

Midlands Tomorrow

2035 Rural Long Range Transportation Plan

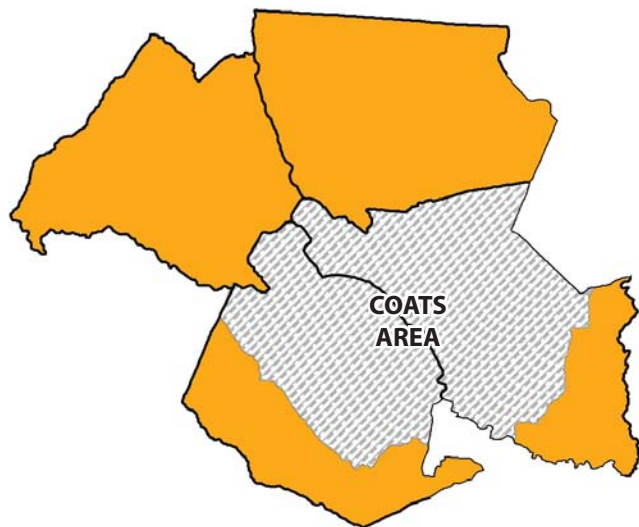


FAIRFIELD

NEWBERRY

RICHLAND

LEXINGTON



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CHAPTER 1 - INTRODUCTION

Having an efficient, safe and sustainable transportation system is vital to the future of the Central Midlands region. Transportation affects our economy, the natural environment, and our overall quality of life. Our ability to work, shop and travel is impacted to some degree by how well the transportation system works. A long range transportation plan is needed to service the needs of our region today as well as into the future.



Transportation planning is diverse and takes many forms. Streets, highways, transit, and bike and walking paths—all provide means for moving people and goods into and throughout the region. Roadway design standards, intelligent transportation systems, and levels of adequate service all help to facilitate that movement.

Issues of population growth, safety, security, environmental justice as well as active citizen participation must be addressed and incorporated throughout the planning process. Coordination and collaboration among government entities and agencies must be pursued in order to achieve a unified plan of action to address transportation issues on a regional basis. The ability to pursue and provide adequate funding for the transportation system and its maintenance is also paramount to the planning process.

The *Midlands Tomorrow: 2035 Rural Long Range Transportation Plan* (2035 Rural LRTP) is the long range transportation plan for the rural sections of the greater Central Midlands region. This plan complements the recently adopted *Midlands Tomorrow: 2035 Long Range Transportation Plan*, which is the regional transportation plan for the urbanized areas of the Columbia metropolitan area. The 2035 Rural LRTP, like its urbanized counterpart, has undergone a collaborative effort by multiple transportation stakeholders across the region in an effort to comply with federal transportation planning guidelines. This multimodal long range plan builds upon the momentum of previous plans (including the *2025 Rural Long Range Multi-modal Transportation Plan*) in order to provide a more comprehensive outlook for transportation in the near and long-term future in the rural planning area.

1.1 Purpose and Scope

The Central Midlands Council of Governments (CMCOG) oversees long range transportation planning for both the Greater Columbia metro as well as the rural portions of the Central Midlands region (see Map 1). In doing so, CMCOG is responsible for developing, maintaining and administering the region's Rural Long Range Transportation Plan (LRTP).

Development of a regional rural transportation plan provides an opportunity for local elected officials and residents to discuss and make decisions about the kind of transportation network that would be most effective for their area of the region. The scope of this plan covers a planning period of 30 years, using the most up to date census information as of base year 2005. The purpose of this 2035 Rural LRTP is to bring together the residents and officials from Fairfield, Lexington, Newberry and Richland Counties to identify transportation needs in the region between now and 2035.

The planning area covers approximately 1,833 square miles and comprises 14 cities and towns. Some key attractions and area landmarks in the rural sections of the Central Midlands region include Lake Wateree, Lake Monticello, Newberry Opera House, Newberry College, Kensington Mansion, Sumter National Forest, Congaree National Park, and the Palmetto Trail. According to 2005 census data, the planning area is expected to grow over 90,000 by year 2035, while the regional population is expected to exceed close to 1 million in that same time frame. This increased level of growth reinforces the need for reliable, convenient and safe transportation opportunities in the future, particularly in the rural areas of the region, where growth potential is viable.



Kensington Mansion,
Eastover, SC

<http://commondatastorage.googleapis.com/static.panoramio.com/photos/original/22114461.jpg>

2035 Rural Long Range Transportation Plan

Map 1 Transportation Study Area

Legend

- Interstates
- Water
- COATS Boundary
- Municipal Boundaries
- County Boundary

Scale: 0 to 12 Miles

CENTRAL MIDLANDS Council of Governments

Geographic Information System Data Source: Esri, Inc. 2019. Map data provided by Esri.

Disclaimer: Central Council of Governments does not warrant or assume responsibility for the accuracy or completeness of the information presented herein.

1.2 Planning Process

The foundation and framework for the 2035 Rural LRTP planning process is based primarily on the 2005 federal transportation legislation, titled the Safe, Accountable, Flexible, and Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). Though it is primarily an urbanized requirement, CMCOG recognizes the requirements established by the Federal Highway Administration (FHWA) regarding the national transportation planning priorities included in the SAFETEA-LU and National Highway System legislation for use in the non-urbanized area. This legislation defines the roles and responsibilities of federal, state, and metropolitan transportation agencies and presents a set of eight planning factors that transportation planning organizations must consider as part of the long range transportation planning process. As a result, these eight planning factors of SAFETEA-LU were instrumental in the development of the vision and goals for the 2035 Rural LRTP. The eight planning factors of SAFETEA-LU are:

- Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity and efficiency;
- Increase the safety of the transportation system for motorized and non-motorized users;
- Increase the security of the transportation system for motorized and non-motorized users;
- Increase the accessibility and mobility options available to people and for freight;
- Protect and enhance the environment, promote energy conservation and improve quality of life;
- Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight;
- Promote efficient system management and operation; and
- Emphasize the preservation of the existing transportation system.

Chapter 4 (Major Transportation Issues by County) will provide a further description of the factors and show how they are addressed and achieved throughout the rural planning area.

1.3 Vision & Goals

The vision and goals of the 2035 Rural LRTP build upon the principles outlined in the previous transportation plan (the *2025 Rural Long Range Multi-Modal Transportation Plan*) as well as from input provided by the communities during the first round of public input meetings. The 2035 Rural LRTP vision and goals provide the basis for identifying options, evaluating alternatives and making decisions on future transportation

investments. They are intended to address the spirit of the eight general planning factors of SAFETEA-LU as well as provide guidance and coordination between and among CMCOG and the local jurisdictions it represents. The transportation plan vision and the goals set forth by this plan, in no particular order, are noted below.

Vision for the 2035 Rural Long Range Transportation Plan

The paramount purpose of our transportation system is to enhance and sustain the quality of life and economic vitality of the region. This will be accomplished through collaboration, sound development, maintenance, and management of a transportation system that meets the accessibility and mobility needs of people and goods in the region through safe, secure, environmentally prudent, and financially sound means.

Goals for the 2035 Rural Long Range Transportation Plan

- **Consultation** – consult with transportation partners and entities that provide guidance and input into the transportation planning process, identify critical transportation issues, and determine the principles for implementation.
- **Economic Vitality** – provide an efficient, interconnected transportation system to advance and support the economic well-being of the region.
- **Safety** – minimize accidents and fatalities on our roadways for all motorized and non-motorized users.
- **Security** – support homeland security and safeguard the personal security of all motorized and non-motorized users.
- **Accessibility** – increase connectivity and provide better ways for people to reach important destinations easily.
- **Mobility** – promote efficient movement of people and goods across all modes of transportation.
- **Environment** – protect and enhance the environment, support social justice, promote energy conservation, promote consistency between transportation improvements and local planned growth patterns.
- **Finance** – ensure by minimizing cost, wisely applying existing resources while seeking innovative funding sources, and expanding opportunities for preserving existing transportation system.

1.4 Committee Oversight

The rural transportation planning process is overseen by the CMCOG Rural Transportation Committee (RTC). The RTC meets quarterly and is comprised of representatives from each of the four rural counties as well as state and local authorities. The RTC is an ongoing forum for policy

development and adoption related to rural transportation planning, programming, and operation. Upon committee approval, transportation plans and programs are forwarded to the CMCOG Board for endorsement.

1.5 Amendment Process

From time to time circumstances dictate that changes be made to the Rural LRTP following its scheduled adoption. If any changes are needed, CMCOG will adhere to the similar processes as identified for the urban long range transportation plan. Amendments can be made if the changes are consistent with federal requirements for plan development and approval. These changes, or amendments, are not routine. CMCOG will consider such amendments when the circumstances prompting the change are compelling, and the change will not adversely affect air quality conformity regulations.

There are two types of Rural LRTP amendments: Minor Amendments and Major Amendments. These types of amendments differ based on the magnitude of the proposed change and the level of review required by various federal, state and local agencies. As a general rule, significant changes to the cost, scope and schedule of a project listing requires a Major Amendment, whereas minor changes in fund sources, description, lead agency, project limits, etc. may be processed through Minor Amendments. Major Amendments must be approved by the Policy Committee, the South Carolina Department of Transportation (SCDOT), Federal Highway Administration (FHWA) and Federal Transit Administration (FTA). Approval of Minor Amendments has been delegated to CMCOG Executive Director and the SCDOT Office of Planning. Proposed changes will be reviewed by CMCOG staff before any actions are considered. All changes must follow CMCOG policies on the Public Participation Process and Federal Air Quality Conformity.

CHAPTER 2 - PUBLIC PARTICIPATION

Public participation in CMCOG's transportation planning process, including planning for the Rural LRTP, considers public involvement early in the planning process essential in order to fully assess all the social and natural environmental as well as economic impacts of transportation decisions. CMCOG believes it is of the utmost importance for the residents of the Midlands to be well-informed and to have adequate access to the decision-making processes. CMCOG also believes in a planning approach that reaches persons and groups that have been traditionally underserved by the transportation system. It accomplishes this by being proactive and open to participation by all segments of the population. CMCOG attempts to conduct a planning process that both encourages broad public participation and considers and responds to public input.

CMCOG's approach to public involvement in the transportation planning process is based in part on the CMCOG Public Participation Plan, which was adopted by the CMCOG Board of Directors in July 2007. It outlines processes and procedures to be undertaken whenever significant planning efforts occur. As part of the plan development process, staff utilized several methods for engaging public participation, which included stakeholder interviews, visualization techniques, survey instrument, public input meetings across the region, presentations to various civic and neighborhood groups, press releases and articles in several area newspapers as well as general information about the 2035 Rural LRTP posted on the CMCOG Transportation website..

