

South Carolina Statewide Comprehensive Multimodal Transportation Plan Summary of Statewide Planning Process

I. Introduction

Since 1990, the state of South Carolina has experienced rapid growth and development but, the amount of travel through and within South Carolina grew at a rate far exceeding its population growth between 1990 and 2005. Table 1, shown below, depicts this dramatic increase in travel demand. This growth and the increased demand to move goods and people are directly related to the economic vitality of the state. The transportation system is a key element in allowing the State to maintain and enhance its position in the global economy.

Table 1. Trends in VMT per Capita

Year	Population	Vehicle Miles of Travel (millions)	System Miles (Lane Miles)	Vehicle Miles of Travel per Capita
1990	3,499,064	34,377,000	89,067	9,825
2000	4,012,012	45,083,000	89,359	11,237
2005	4,229,990	47,598,000	89,834	11,253
Increase	20.8%	38.4%	0.3%	14.5%

Source: SCDOT and US Census Bureau

In addition to the increasing demands on the transportation system, the state is challenged to target its limited financial resources in the most effective manner. Concurrently, the dollars available for transportation investments are shrinking and costs of construction are rising dramatically. The increased demand on the transportation system, coupled with financial limitations on the ability to address mobility issues, dictates that innovative measures be taken to put all of the State's transportation assets to use.

The South Carolina Statewide Comprehensive Multimodal Transportation Plan is comprised of seven primary elements. These elements focus on Bridge Needs and Maintenance; Interstate Plan; Public Transit Plan and Human Services Coordination Plans; Metropolitan Planning Organization and Councils of Government Plans; Railroad Right-of-Way Preservation Inventory; Safety Plan; and the Statewide Strategic Corridor Plan. This plan addresses these elements and the array of policies, considerations and strategies needed to provide for an effective and efficient, multimodal transportation system for the State.

Core elements of the Statewide Plan include: the Statewide Strategic Corridor Plan, the Statewide Public Transit Plan, and the Railroad Right of Way

Preservation Inventory. The inherent relationships and coordination between the modal elements encompassed in this plan and the other elements are incorporated throughout this planning process. This coordination and integration is critical in the provision of a transportation system that meets the mobility needs of residents and visitors.

In addition to meeting the mobility needs of its citizens, the transportation system is a key element in allowing the state to maintain and enhance its position in the global economy. The Statewide Strategic Corridor Plan identifies the strategic corridors that form the backbone of the state's transportation system. This network provides a connected, continuous system that serves the traveling public, as well as providing the needed connections to maintain and enhance economic vitality.

The development of a policy framework for the statewide strategic corridor system provided the foundation for the corridor planning process. Without policies to guide the process, there are no means to implement a credible program, and certainly no means to measure the State's performance in carrying out that program. Policies were identified to guide the development of the strategic network and these policies were developed in coordination with, and in support of, the overall goals and objectives of the SCDOT. The primary elements focus on safety, system maintenance and preservation, and maximization of resources.

The Statewide Transit Plan was assembled based on a bottom-up approach with an emphasis on transit needs and the common goals from each of the ten (10) planning regions. A successful transit program is one that meets the needs of South Carolina residents who do not have another means of travel, and also provides travel choices for those that do. The Statewide and Regional Transit planning process utilized a broad outreach program to determine the quantitative and qualitative needs and desired choices for public transportation, and provides the action plans to address them.

The Rail element is an assessment of rail corridors developed to identify opportunities for future transportation use. The effort involved conducting an inventory of rail corridors throughout the State, and identifying their status and those available for preservation through acquisition. The inventory was used in the evaluation of transit applications in the Regional Transit Plans, including their potential use for certain fixed guideway transit technologies.

These three elements combined to accomplish the following:

1. Identify strategic policies promoting an efficient intermodal transportation system

2. Establish Goals and Guiding Principles for the development, evaluation and improvement of a strategic network of highway corridors through stakeholder input.
3. Identify perceptions, needs, and a vision, through stakeholder input, for public transit services at the regional, interregional, and statewide level.
4. Identify the operational status of rail lines throughout the State, including those that have been abandoned, discontinued service, preserved through rail banking, or are in active service.
5. Identify where intermodal or modal shift opportunities should be used to meet long range transportation needs.

Lessons Learned/Best Practices

South Carolina is not the only state to have developed a planning process and approach to meet the increasing transportation demands and, with shrinking dollars available to address issues, maximizing the benefits of transportation investments. As part of this effort, the activities and approaches of other states were researched.

A number of states have developed similar systems and SCDOT built on the lessons learned and best practices identified within these efforts and experiences. These lessons learned by other states provided direction in the development of the plan and helped streamline the process by utilizing approaches that were successful, while avoiding those that were not. The majority of these strategic networks developed by other states have been based on the correlation and dependence of statewide economic vitality with an effective transportation system. The primary focus of these networks has been the efficient movement of both passengers and goods. These lessons learned provided a platform for developing a strategic transportation plan tailored to fit the needs of South Carolina.

