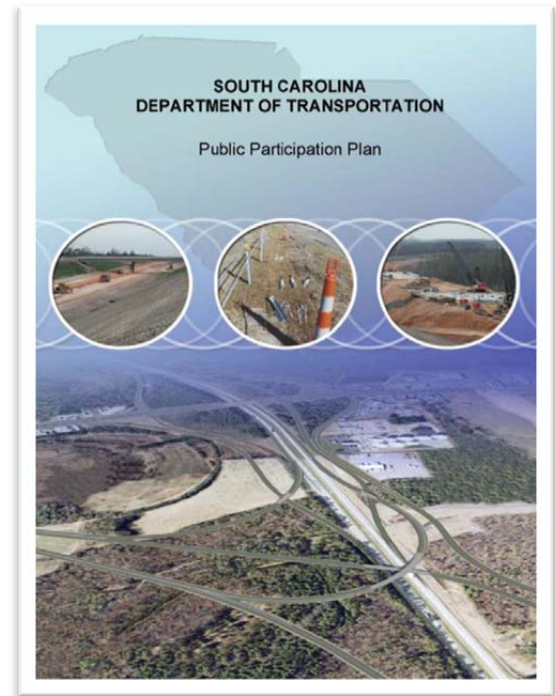
- Collaborating with Other Agencies to Maintain Support, and Improve Existing Safety and Licensing Legislation;
- Effectively Deterring, Identifying, Arresting, and Adjudicating Alcohol and Other Drug Impaired Drivers and Pedestrians;
- Expanding, Improving, and Maintaining Roadway Clear Zones and Visibility Features (i.e. markings, signs, lighting, etc.);
- Expanding the Installation of Shoulder, Edgeline, and Centerline Rumble Strips and Protective Barriers, and the Use of Wider, Paved Shoulders;
- Improving Communications Strategies;
- Improving Current Data Systems and Analysis Methods;
- Increasing Enforcement and Public Information and Education on Traffic Safety Issues; and
- Increasing Occupant Restraint Usage.



8. SCDOT PUBLIC PARTICIPATION PLAN

The Public Participation Plan provides direction for effective participation in the development of SCDOT's transportation plans and programs. For SCDOT's stakeholders, the participation plan describes opportunities to participate in identifying the statewide priorities for transportation investments in South Carolina. While many of the same communication techniques described in this plan are used during the study and design of specific transportation improvements, project development differs significantly from the statewide planning process. For this reason, project-level participation is not included within the scope of this plan.

Two major components of the statewide planning process are the Statewide Comprehensive Transportation Plan and the State Transportation Improvement Program (STIP). The Statewide Comprehensive Transportation Plan provides the long-term guidance for the development of transportation programs and establishes strategies to achieve transportation goals for a 20-year period. The STIP is a short-term program that lists all roads, bridge, and transit projects scheduled for improvement based on available funding over a six-year period.



8.1 Goals and Objectives

The Public Involvement Plan provides direction for effective participation in the development of the SCDOT transportation plans and programs. The Plan identified the following goals and objectives:

- Solicit public participation in each phase of the statewide planning process.
- Seek broad identification and representative involvement of stakeholders and users of all transportation modes.
 - SCDOT's customer base includes not only the general public and federal, state, local, and tribal units of government, but businesses, industries, and transportation service providers as well as organizations that represent people with specific transportation needs.

- Utilize effective and equitable avenues for distributing information and receiving comments.
 - In addition to standard notifications and solicitations for comments, SCDOT uses minority media outlets in an effort to reach traditionally underserved stakeholders. Comments are received through standard mail as well as electronic mail and SCDOT’s internet site.
- Provide educational materials and design participation initiatives that will support and encourage effective participation.
 - Effective participation in the transportation decision-making process requires an understanding of transportation issues and the framework for making transportation investment decisions. Visualization techniques such as videos, posters, maps, and pictures can be especially helpful for describing the plan and program development.
- Support and encourage continuous improvement in the methods used to meet the public need for information and involvement.
 - Public information and involvement methods are continually evolving. SCDOT is committed to periodic review and evaluation of its public participation process.