2.1 Rural LRTP Public Meetings

There were rounds of public input meetings held at various locations across the region. The responses to the meetings served as helpful tools in the development of the plan. Table 2.1 below lists the dates and locations.



Table 2.1: 2009 – 2010 Public Input Meetings for the 2035 Rural LRTP*Round 1*

Date & Time	Location
Monday, August 17 5pm – 7pm	Swansea Town Police Building 320 West 3 rd Street, Swansea
Thursday, August 20 12:00pm – 2:00pm	Newberry County Courthouse Annex 1309 College Street, Newberry
Wednesday, August 26 12pm – 2pm	Town Police Building 660 West Columbia Avenue, Batesburg-Leesville
Monday, August 31 5pm – 7pm	Fairfield County Government Complex 350 Columbia Road, Winnsboro
Thursday, September 3 6pm – 8pm	Eastover Town Hall 624 Main Street, Eastover

Round 2

Date & Time	Location
Monday, May 10 5pm – 6:30pm	Swansea Town Police Building 320 West 3 rd Street, Swansea
Thursday, May 13 5pm – 6:30pm	Batesburg-Leesville Leisure Center 227 Highland Avenue, Batesburg-Leesville
Monday, May 17 5pm – 6:30pm	Fairfield County Government Complex 350 Columbia Road, Winnsboro
Thursday, May 20 12:00pm – 1:30pm	Newberry County Courthouse Annex 1309 College Street, Newberry
Thursday, May 27 5pm – 6:30pm	Eastover Town Hall 624 Main Street, Eastover

Though these sites were heavily advertised weeks ahead, attendance varied between the two rounds of meetings. The purpose for the first round of meetings was to receive comments and concerns on the state of the existing transportation network. This opportunity allowed transportation planning staff to hear firsthand where problem corridors and intersections were and what improvements—as well as the type of transportation mode—residents would like to see in the future (i.e. by year 2035). Attendance during the first round of meetings was very high as compared to past transportation public meetings. Areas that garnered the most attention were Newberry (with an emphasis on intersection improvements) and Eastover (with a focus on making SC 764 safer and requests for more transit service).

In preparation for the second round of meetings, which were intended to seek feedback on the Rural LRTP's recommended policies, strategies, and funding projects, staff undertook the same aggressive means for collecting public input. However, attendance was lower than the previous round.

Some recommended actions that might be considered in preparation for future meetings include:

- Set meeting times for three-hour segments during weeknight (4pm-7pm).
- Reduce the lag time between meetings to maintain public interest.
- Make it clear in the flyer and announcements the purpose and format of the meetings so people would know that the meetings are a “drop-in” format with scheduled presentations at certain times.
- Create flyers and send to area businesses and churches in proximity of the meeting locations.
- Collaborate with town officials ahead of time to inquire if and when certain festivals are happening and sponsor an exhibit or booth to capture a greater public response.
- Post signs along the roadway in proximity of the meeting site to notify commuters of the meeting date, time and location.

2.2 Use of Supplemental Plans

In addition to the public outreach tools mentioned above and for purposes of avoiding duplication of public outreach efforts, Staff also incorporated public comments from various transportation studies and plans that had occurred during the same timeframe of the development of the 2035 Rural LRTP. Table 2.2 denotes the plans, agencies responsible, and years adopted.

Table 2.2: Plans used to supplement LRTP Public Outreach Process

Plan	Governing Body	Year
<i>Central Midlands Transit Development Plan</i>	CMRTA	2005
<i>Bike-Pedestrian Pathways Plan</i>	CMCOG	2006
<i>Commuter Rail Feasibility Study</i>	CMCOG	2006
<i>Congestion Management Plan</i>	CMCOG	2008
<i>Motor Freight Study</i>	CMCOG	2008
<i>SCDOT Statewide Multimodal Transportation Plan</i>	SCDOT	2008
<i>Richland on the Move Transportation Study</i>	Richland County	2008
<i>Midlands Tomorrow: 2035 Long Range Transportation Plan</i>	CMCOG/COATS	2008

Each of these plans underwent a thorough and intense public involvement process. With each, as keeping with the aims of CMCOG's Public Participation Plan, communication and public involvement were paramount to the overall success of the project. Input came from a wide cross-section of people who live, work, or otherwise care how the transportation needs of the Central Midlands region will be met. Outreach tools used were stakeholder interviews, public meetings (including visualization techniques), small group meetings and presentations to targeted focused groups.

Feedback from these plans, and ultimately the 2035 Rural LRTP, came from various persons and groups represented below.

- Federal, state, local agencies responsible for planned growth, economic development, environmental protection, freight movements, land use management, natural resources, and historic preservation
- Elected Officials
- Local Government Staff
- Public School Officials
- Transportation Agencies
- Users of Public Transportation
- Users of Pedestrian and Bicycle Transportation
- Disabled Community
- Homeowners' Associations
- Civic Groups
- Special Interest Groups



CHAPTER 3 - POPULATION

3.1 Regional Growth & Distribution

According to 2005 population estimates, the Central Midlands region is home to around 637,000 people. Of that amount, nearly 69,000 reside in the Rural Planning Area (RPA). Table 3.1 shows how the region grew during the period of 1990 to 2005. During that span, most of the growth occurred in the urban areas of Lexington and Richland County (142% and 37% respectively); while, the rural counties of Fairfield and Newberry saw slight growths of 20% and 23% respectively.

Table 3.1: Population Growth in the RPA (1990 – 2005)

	1990	2000	2005	1990-2005	% change
CMCOG Region	509,399	596,253	636,647	127,248	24.98%
Rural Planning Area	63,079	66,309	68,667	5,588	8.86%
Metropolitan Area	446,320	529,944	567,980	121,660	27.26%

Population was scattered in clusters throughout the region, with the majority in unincorporated areas. Table 3.2 identifies the census counts and estimates for Years 2000 and 2005, respectively, for the jurisdictions in the rural areas in each county.

Table 3.2: Population Distribution in the RPA (2000 & 2005)

COUNTY	PLACE	2000	2005
FAIRFIELD		23,454	24,047
	Ridgeway town	328	331
	Winnsboro town	3,599	3,612
	Balance of County	19,527	20,104
LEXINGTON		216,014	235,272
	Batesburg-Leesburg town (pt)	5,012	5,073
	Pelion town	553	587
	Summit town	219	245
	Swansea town	533	686
	Balance of County	209,697	228,681
NEWBERRY		36,108	37,250
	Little Mountain town	255	259
	Newberry town	10,580	10,689
	Peak town	61	62
	Pomaria town	177	180
	Prosperity town	1,047	1,098
	Silverstreet town	216	223
	Whitmire town	1,512	1,526
	Balance of County	22,260	23,213
RICHLAND		320,677	340,078
	Eastover town	830	779
	Balance of County	319,847	339,299

3.2 Projected Growth—2035 Forecasts

According to a 2007 study completed by CMCOG,¹ the Central Midlands region is expected to have nearly 1 million residents by 2035. Table 3.3 and Map 2 display the range of growth patterns across the region. Rates of growth within the region are divided into three categories: a) Under 25%, b) 25% to 60%, and c) Over 60%.

Table 3.3: Population Change by County, 1990-2000 & 2000-2035

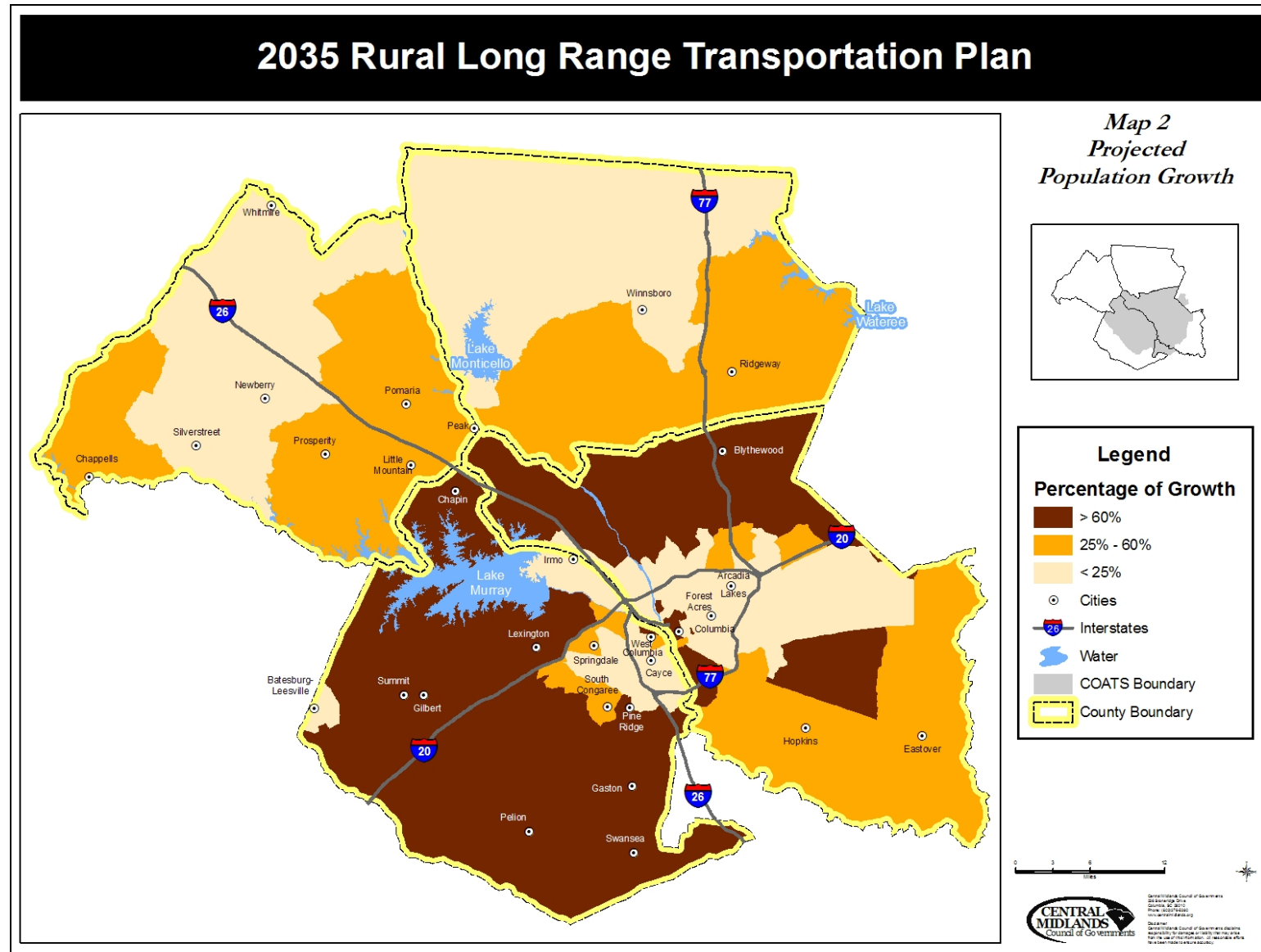
County	1990	2000	2035	% Change 90-00 (actual)	% Change 00-35 (projected)
Lexington	167,611	216,014	425,092	28.9%	96.8%
Richland	285,720	320,677	451,470	12.2%	40.8%
Newberry	33,172	36,108	44,840	8.9%	24.2%
Fairfield	22,295	23,454	28,650	5.2%	22.2%
Total:	508,798	596,253	950,052	17.2%	59.3%

Within the four-county region, Lexington County will experience the greatest percentage of growth (63%), double that of Richland County (32%) and nearly triple that of Newberry and Fairfield Counties (24% and 22%, respectively). As depicted in Map 2, the highest rates of growth will be concentrated in Lexington County and northern Richland County, continuing those trends already established in the 1990s. The southern portions of Newberry and Fairfield Counties, along with eastern Richland County, will see increased growth as well during this period.