Efforts from a cross section of states were examined, including neighboring states and those with similar highway networks. This examination targeted both recent efforts of states, as well as those from states which have had developed networks long enough to measure performance. The wide-range of planning timeframes included in the research was to ensure this planning process was based on best and tested practices. The states examined include North Carolina, Florida, Georgia, Missouri, Virginia, Ohio and Pennsylvania. Table 2 displays a comparison of the goals of the strategic networks from five of the states most similar in focus to South Carolina. Similar goals are reflected with the same colors.

Table 2. Comparison of Goals – Other States

North Carolina	Florida	Ohio	Virginia	Missouri
Strategic Corridor Network				
Strategic Highway Corridors	Florida Intrastate Highway System	Access Ohio	V-Trans 2025	Missouri LRTP
Goals of the Strategic System				
Enhance major corridor mobility within and to destinations just outside North Carolina	Provision of a major, interconnected network moving people and goods	Continually reduce the number and severity of crashes	Provide a safe, secure and integrated transportation system	Ensure safety and security in travel and the transportation system
Partner with stakeholders and all vested agencies to create a clear vision for each corridor	Maintaining and enhancing Florida's economy and competitiveness	Complete macro-corridor in the 2003 <i>Jobs and Progress Plan</i>	Preserve and manage existing systems through technology and efficient operations	Preserve the existing multimodal transportation system
Protect investment in critical highway corridors	Connecting important regional, national, and global markets and major intermodal facilities	Reduce traffic congestion and improve travel reliability	Efficient movement of people and goods with expanded choices and improved intermodal connectivity	Relieve congestion to ensure the smooth flow of people and goods throughout the entire system
Enhance connectivity of travel within and just outside North Carolina	Maintaining mobility necessary to serve both residents and the tourist industry	Plan and sustain manageable and predictable schedule of existing transportation system maintenance	Improve economic vitality	Broaden access to transportation alternatives and enhance the quality of life of our communities through transportation and the protection of the natural environment
Support a statewide vision and identification of a desired facility type - freeway, expressway, boulevard or thoroughfare - for each corridor		Efficiently manage resources to execute core business functions while maintaining the highest possible levels of quality and productivity	Improve quality of life with coordination of transportation, land use, and economic development	Facilitate the efficient movement of goods using all modes of transportation
Influence the project level decision making process to achieve broader goals through funding, project planning, design, access and land-use decisions.			Improve program delivery	Ensure Missouri's continued economic competitiveness by providing a safe, reliable and efficient transportation system

II. Planning Approach for the Statewide Strategic Corridor Plan; the Statewide Public Transit Plan; and the Railroad Right of Way Preservation Inventory

The integration of different modes in this planning process was accomplished on several different levels. The corridor plan was developed based on the identification of a variety of modal strategies and analyses. Both existing and future issues and deficiencies from a congestion and safety perspective were identified. In conjunction with this effort, opportunities for various transit solutions such as express bus, traditional fixed route transit in urban areas, and rail were also identified. In addition, the incorporation of bicycle and pedestrian facilities along corridors, where appropriate and in conjunction with transit, were identified.

The development of the Statewide Transit Plan also included the identification of linkages between the corridor and transit elements. This coordinated planning effort included a wide range of potential transit strategies that could be utilized to enhance existing transit or included in transit implementation. These strategies included both service and operational elements, and a variety of transit facilities/solutions, such as dedicated or managed lanes, bus pull-outs, and queue-jumping capabilities. These solutions are often more cost-effective when incorporated with new roadway construction and/or reconstruction and were integrated into the corridor planning process.

In addition to the coordination between the corridor and transit planning efforts, the rail inventory provides information on rail facilities that could be utilized for alternative modes in the future. These potential solutions include commuter rail service, the use of the rights-of-way for light rail, dedicated bus or tram, or for bicycle/trail facilities.

The Statewide planning process began with the formation of a stakeholder group, referred to as the **Resource Group**, which includes representation of a variety of local, State and federal agencies, transportation advocacy groups, environmental interest groups, and other agencies with which consultation is vital to the long term transportation plan. This stakeholder group was segmented into three (3) modal subcommittees; Corridor, Transit, and Rail. The input process of the Resource Group and the subcommittees is shown in Figure 1, found on the following page.

The Metropolitan Planning Organizations and Councils of Government are responsible for transportation planning activities on the local level, both in urban and rural areas. Representatives from each of these groups were represented in the Resource Group, and also had opportunity to provide input throughout the process. Each of these local Long Range Transportation Plans was reviewed to ensure that the results of this planning process were consistent with the local plans.