9. SCSPA STRATEGIC PLAN UPDATE

This Plan, sponsored by the State Ports Authority (SCSPA), was an update to the 2009 Strategic Plan and reflected major changes in the global and U.S. economies, the container shipping industry, and the Atlantic Coast port industry. The Plan update process included three months of research, analysis and interviews, combined with board sessions and two planning sessions. The key elements of the Plan update included the following:

- Review and enhance, if appropriate, the SCSPA's mission;
- Review and refine strategic priorities where appropriate; and
- Identify key actions required to successfully pursue the SCSPA's strategic priorities.

The SCSPA is an enterprise agency of the State of South Carolina and is governed by an 11-member Board with 9 members appointed by the Governor and approved by the Senate. The Board's responsibilities include hiring the Chief Executive Officer, setting policy and direction, and providing oversight and guidance to the SCSPA's Senior Management Team.

The SCSPA operates multiple lines of business and asset bases while competing with other ports in the South Atlantic-East Gulf port range. The major lines of business include container, breakbulk, roll-on/roll-off (RoRo), bulk, and cruise. SCSPA asset bases include the following:

- **Port Charleston:**
 - Container facilities - existing: North Charleston and Wando Welch
 - Container facilities - new: currently developing the Navy Base Container Terminal



- Multipurpose facilities
 - Columbus Street
 - Veterans’ Terminal
 - Union Pier Terminal
- **Port Georgetown:**
 - Breakbulk and bulk facilities
- **Other Assets:**
 - Daniel & Thomas Island properties
 - Port Royal

The contribution that the SCSPA makes to South Carolina’s economy and economic development is significant with \$45 billion in total economic output each year across the state. Additional economic impacts from the SCSPA Port and Maritime Industry include the following:

- 260,800 jobs, representing 10.9 percent of all jobs in South Carolina;
- \$11.8 billion in labor income, which is 13.6 percent of the state’s total income;
- \$1.5 billion in state and local taxes; and
- \$18.5 billion in value-added impact, representing 12.1 percent of the total gross state product.

9.1 The Updated SCSPA Mission Statement

The SCSPA promotes, develops and facilitates waterborne commerce to meet the current and future needs of its customers, and for the economic benefit of the citizens and businesses of South Carolina. The SCSPA fulfills this mission by delivering cost-competitive facilities and services, collaborating with customers and stakeholders, and sustaining its financial self-sufficiency.

The SCSPA mission includes the following six objectives:

- **Growth:** aggressively pursue growth opportunities across all lines of business;
- **Productivity:** deliver superior, cost-effective productivity to its customers;
- **Asset utilization:** maximize the efficiency and use of its assets;
- **Financial self-sufficiency:** sustain the SCSPA’s ability to continuously invest to meet customers’ ongoing requirements;
- **Economic contribution:** contribute to the economic betterment of south Carolina’s citizens and businesses by sustaining and growing waterborne transportation employment opportunities and fostering full service ports; and
- **Staff development:** recruit, retain, develop and train customer-centric employees.

The SCSPA Strategic Issues are defined as an opportunity or a threat that fundamentally affects the ability of an organization to fulfill its mission and achieve its objectives. The hallmarks of a strategic issue include the following:

- Major uncertainties or risks;
- Complex, i.e. involves multiple parties or decision-makers, multiple factors or drivers that are interrelated, multiple outcomes depending on the interaction of key drivers;
- Ability of an organization to achieve sustainable competitive advantages;
- Commands significant resources; and
- Requires the focus of senior management to address.