Overall, projected growth for the region will parallel trends nationwide, those of increasing population growth in the urban downtown areas and very strong growth in the outer suburbs, particularly along interstate highways. The southern portions of rural Newberry and Fairfield counties will experience strong growth due to population overflow from the rapidly expanding areas of Lexington and Richland Counties, particularly adjacent to Interstates 26 and 77, while the northern portions of Newberry and Fairfield Counties will see limited and possibly negative growth trends over the next 30 years.

¹ *Regional Population Projections (2005-2035)*, CMCOG, December 2007.

Map 2: Projected Population Growth



3.3 Socioeconomic Analysis

This section reviews the anticipated social concerns and analysis of the planned 2035 Rural Long Range Transportation Plan. The section starts by discussing the environmental justice responsibilities of transportation planning agencies and then provides an analysis of the location and distribution of low income and minority populations. The section concludes with a list of objectives and strategies that supports and advances CMCOG's commitment to improving mobility and accessibility for every citizen and protecting and enhancing the natural and social environment.

3.3.a Environmental Justice

Environmental justice aims to ensure the equitable distribution of both the benefits and adverse impacts of public policy decisions such as investments in transportation infrastructure. Environmental Justice concerns are upheld first and foremost, by the 1964 Civil Rights act which provides legal protection against discriminatory practices by any agency or program receiving federal financial assistance.

In 1994 all federal agencies were mandated by Executive Order 12898 to incorporate environmental justice concerns into their programs, policies and activities. In 1997 the U.S. Department of Transportation (USDOT) issued its own mandate which further defined the role of transportation planning agencies in mitigating the adverse impacts of transportation decisions on low income and minority populations. The three fundamental principles of environmental justice as defined by USDOT are as follows:

To avoid, minimize, or mitigate disproportionately high and adverse human health or environmental effects, including social and economic effects, on minority populations and low-income populations.

To ensure the full and fair participation by all potentially affected communities in the transportation decision-making process.

To prevent the denial of, reduction in, or significant delay in the receipt of benefits by minority and low-income populations.

It is the responsibility of the USDOT, State Departments of Transportation, Rural & Metropolitan Planning Organizations, and Local Governments to integrate these principles into all aspects of the transportation planning process.

To ensure non-discrimination in accordance with these principles CMCOG has adopted a Title VI Plan which outlines the Title VI policy of the agency and establishes goals and monitoring procedures for all

"No person in the United States shall, on the ground of race, color, or national origin be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance."

- Title VI of the Civil Rights Act of 1964

transportation planning activities.² The USDOT has also provided additional guidance on how transportation planning organizations can meet their responsibilities to uphold Title VI and environmental justice legislative requirements.³ This guidance defines the following three primary responsibilities of a regional transportation planning organization:

To enhance analytical capabilities to accurately assess the compliance of planning programs with Title VI requirements

To identify residential, employment, and transportation patterns of low income and minority populations to ensure the equitable distribution of the benefits and burdens of transportation investments

To develop and maintain an inclusionary public involvement process that removes barriers to participation by low income and minority populations

As the overseer of long range transportation planning for the Central Midlands region, CMCOG will strive to meet each of these responsibilities as they pertain to the development, adoption, and implementation of the region's transportation planning process—in particularly, the 2035 Rural Long Range Transportation Plan.

3.3.b Social Equity Analysis

To determine the location and concentrations of low income and minority populations CMCOG used a methodology described by the Mid-Ohio Regional Planning Commission in a USDOT case study for environmental justice analysis.⁴ The methodology involved a three step process that included (1) determining the regional percentages of low income and minority populations (2) using the regional percentages as thresholds for determining whether or not a particular Census Block Group is considered to be predominantly low income or minority (3) mapping these thresholds (individually and together) to provide a visual representation of the spatial distribution of low income and minority populations.

² For more information, see the *CMCOG Title VI Plan for Compliance with the Civil Rights Act of 1964*. Adopted December 9, 2004.

³ *Overview of Transportation and Environmental Justice*. United States Department of Transportation. Publication No. FHWA-EP-00-013.

⁴ *MPO Environmental Justice Analysis, Columbus, Ohio: Use of Data Sources, Analytical Techniques, and Public Involvement*. Washington, DC: US Department of Transportation. Available Online: <http://www.fhwa.dot.gov/environment/ej2.htm>. This methodology has also been used in the development of the Midlands Tomorrow: 2035 LRTP as well as by a number of other MPOs across the nation.

The criteria used to identify and map low income and minority populations included the following three 2000 Census variables:

Non-white population
Hispanic population
Families below the Poverty Line

The totals and percentages of these variables for the region and for the portions of the region represented in the 2035 Plan study area are summarized in Table 3.4.

Table 3.4: Environmental Justice Profile of the Central Midlands Region

	CMCOG Region	Newberry	Fairfield	Lexington	Richland
Population	596,253	36,108	23,454	216,014	320,677
Minority Population	220,736	12,993	14,172	34,170	159,401
% Minority Population	37.02%	35.98%	60.42%	15.82%	49.71%
Hispanic Population	14,642	1,533	250	4,146	8,713
% Hispanic Population	2.46%	4.25%	1.07%	1.92%	2.72%
Families	153,312	9,886	6,377	60,303	76,746
Families Below Poverty Line	13,996	1,341	1,096	3,842	7,717
% Families Below Poverty Line	9.13%	13.56%	17.19%	6.37%	10.06%

Note: These totals do not include Fort Jackson. Military populations are not considered to be exposed to the same level of risk for environmental justice concerns as civilian populations and were therefore subtracted from the totals for each variable listed above.

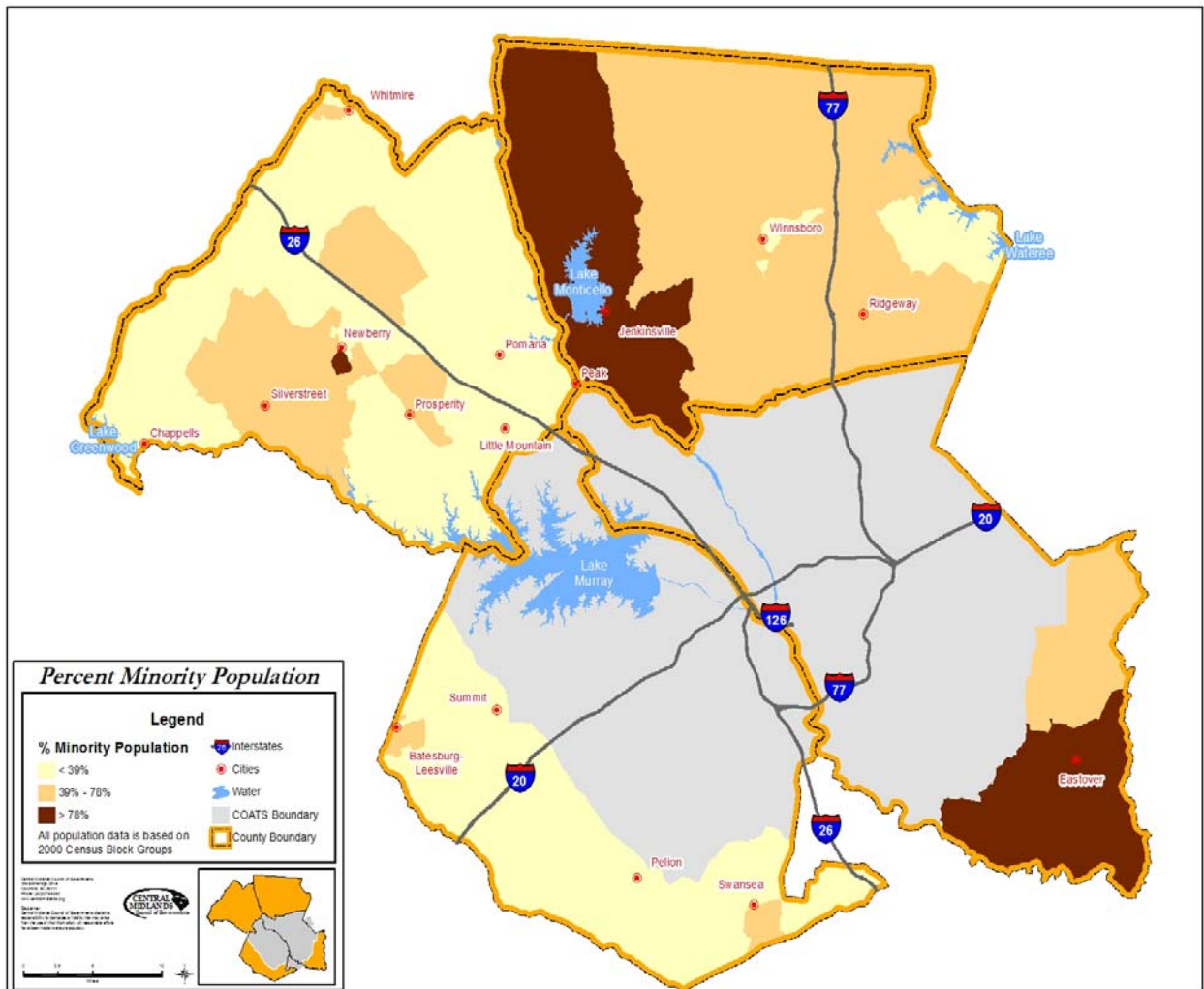
According to these regional totals, minority populations make up 37% of the total population of the CMCOG region, with the largest share (approximately 60%) residing in Fairfield County. The Hispanic population represents 2% of the total for the region, with Newberry County having the largest share at over 1,500 persons (4% of Newberry County's population). There is close to 10% of the regional population with families having incomes below the federal poverty thresholds, with Fairfield County having the largest share at 17%.