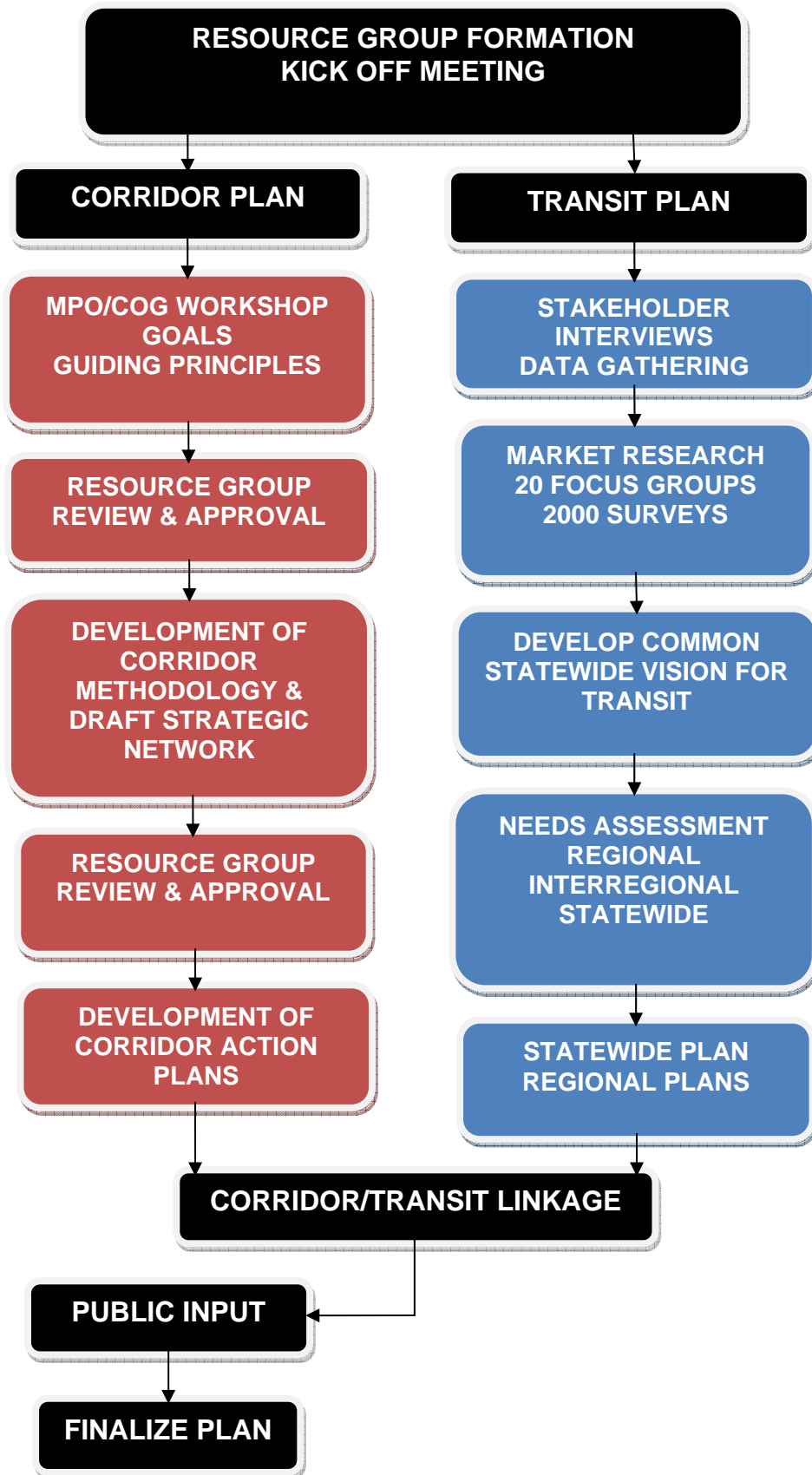
Public Participation

In addition to the Resource Group, input from the members of the general public is also critical to the planning process. Rounds of public meetings were held throughout the state to review the draft Comprehensive Multimodal Transportation Plan. This public participation process was held in compliance with the requirements and standards set forth in the SCDOT Public Participation Plan.

Planning Requirements

The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A, Legacy for Users (SAFETEA-LU), is the federal legislation authorizing funds for Federal-Aid highways, highway safety programs, and transit programs through 2009. In order to receive federal transportation funding, state Departments of Transportation are required to employ a continuing, cooperative, and comprehensive planning process. This process includes the development of a long-range statewide plan and Statewide Transportation Improvement Program (STIP). The combined planning efforts in the development of the Statewide Comprehensive Multimodal Transportation Plan meet the requirements set forth in SAFETEA-LU.