In order to successfully fulfill its mission, the SCSPA has identified the following four strategic issues:

- **Cargo Growth:** How does the SCSPA best position itself to take advantage of current and emerging market opportunities to expand and diversify its major lines of business?
- **Infrastructure Development:** What is the optimal infrastructure development plan for positioning the SCSPA to achieve above market growth in and diversification of its major lines of business?
- **Productivity and Efficiency:** What is required to continuously improve productivity and efficiency in order to sustain the SCSPA’s competitive cost advantages?
- **Financial Sustainability:** How does the SCSPA sustain its financial self-sufficiency while achieving investing in the facilities, infrastructure and process improvements required to achieve superior market growth?

9.2 Strategic Initiatives

These four key strategic initiatives were developed during the SCSPA Strategic Plan update to assist in the implementation of the plan.

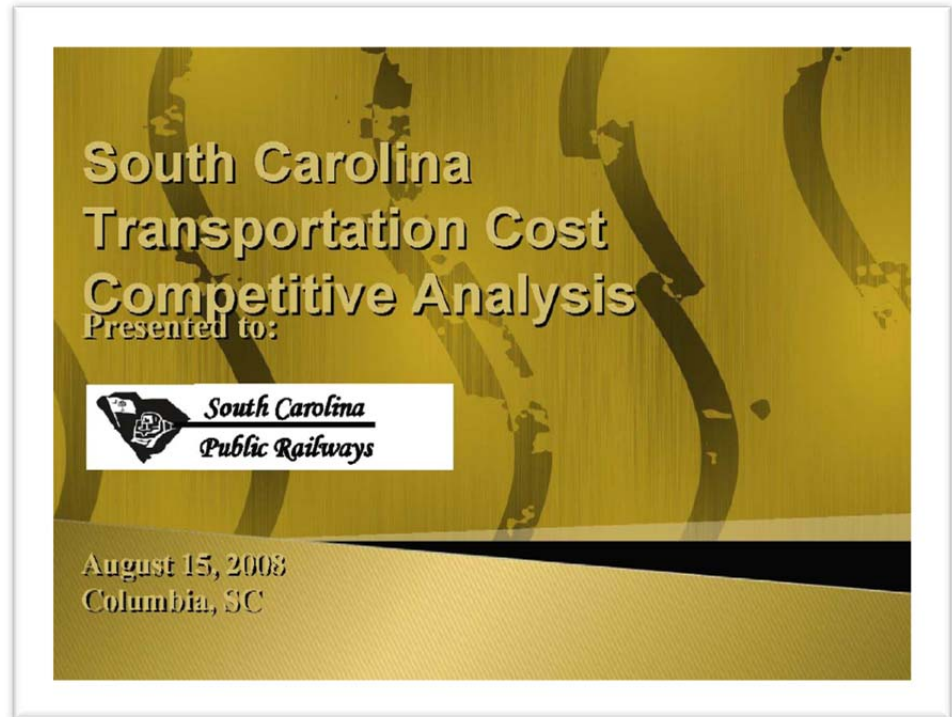
- **Cargo Growth Strategy:**
 - The SCSPA will continue to pursue a multi-tiered approach to growing and diversifying its major lines of business, focusing on:
 - Customer retention and expansion,
 - New customer development,
 - Partnering with market leading stakeholders to enhance and expand the SCSPA’s competitiveness and market opportunities, and
 - Incremental line of business and product diversification.
- **Infrastructure Development Strategy: Post 45’ Harbor Deepening Project**
 - The SCSPA will pursue an integrated approach to utilizing, modernizing and expanding port and related freight and cruise transportation infrastructure by:
 - Successfully completing the fast-track, Post 45’ Harbor Deepening Project;
 - Maximizing the use and efficiency of the SCSPA’s existing asset base;
 - Successfully completing Phase I of the Navy Base Container Terminal; and