These regional percentages represent the baseline against which to compare each individual block group. Maps 2.1 – 2.3 illustrate the areas of the region where percent minority and Hispanic populations and families below the poverty line exceed the regional percentage thresholds defined above.

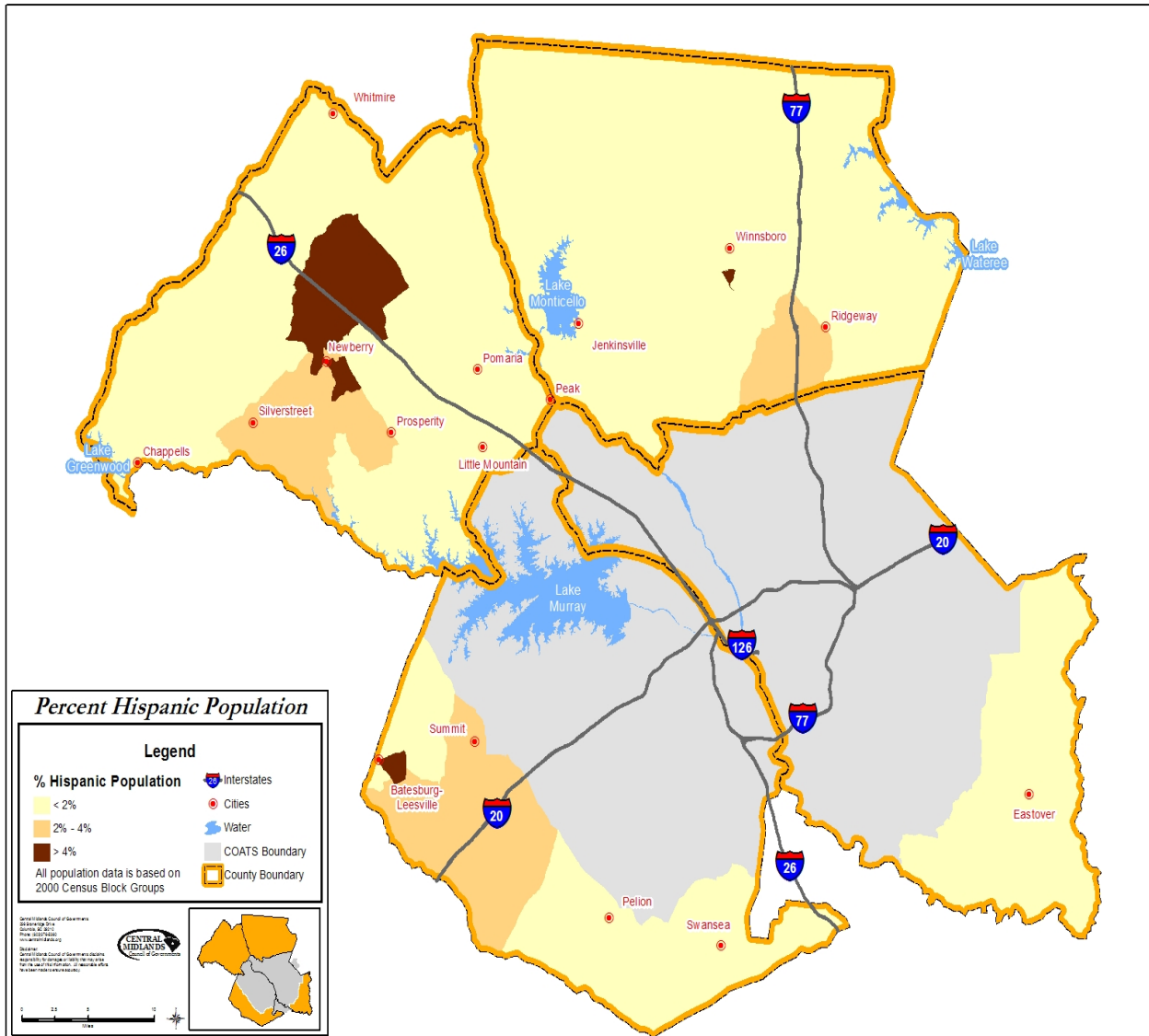
The maps illustrate that the block groups with the highest concentrations of minority residents exceeding the regional average are located in western Fairfield County and southeastern Richland County. Block Groups with Hispanic populations exceeding the regional average are randomly distributed throughout the region, but more so situated in upper Newberry County, around the City of Newberry and in western Lexington County, outside of Batesburg-Leesville. Concentrations of families below the poverty line are located in upper Newberry and Fairfield Counties and eastern Richland County.

In addition to looking at the distribution of these populations by themselves, it is also helpful to create a composite map that depicts the highest concentrations of all three variables combined. To accomplish this task each block group was given a score of 0, 1, or 2 for each variable depending on whether or not it was above or below the regional threshold. If it was below, it received a 0, if it was between the regional threshold and double the regional threshold it received a 1 and if it was more than double the regional threshold it received a 2. The scores were then added together to give each block group a composite score which illustrates on a map, the distribution of those block groups with above average concentrations of low income and minority populations. Map 2.4 depicts these areas which have the potential to be more vulnerable to environmental justice issues.

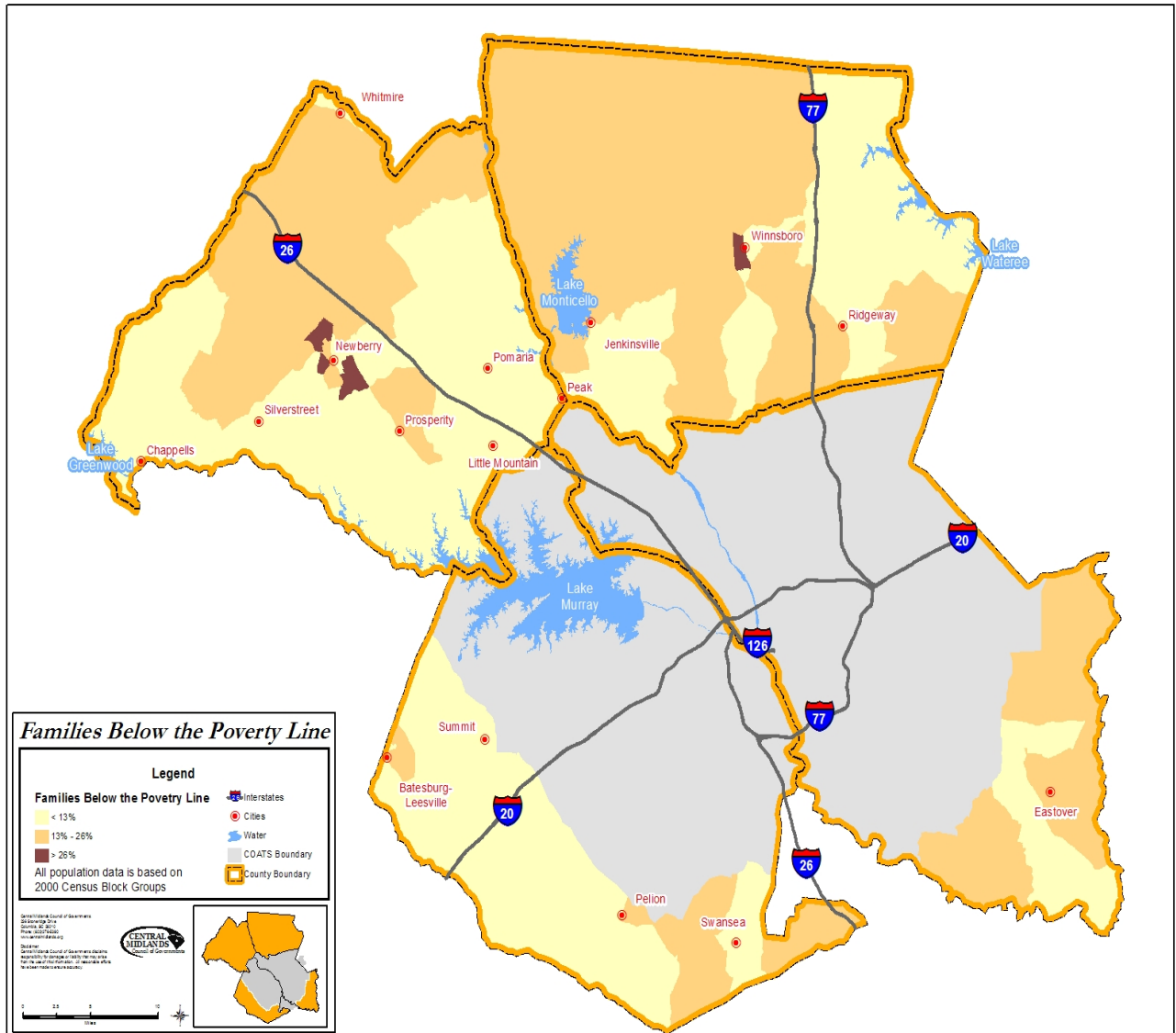
Map 2.4 represents a useful benchmark for pro-actively assessing the probability of specific transportation improvement projects being in non-compliance with environmental justice and Title VI legislation. While every project will be intensely scrutinized once it is programmed for implementation (regardless of location), this overview provides a good first step in vetting projects that might not adequately serve low income and minority populations or have the potential to inequitably burden them with the adverse impacts of construction and operation.

