

EXECUTIVE SUMMARY

In general, freight planning is often not a priority for Metropolitan Planning Organizations (MPO) or many Departments of Transportation (DOT). Trucks tend to represent a relatively small share of total traffic in many metropolitan areas, and the data needed to develop and validate freight analytical tools are expensive and difficult to collect. In addition, mandatory planning activities – long-range plans, Transportation Improvement Programs (TIP), air quality conformity determinations and special projects – often consume the majority of available resources, thus reducing the ability to commit adequate resources to freight planning activities.

While the need for effective and efficient transportation systems to move freight is often recognized by many MPOs, few can accurately reflect the interactions of goods movements with passenger vehicles within their transportation models. Despite this constraint, more and more elected officials have acknowledged that the problem will not be resolved by simply documenting increasing commercial vehicle volumes and have pressed transportation professionals to do more to provide solutions before the anticipated volumes of freight overwhelm their systems. Freight-specific improvements often provide higher payoffs towards improving the overall transportation system as heavy single-unit and combination trucks disproportionately contribute to traffic congestion, infrastructure deterioration, incident effects and emission outputs as well as mitigation strategies are often more easily implemented than those affecting passenger vehicles.

As part of its ongoing, long-range planning efforts, the Spartanburg Area Transportation Study (SPATS) initiated this freight supply and demand analysis to assess the impacts of goods movements within Spartanburg County. The analysis examines the movement of freight by truck, rail and air originating from, destined to or passing through the county in order to determine how SPATS can best help position itself to accommodate future freight growth, while minimizing adverse impacts on the county's infrastructure and environment. It includes recommendations for future infrastructure investments and policies that will enable the county's transportation system to continue to operate at the highest levels of efficiency and safety in the years ahead.

The intent of this analysis is to help decision makers understand how freight fits into the overall planning framework and ensure that freight-related issues are addressed and weighted appropriately in the selection of projects. This process is an important step in informing the public and their elected leadership of the tradeoffs between various modes and investment strategies. The *Freight Infrastructure* chapter captures the “supply” side of the study. It inventories and analyzes both nationally and regionally significant freight infrastructure within the county to suggest how it is used or under-utilized in order to identify critical gaps, deficiencies and opportunities. The *Freight Demand Profile* provides a baseline understanding of the current movement of freight to, from and throughout the county. It is the study's “demand” portion, where current patterns and future trends are examined to “tell the story” of goods movement. The *Freight Capacity and Recommendations* chapters explore options to solve current freight issues, to plan for future challenges and to lay out options that will shape strategic investments in the future.

TABLE OF CONTENTS

Executive Summary	i
Introduction	1
Data Sources	3
Spartanburg Area Transportation Study	3
South Carolina Department of Transportation	5
<i>Statewide Traffic Count Database</i>	<i>5</i>
<i>Transearch®</i>	<i>7</i>
Bureau of Transportation Statistics	9
<i>National Transportation Atlas Database</i>	<i>9</i>
<i>Commodity Flow Survey</i>	<i>10</i>
Federal Highway Administration	11
<i>Freight Analysis Framework</i>	<i>11</i>
Freight Infrastructure	15
Highways & Major Roadways	15
<i>Interstate 26</i>	<i>15</i>
<i>Interstate 85</i>	<i>17</i>
<i>US Highway 29</i>	<i>17</i>
<i>US Highway 176</i>	<i>17</i>
<i>US Highway 221</i>	<i>18</i>
<i>State Highway 9</i>	<i>20</i>
<i>State Highway 11</i>	<i>20</i>
<i>State Highway 14</i>	<i>20</i>
<i>State Highway 56</i>	<i>20</i>
<i>State Highway 215</i>	<i>20</i>
Truck Stops and Service Areas	22
Railways	23
Intermodal Facilities	27
Airports	28
Freight Demand Profile	29
General Characteristics of Regional Freight Modes	29
<i>Truck</i>	<i>29</i>
<i>Rail</i>	<i>29</i>
<i>Air</i>	<i>29</i>
<i>Summary</i>	<i>29</i>
Freight and the Regional Economy	33
Goods Movement To, From and Through Spartanburg County	39
<i>Tons and Value Originating within Spartanburg County</i>	<i>39</i>

Tons and Value Destined for Spartanburg County.....44
Tons and Value Traveling through Spartanburg County.....49
Freight Trends.....54
Freight Capacity.....61
Recommendations.....62

List of Tables

Table 1. Data Used to Develop Transearch® Production and Consumption Patterns.....7
 Table 2. Two-digit Transearch® STCC Descriptions.....8
 Table 3. NTAD GIS Coverage.....9
 Table 4. Industries Represented in the CFS.....11
 Table 5. Two-digit FAF STCC Descriptions.....12
 Table 6. 2007 Employment by STCC2 Industry Code.....34
 Table 7. 2007 Wages (\$1,000) by STCC2 Industry Code.....35
 Table 8. Annual Tons Originating within Spartanburg County.....40
 Table 9. Top Five Ranked Commodities by Tons Originating within Spartanburg County.....41
 Table 10. Annual Value Originating within Spartanburg County.....42
 Table 11. Top Five Ranked Commodities by Value Originating within Spartanburg County.....43
 Table 12. Annual Tons Destined for Spartanburg County.....45
 Table 13. Top Five Ranked Commodities by Tons Destined for Spartanburg County.....46
 Table 14. Annual Value Destined for Spartanburg County.....47
 Table 15. Top Five Ranked Commodities by Value Destined for Spartanburg County.....48
 Table 16. Annual Tons Traveling through Spartanburg County.....50
 Table 17. Annual Value Traveling through Spartanburg County.....52

List of Figures

Figure 1. Traffic Analysis Zone Coverage.....4
 Figure 2. SCDOT Traffic Count Locations.....6
 Figure 3. FAF Network.....13
 Figure 4. Spartanburg County Highways and Major Roadways.....16
 Figure 5. NTAD Railroad Alignments and Owners.....24
 Figure 6. NTAD At-Grade Railroad Crossings.....25
 Figure 7. NTAD Intermodal Facilities.....27
 Figure 8. NTAD Airport Locations.....28
 Figure 9. Likely Mode of Shipment Considering Weight and Value.....29
 Figure 10. 2007 Employment by STCC2 Industry Code.....34
 Figure 11. 2007 Wages by STCC2 Industry Code.....35
 Figure 12. 2004 Employment in Spartanburg County by TAZ.....36
 Figure 13. 2035 Employment in Spartanburg County by TAZ.....37
 Figure 14. Change in Employment in Spartanburg between 2004 and 2035.....38
 Figure 15. Percent of Annual Tons Originating within Spartanburg County.....41