- Cooperating and working with area transportation leaders and private transportation companies, government leaders, shipping companies, port users and other stakeholders to improve competitiveness of regional rail transportation, and improve opportunities for rail use by area cargo shippers who use the Port of Charleston.
- **Productivity and Efficiency Strategy**
 - The SCSPA will pursue a continuous process improvement program designed to sustain and enhance its leadership role in productivity and cost competitiveness by:
 - Successfully implementing its new marine terminal information system,
 - Successfully implementing its rail drayage program,
 - Partnering with sector market leaders in key industries to formulate and implement pragmatic strategies to expand the Port of Charleston’s growing supply chain programs, and
 - Continuously reviewing, refining and redesigning (as required) operations and customer service processes to improve efficiency and productivity and reduce customers’ costs.
- **Financial Sustainability Strategy**
 - The SCSPA will continue the implementation of its long-term financial strategy to ensure the SCSPA fulfills its financial self-sufficiency mandate and thus has the requisite funds to continuously invest in the modernization and expansion of its facilities, infrastructure and services.
 - Short-term: successfully complete implementation of current process improvement, cost-reduction and IT initiatives. Insure the SCSPA’s organizational structure and processes align with its strategy,
 - Mid-to-long term: identify, evaluate, and integrate new and emerging financial management and financing techniques to support the SCSPA’s cargo growth and infrastructure development strategies, and
 - Opportunistically evaluate opportunities to pursue public-private partnerships with market leaders to fund SCSPA’s long-term investment strategy.



10. TRANSPORTATION COST COMPETITIVE ANALYSIS

The South Carolina Transportation Cost Competitive Analysis⁵, prepared for the South Carolina Department of Commerce, compares South Carolina's freight competitiveness against its surrounding competitors in the field. The comparison includes roadway, rail operations, air, port operations, inland terminals, and manufacturing and distribution.



South Carolina is very competitive in the following areas:

- International cargo (import and export) when compared to Georgia Ports, Jacksonville, Tampa and North Carolina Ports Authority,
- Domestic and international rail and intermodal cargo destined for IPI points (Midwest, Mississippi Valley, Texas and Mexico) when compared with Georgia, North Carolina and Florida,
- Trucking (TL and containerized) for IPI origins and/or destinations including Florida, North Carolina and Georgia,
- LTL and Parcel when compared against Florida, Virginia and North Carolina,
- Air Cargo when compared with Georgia, North Carolina, Virginia and Florida,

⁵ South Carolina Transportation Cost Competitive Analysis presented to South Carolina Public Railways, August 15, 2008.

- Shipper’s perspectives:
 - Competitive (cost, reliability, availability, security and velocity) if truck, port or parcel based
 - “Sweet spot” for international cargoes is the Midwest, lower Mississippi Valley, Texas, the plains states and central Mexico
- Georgia (and the GPA) is most significant competitor, and
- Panama Canal expansion (2014) is a significant event if SCSPA can develop capacity, including intermodal rail.

10.1 Issues

10.1.1 South Carolina

Rail is not competitive for short haul in South Carolina, because all cargo goes through Atlanta regardless of origin in South Carolina or Georgia. SCSPA does not have a competitive advantage with GPA for intermodal rail to IPI destinations. Intermodal Rail is not, at least currently, the driving force behind rail capacity enhancements. Almost all of the shippers and logistics providers interviewed and surveyed felt Georgia had a perceived “significant competitive edge” over South Carolina. The perception is based upon four issues:

- Political emphasis of “pro-freight development and mobility,”
- All rail and intermodal cargo through Atlanta,
- Not having a complete and knowledgeable understanding of costs, and
- Atlanta is a major air and parcel hub in the SE United States.

10.1.2 Freight Competition with Georgia

Identifying how a state compares with its neighboring states is important for a state that is trying to be competitive in the marketplace. Due to its close proximity to Georgia and its ports, South Carolina must constantly compare how the state’s freight operations compare with its main regional competitor for freight. Examples of the competitive issues with freight operations in Georgia are:

- The GPA is outspending SCSPA by a significant amount (\$1.2 billion to \$600 million) to grow from 2 million TEU’s to 6 million TEU’s vs. 2 million TEU’s to 3.5 million TEU’s for SCSPA,
- Significant high level political emphasis on trade,
- NIMBY effect (North Charleston vs. Garden City),
- State spending on transportation infrastructure, including on-dock or near-dock intermodal rail,
- Ease and speed of permitting and environmental review,
- CSX tried to develop two Intermodal Yard’s (IY) in South Carolina, but were rebuffed by local communities; openly welcomed in Georgia, and

- Both railroads, two major ocean carriers, a large third-party logistics company (3PL), and a large industrial property developer cited personal and frequent contacts with Governor, State legislators and a US Congressman to encourage their moving to GPA.