Map 2.1: Percent Minority Population (2000)

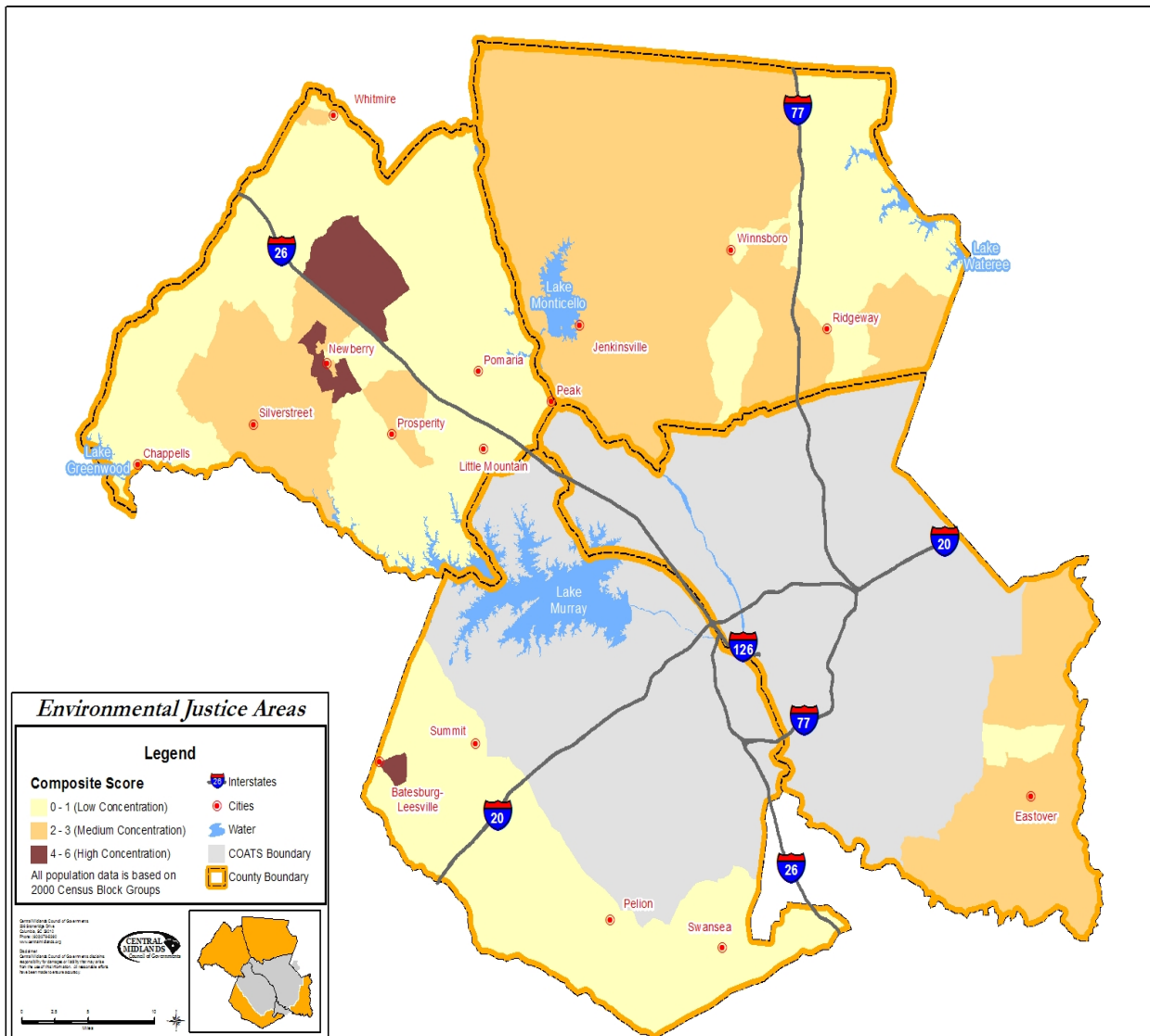
Map 2.2: Percent Hispanic Population (2000)



Map 2.3: Families Below the Poverty Line (2000)



Map 2.4: Environmental Justice Areas (2000)



CHAPTER 4 -TRANSPORTATION SYSTEM

4.1 Roadway Network

The planning area contains many arterial roadways, including interstates, U.S. highways, State highways, and local major arterials. The backbone of the study area's highway system is composed of interstates (I-20, I-77, I-26), while certain US and State highways carry a large volume of traffic as well: US 1, US 21, US 76, US 176, US 321, US 378, & US 601 and SC 34, SC 121, & SC 215). These major roads in the region are shown in Map 3. As population increases between now and 2035, the amount of traffic on these roads is expected to intensify.

Traffic Flow Data. An examination of the growth in traffic at key locations in a community can provide an understanding of the way growth has occurred, of travel patterns as a result of that growth, and of potential trouble spots as traffic continues to increase. There is often a relationship between the amount of traffic in a particular location and the number of crashes that occur at that location.

Identifying high-growth locations early on and applying appropriate engineering or other site-specific solutions can help officials and their staff to prevent unsafe conditions in the future and reduce driver frustration. Table 4.1 identifies locations in each of the four counties where average weekday travel grew only average 2% or more between 1998 and 2008. The table also shows the growth (decline) in traffic on an average weekday for specific locations in each county.

From the examination of the traffic flow data in each county, there appears to be only slight increases and declines in traffic at certain areas, which are typical of rural areas based on living and working conditions. The biggest decline worth noting occurred in Fairfield County, where the county experienced a significant loss of jobs and commute flow, due to the departure of Mack Truck Company in late 2002.

Map 3: Major Roads

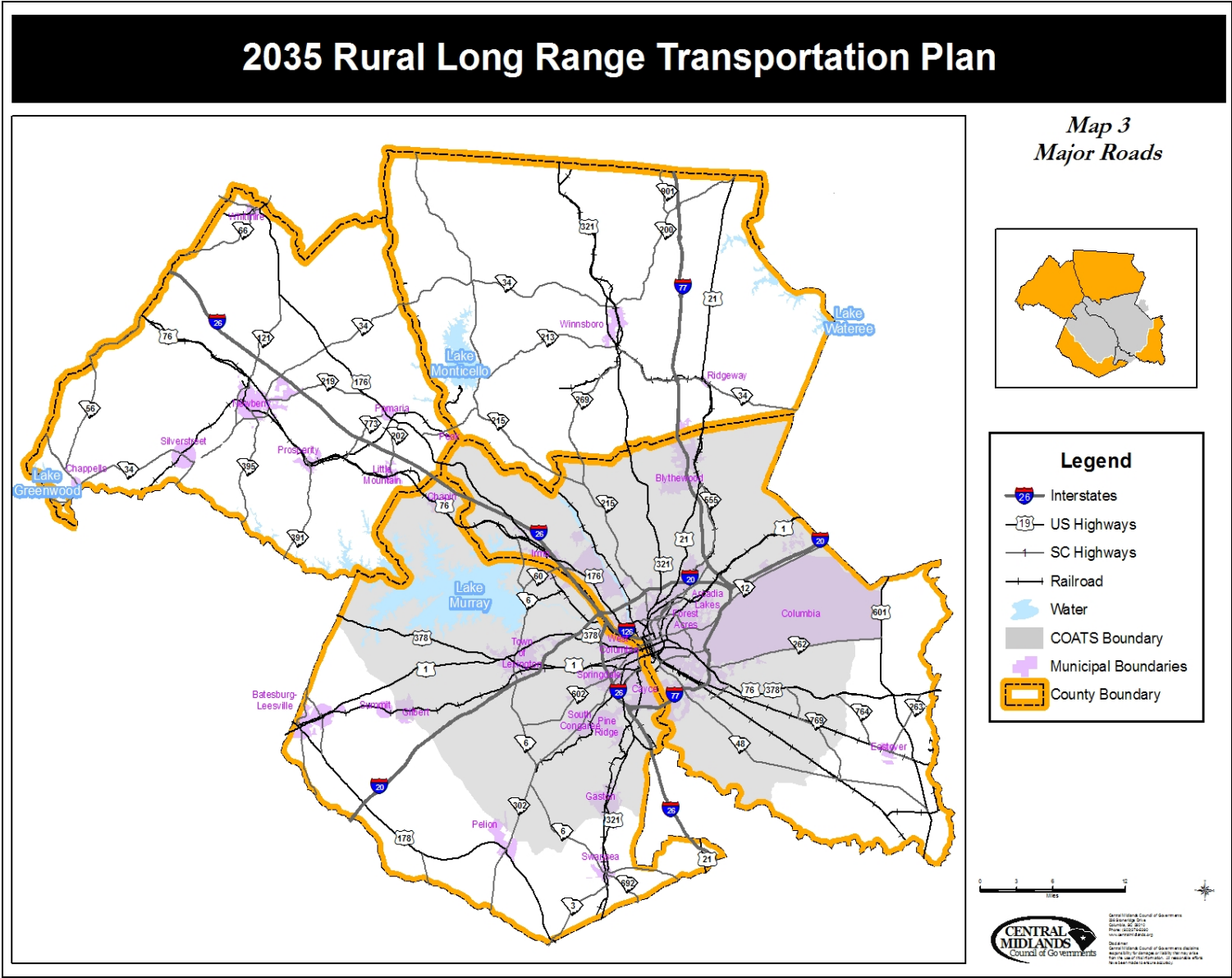


Table 4.1: High Traffic Areas by County

Rt	RT#	STNAME	1998	2003	2008	% change 1998-2003	% change 1998-2008
Richland							
SC	48	BLUFF RD	2600	2600	2600	0%	0%
SC	263	VANBOKLEN RD	1400	1750	1900	25%	36%
SC	764	OLD EASTOVER RD	1775	1725	1700	-3%	-4%
US	76	GARNERS FERRY RD	15100	17000	16000	13%	6%
US	601	MCCORDS FERRY RD	3260	3400	3300	4%	1%
Lexington							
SC	6	ST MATTHEWS RD	3450	3475	2850	1%	-17%
SC	23	E CHURCH ST	4467	5217	4400	17%	-1%
SC	245	N LEE ST	2975	3600	3225	21%	8%
SC	302	PINE ST	6900	7500	6900	9%	0%
SC	692	REDMOND MILL RD	3000	2900	2700	-3%	-10%
US	1	AUGUSTA HWY	6850	5450	6050	-20%	-12%
US	21	CHARLESTON HWY	2000	2100	2000	5%	0%
US	178	FAIRVIEW RD	4417	4561	4411	3%	0%
US	321	S CHURCH ST	8350	8950	8125	7%	-3%
I-	20	INTERSTATE 20	22100	26700	28200	21%	28%
Newberry							
SC	34	SC 34	4155	3818	4045	-8%	-3%
SC	39	SC 39	1050	1200	1475	14%	40%
SC	56	SC 56	950	1050	1250	11%	32%
SC	66	SC 66	1575	1300	1350	-17%	-14%
SC	72	SC 72	4250	3150	3200	-26%	-25%
SC	121	SC 121	5089	3944	4578	-22%	-10%
SC	202	SC 202	1325	1425	1525	8%	15%
SC	213	SC 213	1600	1500	1700	-6%	6%
SC	219	SC 219	4767	5283	5533	11%	16%
SC	391	SC 391	3300	3550	3850	8%	17%
SC	395	NANCE ST	5700	5300	5000	-7%	-12%
SC	395	NANCE ST	3286	3207	3186	-2%	-3%
SC	773	SC 773	3200	2800	3200	-13%	0%
US	76	US 76	9567	9800	9433	2%	-1%
US	176	US 176	3525	2675	3238	-24%	-8%
I-	26	INTERSTATE 26	27467	32450	33317	18%	21%