Figure 1. Resource Group/Stakeholder Process



In June of 2007, the South Carolina General Assembly signed Act 114 into law requiring the South Carolina Department of Transportation Commission to ensure that transportation projects originate from an established priority list to the extent permitted by federal laws taking into consideration the following criteria: Financial viability; public safety; potential for economic development; traffic volume and congestion; truck traffic; pavement quality; environmental impacts; alternative transportation solutions; and consistency with local comprehensive plans.

The South Carolina Statewide Comprehensive Multimodal Transportation Plan, including the Statewide Strategic Corridor Plan; the Statewide Public Transit Plan; and the Railroad Right of Way Preservation Inventory, attempt to address federal and state requirements regarding a continuing, cooperative, and comprehensive planning process and project prioritization. All of the plan elements were developed in consideration of eight key goals identified by SCDOT:

- **Mobility:** promote efficient movement of people and freight and reduced travel times for all modes of transportation.
- **Accessibility:** ensure that transportation facilities and services are coordinated with land development patterns and community needs to ensure that all citizens easily can reach important destinations
- **Safety:** minimize crashes and fatalities and ensure efficient coastal evacuation routes
- **Security:** increase the safety and security of the transportation system for motorized and non-motorized users
- **Economic vitality:** provide an efficient, interconnected transportation system to maintain economic competitiveness
- **Community vitality:** minimize and mitigate community disruptions resulting from existing and future transportation facilities, and ensure citizens have appropriate, accessible, multimodal transportation choices to serve their mobility needs
- **Environment:** minimize and mitigate transportation system impacts on water resources, natural habitats, cultural resources and air quality, and ensure transportation investments are consistent with efforts to preserve and improve environmental quality.
- **Equity:** develop a transportation system that meets the needs of all citizens, recognizing that variations in income, age, ability, and regional location produce different mobility needs.

III. Planning process

SCDOT has developed an ongoing, statewide planning process that results in the Statewide Transportation Improvement Program (STIP), which is the short-range work program. The STIP provides the blueprint for what projects are funded and when they will be constructed and is updated on an annual basis.

Viable, implementable plans are dynamic in nature, rather than static. It is important that as conditions change, the plan can be adapted to meet new and changing needs. The planning process, with its annual review and update, provides the ability for the plan to remain viable. The planning process developed for the strategic corridor system is also a dynamic one and is coordinated with the existing process currently used by SCDOT.

The Strategic Corridor System Plan consists of several elements. The first is the development of an unconstrained Needs Plan, which incorporates all of the projects identified through the corridor action plan process. This Needs Plan is not constrained by dollars, but includes all of the projects developed to meet the identified needs, issues and deficiencies.

The second element is the Long Range Cost Feasible Plan. This long range plan is developed with a twenty year horizon. After projects are prioritized, they are matched with the anticipated funding over the next 20 years and those projects that are financially feasible are included in the long range plan. The remaining projects are still included in the Unfunded Needs Plan and should the funding scenario change, are still available for inclusion into the long range plan at some future date.

The third element of the plan consists of the Ten Year Work Program, divided into sub elements of Years One to Six and Years Seven to Ten. The first of these sub elements produces the projects for the STIP, which has a six year life. The second four years provides those additional projects that should be identified and prioritized in the event that funding conditions improve. The ten year horizon is recommended because of the complicated and lengthy nature of transportation project development and construction.

As projects move through the process and are completed, new projects from years seven through ten move into the short range work program of years one to six, with projects moving into the new tenth year from the Long Range Cost Feasible Plan.

In order to complete these update cycles efficiently and effectively, there are several general recommendations that have been developed. These recommendations include the following:

- Data Collection
 - Install additional permanent count stations with classification capabilities

Data is the key element in the update process, providing the new information needed to assess and evaluate projects in all elements of the plan.

- Utilize Route Identification Strategies and Features
 - Implement route markers (e.g. “*Upstate Corridor*”)
 - Highlight strategic corridors on official state maps
 - Implement ITS/Cameras/Incident Management strategies
 - Include corridor information at rest stops
- Implement freight specific strategies
 - Employ motor carrier inspection stations on strategic corridors
 - Provide climbing/passing lanes
 - Utilize heavier pavements
- Implement transit features designed to enhance transit use
 - Provide Park and Ride lots for commuter services
 - Enhance the website to provide information and encourage transit use
- Continued Stakeholder Involvement
 - Multimodal freight advisory group
 - Transit advisory group
 - Corridor Coalitions or Task Forces

Stakeholder involvement throughout the process is a key element is public acceptance and “buy-in”. In addition, these task forces/stakeholder groups can provide valuable input on an ongoing basis, provide information concerning changing conditions from the user perspective, and provide an avenue for continuing education of the public concerning transportation and the related issues.