10.1.3 SCSPA is Expanding Capacity

The SCSPA has identified key strategic growth areas to expand capacity at its facilities. Areas influencing capacity expansion include:

- Port has approved and authorized new terminal and infrastructure development,
- Port has highest productivity in the US, and
- Port is an “operating port” = direct control of labor facilities and market.

Port Charleston Orientation - Enhancements for Port Charleston that have been identified during the SCSPA Strategic Plan update include:

- 5 total terminals in Charleston
 - 3 container terminals
 - 2 Breakbulk/RoRo
- 47' of water in the entrance channel at mean low water
- 45' of water in the interior channel at mean low water
- Close to the open sea. All terminals are within 2 hours
- Close to Interstate highways with direct access to 5 interstates in SC
- New container terminal currently underway

New Charleston Terminal - The SCSPA Strategic Plan update highlights planned investments for the new Charleston Terminal. The highlights identify the Phase 1 and full project investments planned at the facility.

- **Phase 1:** 171 acres and a 2,400 ft berth
- **Full project:** 280 acres and a 3,510 ft berth

10.2 Conclusions

Enhancements to the freight system in South Carolina are key investments for the state to stay competitive in attracting freight operations to the state. These investments include waterside operations at the ports, as well as investments at landside operations sites.

10.2.1 SCSPA Inland Markets

With more freight being transported throughout the state, investments must be made to the transportation system to improve the connectivity of important inland freight corridors. Identified improvements to inland markets include:

- Existing road and rail infrastructure working well,
- Dispersal of terminals is minimizing choke points and minimizing truck impact; 72 interchange lanes, and
- Rail has “low hanging fruit” to provide improvements:
 - Direct Charleston/Atlanta routing via CSX
 - Improved Charleston/Charlotte routing via CSX
 - Already enhanced NS service Charleston/Charlotte is available
 - NS has invested heavily in improved track sidings for coal business, which has benefited intermodal business as well.

10.2.2 Port has “Surge” capability

The SCSPA continues to prepare for rapid growth at its port operations sites, including waterside and inland sites. Examples to capture this planned growth include:

- Preparation for a short-term surge and continual improvement of operations in advance of cargo forecasts, and
- Developers are adding 20+ million sf of class A industrial DCs within 30 miles of the Port of Charleston
 - These are spec buildings
 - Some are available now
 - Several very large ones are to hit the market in the coming year.

10.3 Recommendations

Keeping South Carolina’s freight network moving forward does not focus on one particular mode or location. Recommended policy and infrastructure enhancements to the state’s freight transportation system include:

- Build upon the “sweet spot” IPI markets,
- Encourage the enhancements of infrastructure capacity (road and rail) improvements for:
 - Charleston
 - Columbia
 - Greenville/Spartanburg,
- Encourage major industrial developments, logistics and distribution centers and manufacturing complexes to locate near existing major transportation corridors,
- Engage the “political machine” fully
 - Marketing the potential client
 - Federal and private financing
 - Environmental mitigation
 - Streamline and expedite permitting requirements and procedures, and

- Support SCSPA in their efforts to expand capacity and grow the business
 - Road and rail access to container terminals
 - Coordinated environmental review and permitting.

10.4 Next Steps

The identified next steps to the South Carolina freight network by the South Carolina Transportation Cost Competitive Analysis included:

- Transfer data and information to State Rail Plan Study team(s), and
- Legislature needs to understand and appreciate Port's growth, expansion planning and capacity constraints.