Fairfield							
SC	34	SC 34	4192	4158	4217	-1%	1%
SC	200	SC 200	2238	2163	2113	-3%	-6%
SC	213	SC 213	1567	1750	1883	12%	20%
SC	215	SC 215	1225	1475	1450	20%	18%
SC	269	SC 269	1150	1300	1100	13%	-4%
SC	901	SC 901	150	150	125	0%	-17%
US	21	US 21	2600	2483	2467	-4%	-5%
US	321	US 321	4388	4125	3613	-6%	-18%
US	321	US 321 Business	6300	4975	4200	-21%	-33%
I-	77	I-77	27740	33180	36480	20%	32%

4.2 Public Transportation

Public transportation is an important component of the Central Midlands regional transportation network. It serves a variety of population groups, who utilize this service to access jobs, medical care, professional services, and other aspects of daily life. While few people doubt that private automobiles will still be the predominant mode of transportation in the Central Midlands thirty years from now, public mass transit will fulfill some important functions, including:

- Providing a mobility alternative for persons unable to rely on private automobiles due to age, disability or income.
- Efficiently moving people within densely populated areas and congested corridors.
- Connecting workers with employment centers
- Connecting the Central Midlands to other population centers, such as Charlotte, through the Southeastern High Speed Rail Corridor.
- Responding to the growing desire of many Americans to live in urban settings and communities less dependant on the automobile
- Responding to the rapid growth of the elderly population
- Offering a more environmentally friendly alternative to the automobile

In the study area and throughout the Columbia metro, public transit is provided by way of the efforts of several local and state pubic agencies and private providers. Some of them include the Central Midlands Regional Transit Authority, Santee Wateree Regional Transit Authority, Fairfield County Transit Administration, and the Newberry County Council on Aging.

Express Bus Service

Express bus service is available to parts of the urban and rural sections in the metropolitan through a service offered by the SCDOT called SmartRide. Now in its fourth year of service, the SmartRide Commuter-Focused Transit Program is a partnership between SCDOT and local transit providers, local communities, businesses, and conscientious commuters who want a viable alternative to the traditional single-occupant vehicle commute. Commuters are invited to try either of the SmartRide commuter transit services available into the downtown Columbia area. SmartRide provides a convenient and a very cost effective option for commuters in certain sections of the study area who desire transportation to downtown Columbia during the workweek. SmartRide commuters can transfer to CMRTA buses to reach their final destination.

Currently, there is only one express bus service route in the planning area. The SmartRide Newberry services the Newberry and Lexington County area. It is operated through partnership between SCDOT, Newberry County Council on Aging and the Central Midlands Regional Transit Authority. This service originates out of Newberry in the Northwest area with stops in Newberry, Little Mountain and Chapin.

In addition, CMCOG is working to establish an express bus route from the Town of Batesburg-Leesville to the City of Columbia. In coordination and cooperation with the Town, SCDOT, and South Carolina Department of Health and Environmental Control, CMCOG will perform a transit feasibility study for the Batesburg-Leesville area. The purpose of a study is to determine the potential for a transit system and to help gauge the short and long-term benefits and demands for a region-wide transit system. Desired stops along this proposed route may include the Towns of Batesburg-Leesville, Gilbert, and Lexington.

4.3 Passenger Rail

Public transportation is paramount to the success of any passenger rail service. In 2006, CMCOG undertook a regional rail study that assessed the feasibility of commuter rail in the region. The Commuter Rail Plan identified three routes: Camden, Batesburg-Leesville, and Newberry. Two of these destinations (Batesburg-Leesville and Newberry) are in the planning area.

Corridor population densities, the strength of downtown Columbia as a regional destination and employment center, and the proximity of activity centers to the existing freight rail lines create a positive

environment for potential rail services. Projected population and employment in each of the three corridors (Camden, Batesburg-Leesville, and Newberry) show that these characteristics will only improve over time and the investment in transit will become more and more cost effective. As a result, these findings present an opportunity for the region to address mobility concerns before they reach critical mass.

In the near future, CMCOG will work with officials in Sumter County in assessing the feasibility of establishing a commuter rail route from Columbia to Sumter. Necessary steps will include review current and projected populations for Sumter and Columbia, analyzing freight movement along the corridor, identifying funding options and opportunities and investigating interest and support in establishing this connection.

4.4 Motor Freight

In 2008, CMCOG completed its *Regional Motor Freight Plan*. This study was done to assess the current state of the region's (both urban and rural) freight transportation and logistics systems, determine the needs of the systems' principal users; develop a strategic vision to guide future policy development, and recommend priority improvements to the system.

Currently, the entire Central Midlands region is served by an adequate, well functioning multimodal freight network of highway, rail, and air cargo infrastructure. Of all the region's highways, I-77 carries the highest levels of truck traffic among interstate facilities in the region, at roughly 18% of the annualized daily traffic of just over 79,000 vehicles. A variety of arterial highways also support the region's freight network, including US 76, US 378, US 1, SC 555, US 21, US 321, US 601, SC 34 and SC 215. Most of these facilities carry 10% truck traffic or less.



Rail Freight

Both CSX Corporation and Norfolk Southern own and operate an extensive rail network through and within the Central Midlands Region, with approximately 308 route miles of active railroad lines in the four counties. The rail lines within the Central Midlands region are predominately single track, with

no extended sections of double track. The usage of single track limits rail line capacity, since trains must wait on sidings to pass each other. The capacity of single track depends on a number of factors including the number of sidings, the mix of trains using a segment, the track grade, curvature, speed limits in effect, and the method of dispatch control.

Air Freight

The Central Midlands region also supports a robust air cargo network centered on the Columbia Metropolitan Airport. The Columbia Metropolitan Airport supports scheduled air cargo flights on DHL, FedEx, and UPS, with UPS operating a regional air cargo hub serving five states in the Southeast Region of the United States.

Freight Movements

In 2006 it is estimated 228 million tons of commodities moved into, out of, within and through the Central Midlands region. Of the total volume of goods movement, 73% passes through the region and 92% moves by truck. Over the next 25 years, the total volume of freight moving over the region's infrastructure is projected to increase by 42%, to an estimated 325 million tons by 2030. Over the next 25 years, truck shipments are forecast to grow by 30% and air shipments by 82%, while rail shipments are projected to increase by 18%, primarily due to through-movements. The volume of freight moving in Fairfield County is estimated to grow by 745% by 2030 (to 5.5 million tons annually), while Richland County is projected to experience a doubling in freight movements (to 45 million tons annually). This level of growth may strain highway infrastructure, specifically routes such as I-20.

Currently, the primary commodity transported to, through and from the region is Nonmetallic Minerals, with projected additional growth in volumes of 18% by the year 2030. Secondary Traffic defined as freight transiting to and from distribution centers or through intermodal facilities, is projected to surpass Nonmetallic Minerals as the top commodity volume in the region by 2030, growing by 122%.

Based on projections from Global Insight, trucks will continue to serve as the primary mode of transportation in the region in the future. The Central Midlands region is a gateway for freight movement throughout the southeast, and the area also serves as a major hub for the consolidation of freight. It is also important to note that the types of commodities that originate in or are destined for the region that are projected to increase are primarily bulk commodities. These commodities are typically used for pure manufacturing purposes and the final products will most likely be consumed outside of the Central Midlands region. From an infrastructure perspective, these commodities dictate mode choice and supply chain efficiency, and are likely to impact

roadways in the region by increasing heavy duty truck traffic. This effect will be offset somewhat by the leveling off of growth in some of the commodities that account for the heavier volumes, such as Nonmetallic Minerals.

Roadway Bottlenecks

A survey of regional businesses provided freight stakeholders the opportunity to identify issues of concern regarding the region's transportation system. Of nearly fifty companies who responded to questions regarding capacity of the region's highway system 12% indicated that congestion does cause significant delays in the shipment of their goods. It is important to note that the *Regional Freight Plan* found the only bottlenecks in the region in the urban areas—not rural area. However, bottlenecks anywhere (urban/rural) can impact the flow and direction of traffic in the outlying, rural areas of the region.

Suggestions for improving the transportation services in the Central Midlands Region included reducing the congestion on I-26 and I-20, more lanes and wider roads, improved transit systems, and many specific operational and pavement condition improvements to the roadway system.

4.5 Pedestrian & Bicycle Facilities

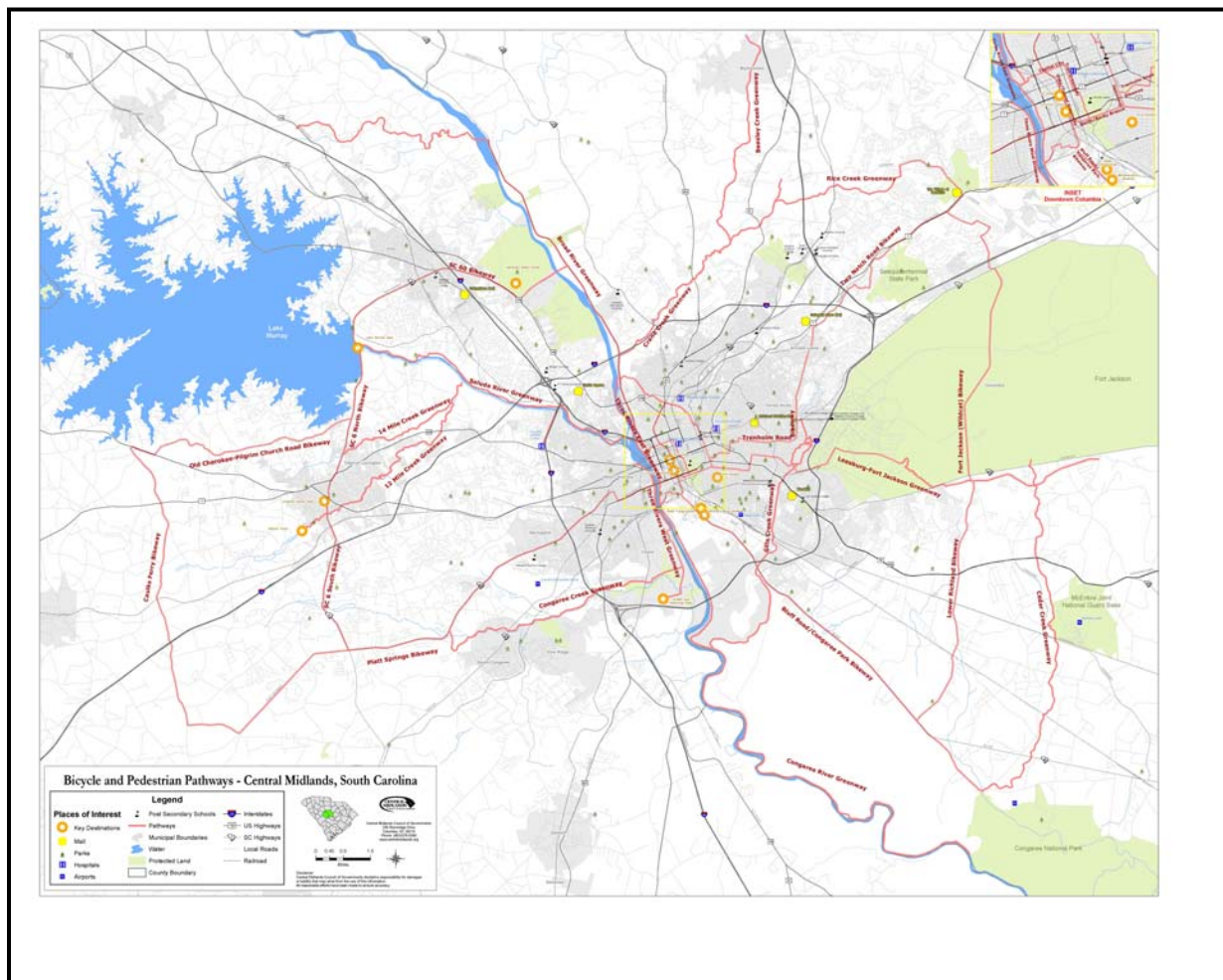
The study area is comprised of many state highways that are commonly used by bicyclists. In particular, the study area has two of the six recognized statewide bicycle routes. They are the Walter Ezell Route, which travels along US 178 in western Lexington County, and the Central Bicycle Route, which utilizes SC 215, US 176, and SC 391 in Fairfield, Newberry and Lexington Counties, respectively. More importantly, during the time of the writing of this document, SCDOT announced additional funding (via SCDOT Enhancement Program) will be available to pave four-foot shoulders on the above noted roadways—because they are designated as part of the South Carolina Bicycle Tour Routes.⁵

While there is no current regional bike and pedestrian plan that encompasses all four counties, CMCOG, under the guidance of the CMCOG Bicycle and Pedestrian Advisory Committee, has developed the CMCOG Bike and Pedestrian Pathways Plan. Although this plan was developed primarily for the urbanized area (COATS MPO

⁵ For more information on this program, refer to the following SCDOT website: http://www.scdot.org/ArtMan/publish/article_1062.shtml (SCDOT Enhancement Program Includes Widening Shoulders for Bicyclists, July 13, 2010).

Boundary), the plan comprises an inventory of existing bike and walking facilities and recommends a list of region-wide pathways (i.e. greenways, sidewalks, and bikeways) that interconnect and link with areas beyond the MPO boundary into areas of the study area. To date, there are 16 miles of developed and 185 miles of undeveloped greenways as well as 32 miles of existing bikeways and 785 miles of proposed bikeways interdispersed throughout the urban areas of Richland and Lexington Counties. See Figure 1. As these plans are developed, CMCOG will investigate opportunities and links for connecting towns and communities with safe biking and walking facilities.

Figure 1: Regional Pathways Plan



One of the key links to the rural area highlighted in the CMCOG Bike and Pedestrian Pathways Plan is the Palmetto Trail. The Palmetto Trail traverses through the lower limits of rural Richland County, through Columbia and on up to Newberry County. In 2009, a seven-mile stretch of this rail-trail was completed that extends from just outside Jenkinsville (Fairfield County) continuing northwest to Newberry County through the town centers of Peak and Pomaria. Future phases of this project call for an eventual connection to Lynches Woods Park in Newberry.

While very few bikeways exist in the study area, each of the incorporated areas in the planning area has their own set of sidewalks. These facilities are primarily located in the downtown business districts of each and/or along major commercial centers. As noted in the Objectives and Strategies Chapter (Chapter 5), jurisdictions are encouraged to adopt and implement more bicycling and walking initiatives.



CHAPTER 5 - MAJOR TRANSPORTATION ISSUES BY COUNTY

To assess the transportation-related issues of each county, the eight planning factors of SAFETEA-LU were used as a guide. They are: *Economic Vitality, Safety, Security, Environment, Integration & Connectivity, Accessibility & Mobility, System Management & Operation, and Preservation of Existing System*. Considering that some of these factors may or may not have significant information pertinent to the county, the categories were then revised and organized into the following five main groups (listed alphabetically and not by importance).

- Accessibility & Mobility
- Economic vitality (+Integration & Connectivity)
- Environment
- Maintenance (also known as “Preservation of Existing System”)
- Safety (+Security +System Management & Operation)

The proceeding pages examine how each of these five categories (noted above) is addressed in each of the four counties of the planning area. A summary list of all the objectives and strategies is provided in Chapter 6.

5.1 Fairfield County

Fairfield County is situated north of the Greater Columbia metropolitan region. The entire county is within the

County	Fairfield	Lexington (rural)	Newberry	Richland (rural)
Population	23,454	26,279	36,108	7,424
Land area (sq mile)	687	304	631	192
Population Density (per mile)	34	86	60	38

limits of the rural planning area. Although it falls as one of the region's largest counties at over 687 square miles, Fairfield County remains predominantly rural with a population density of 34 persons per mile. The county is split among four sectors of population: the Monticello, Winnsboro, Ridgeway, and Lake Wateree areas. The Winnsboro area is the largest sector, as it represents approximately 50% of the county's total population. The county is home to two prominent lakes, Lake Monticello (in the west) and Lake Wateree (in the east) and part of the Sumter National Forest (in the northwest). Other notable attractions and/or employment destinations in the county include the V.C. Summer Nuclear Station, City of Winnsboro (county seat), Town of Ridgeway, and the Walter Brown Industrial Parks.

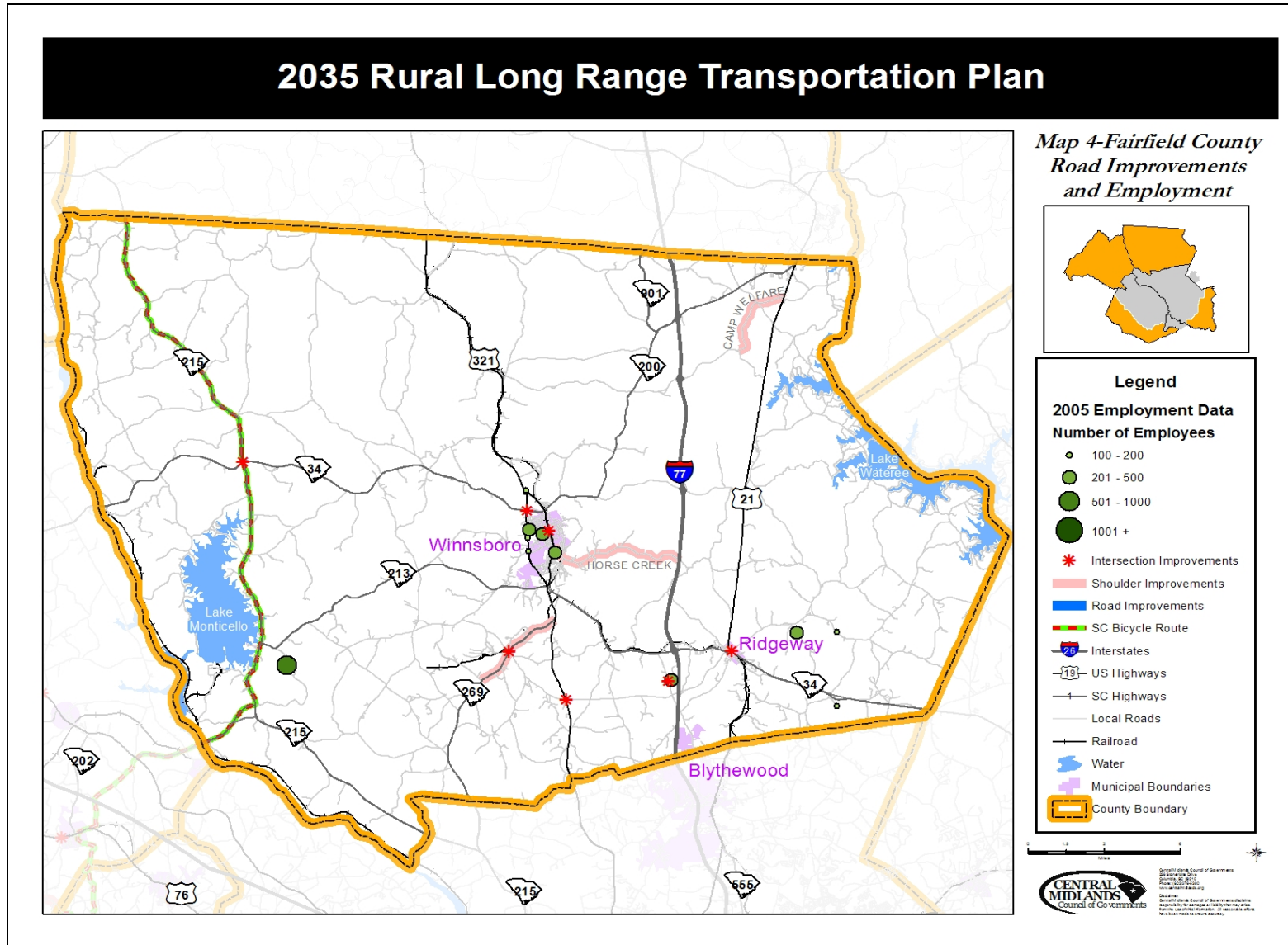
5.1.a Accessibility & Mobility

Like many places in the region, the automobile is the dominant means of travel in the county. The county does provide transit services throughout the county by way of the Fairfield County Transit System (FCTS). Efforts to increase accessibility and mobility would be served by expanding the existing services provided by FCTS as well as adding new opportunities for ridesharing; enhancing access to key employment centers; and improving linkages to Winnsboro, Ridgeway, Lake Wateree, and Columbia. To further improve accessibility and mobility for county residents, the Peach Road/I-77 interchange was completed in 2006.

5.1.b Economic Vitality

An important regional activity is the development and enhancement of economic vitality. One of the essential components is good traffic flow. Fairfield County benefits in this area as there is limited congestion throughout the transportation system. For the most part, many of the commuting patterns of county residents are directed to two general destinations: Winnsboro and Columbia. Winnsboro houses a number of government and medical jobs, while Columbia offers a larger selection of employment and service opportunities.

Map 4: Fairfield County Road Improvements & Employment



Map 4 shows the highway network and the location of major industry in the study area along with funded road improvement and intersection projects. Employment centers are located along the major highways of I-77, US 321, SC 269, SC 215, SC 213, SC 200, and SC 34. The general commuting patterns of residents demonstrates that the majority of trips are along these roadways to the destinations of jobs, homes, and medical services.

Most of the key employment centers in the county are located in the Town of Winnsboro and within the industrial parks in proximity of I-77. The county's largest employer is VC Summer Nuclear Station with over 825 people employed. Meanwhile, the county's second largest employer is the Ben Arnold-Sunbelt Company with over 400 employees, located near the SC 34/I-77 interchange. Some potential major traffic generators in the future might come from companies relocating to the industrial parks in proximity of the I-77/Peach Road interchange, a recently-completed federal-aid project that provides access to both the urban centers of Winnsboro and Ridgeway.

5.1.c Environment

The protection and enhancement of the environment helps to sustain and improve our region's quality of life. This may include promoting consistency between transportation improvements and locally planned growth patterns as well as assisting in reducing air pollution by reducing motorized vehicle miles traveled. Currently, the county is predominantly rural agriculture and low-density residential. Although Fairfield at 438,425 acres is one of the state's largest counties, the largest single land use is forest, accounting for over 80% of the total acreage, with the Sumter National Forest holding a large share of that. Developed or urbanized portions of the county comprise of around 2% of the county. Urban centers are concentrated in and just beyond the Winnsboro town limits, shores of Lake Wateree, around Ridgeway town limits, and to a lesser extent, around parts of Lake Monticello and Jenkinsville.

According to future land use and comprehensive plans, the county will continue to remain primarily rural as it is now with a mixture of agriculture and low-density residential. Foreseeable population growth is projected to occur more so in and around the town centers of Winnsboro and Ridgeway and the Lake Wateree area. A key factor to the county's residential and economic vitality is the expansion of the Greater Columbia area and the improved accessibility via I-77 through the county. Such changes will continue to support the suburbanization of employment facilities in the county. Potential impacts could include sprawling developments, concentrated congestion, and increased air

quality concerns. The strategies and objectives of this plan will address these concerns in an effort to improve the environment influences of Fairfield County.

5.1.d Maintenance

One of the primary goals of the 2035 Rural Plan is to preserve the existing transportation network. Where it is not feasible (cost prohibitive) to widen lanes or construct new location roadways, other options must be considered, such as intersection improvements, shoulder widenings, signal timings, and resurfacing. In consultation with SCDOT, no concerns or needs were identified on SCDOT roads. However, SC 200 (Newberry Road) has been recently resurfaced with funds from the federal American Recovery and Reinvestment Act of 2009. The objectives and strategies of this plan will provide options to enhance maintenance activities in Fairfield County. CMCOG will continue to work with the Fairfield County Transportation Committee to develop maintenance strategies for county roads.

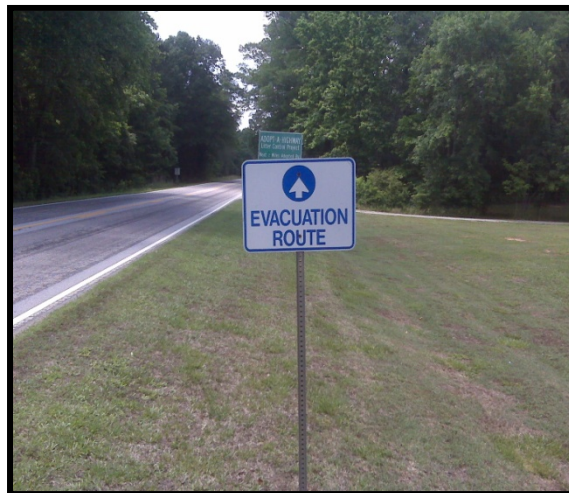
5.1.e Safety

There are currently 709 miles of roadway in the county and typically the more miles of roads, the more opportunity for accidents. Safety for all road users can be enhanced through analyses of each road and intersection. According to SCDOT Crash Data over the past three years (2006 – 2008), the county had a total of 1,338 accidents and 586 accidents with either injuries or deaths (Table 5.1). Only the area around Winnsboro had experienced significant levels of accidents.

Table 5.1: Crashes in Fairfield County (2006-2008)

Fairfield County	2006			2007			2008		
	Fatal/ Injury	Property Damage Only	Total Crashes	Fatal/ Injury	Property Damage Only	Total Crashes	Fatal/ Injury	Property Damage Only	Total Crashes
Fairfield County Sherriff	3	3	6	0	0	0	3	0	3
Winnsboro PD	22	31	53	21	38	59	18	32	50
Ridgeway PD	1	0	1	0	0	0	1	1	2
Highway Patrol	159	228	387	144	247	391	164	222	386
Totals	185	262	447	165	285	450	186	255	441

Regarding security-related issues, of concern to residents in Fairfield and Newberry Counties is the VC Summer Nuclear Station in Jenkinsville. Figure 2 provides a list of evacuation routes in case of an emergency at the station. SC 213 and SC 215 are the roads that specifically carry traffic in and out of the nuclear plant vicinity. Other roads of importance are SC 34, SC 269 and US 321. Considering that these roads are identified evacuation routes, more planning and safety improvements should be provided along these corridors—at least to the respective “evacuation reception centers” as pointed out in Figure 2. Though AADT data reports low levels of traffic along these roads, it may be prudent to ensure that these roads, at a minimum, in the future are equipped with shoulders and wider lanes as well as signage (indicating it as an emergency evacuation route), so that traffic will flow easily and safely in case of emergency evacuations.



Evacuation Zone Map

If you hear the warning siren, follow the instructions provided over these Emergency Alert System stations:

- WCOS (1400 AM, 97.5 FM radio)
- WTCB (106.7 FM)
- WVOC (560 AM radio)
- WKDK (1240 AM radio)
- ETV (Channel 35 Time Warner Cable 11)
- WIS (Channel 10 Time Warner Cable 3)

Refer to complete information and instructions included in this publication.

Protective Action Zone

Take the easiest route from your location to the suggested evacuation routes below.

County	Sector	Primary Evacuation Routes	Reception Centers
Fairfield	A-0	[213] East, [321] North, Mabley Hwy., East to	White Oak Conference Center
Fairfield	A-1	[34] East, [321] North, Mabley Hwy., East to	White Oak Conference Center
Fairfield	A-2	[34] East, [321] North, Mabley Hwy., East to	White Oak Conference Center
Fairfield	B-1	[213] East, [321] North, Mabley Hwy., East to	White Oak Conference Center
Fairfield	B-2	[213] East, [321] North, Mabley Hwy., East to	White Oak Conference Center
Fairfield	C-1	[215] South, [269] North, [321] North, Mabley Hwy., East to	White Oak Conference Center
Fairfield	C-2	[215] South, [269] North, [321] North, Mabley Hwy., East to	White Oak Conference Center
Richland	D-1	[176] East, Shady Grove Rd., East, Old Tamah Rd., East to	Dutch Fork High School
Lexington	D-2	[26] East, Exit 103 Harbison Blvd. to St. Andrews Rd., West to	CrossRoads Middle School
Newberry	E-1	[176] West, [219] West to	Newberry High School
Newberry	E-2	[26] West, [219] West to	Newberry High School
Newberry	F-1	Broad River Rd. North, [34] West, Hillbrook South to [219] West to	Newberry High School
Newberry	F-2	[176] North, [34] West, Hillbrook South to [219] West to	Newberry High School

5.1.f Objectives & Strategies

Accessibility & Mobility:

- I. Work with FCTS and other partners and stakeholders in promoting regional bus transit and ridesharing opportunities to key employment centers in Winnsboro and Columbia.
 - Initiate a marketing program to highlight successes of FCTS and build community support.
 - Establish a regional educational program on the benefits of transit.
 - Partner with SCDOT, FCTS, and/or large employers in promoting Transportation Demand Management strategies (e.g. carpool / vanpool, transit incentives).
 - Participate in community meetings and other local events to build support for the system at the grassroots level.
 - Coordinate on a continual basis with freight rail operators.
- II. Encourage land development and travel patterns that support transit and bike/walking opportunities
 - Promote “transit-friendly” development in potential transit corridors.
 - Continue to develop express routes in major corridors (US 321 & I-77).
 - Expand transit options in unserved or underserved areas.
 - Improve the transportation system to accommodate bicycle and pedestrian access along roadways.
 - Encourage the removal of physical barriers and the provision of facilities (such as ramps, curb cuts, and adequate sidewalks) for persons with physical disabilities.
 - Encourage land development regulations that require nonmotorized facilities, support bicycle and pedestrian connectivity, promote the efficient use of the existing transportation network, and foster regional coordination;
 - Encourage local governments to update land development regulations to support bicycle and pedestrian connectivity and the efficient use of the transportation network through the inclusion of pedestrian facilities as a requirement of development and performance standards that promote multimodal access.
- III. Increase bicycle and pedestrian safety through public awareness
 - Partner with Fairfield County School District to establish Safe Routes To School policies that encourage local and state entities to provide adequate pedestrian and bicycle facilities, linking residential areas and school campuses and encourage students to walk or bike to school.
 - Partner with DHEC, members governments, and health providers to promote pedestrian and bicycle transportation as a means of obtaining physical activity, improving personal health, and enhancing area quality of life.

IV. Encourage municipalities to participate in annual SCDOT Transportation Enhancement (TE) process

- Continue circulating information on the benefits of the TE Program through Rural Transportation Committee and member governments
- Partner with SCDOT in sponsoring annual introductory workshops on the SCDOT Transportation Enhancement Program

Economic Vitality

- I. Ensure minimal traffic congestion to large employment centers along key highway/roadway corridors
 - Partner with large employment centers and FCTS to create transit and/or ridesharing opportunities to large employers
- II. Support the regional transportation system and alternatives and solutions supporting efficient movement of citizens and freight and economic development growth
 - Encourage and support greater alignment between local economic development stakeholders and regional transportation organizations
 - Continue support of organizations and initiatives seeking regional alternative transportation modes
 - Work with counties on planning and funding sustainable roadway networks
 - Work with local governments and business to develop dedicated funding for public transit

Environment

- I. Support local and regional air quality initiatives that keep the region in attainment with EPA air quality standards.
 - Continue to invite county officials to participate in Midlands Air Quality Forum
 - Encourage the local adoption of action strategies for conserving energy and reducing air pollution.
- II. Encourage regional consultation and coordination with environmental organizations, state agencies and local governments in order to mitigate the environmental impacts of transportation projects, identify potential areas for conservation, and ensure compliance with ongoing conservation initiatives and local land use plans.
 - Continue to work with SCDOT to coordinate and consult with relevant environmental organizations on the compatibility of transportation plans with regional conservation goals.
 - Encourage the local implementation of the CMCOG *Open Space Preservation Plan*.
 - Market the Central Midlands Wetlands Mitigation Bank for use by SCDOT in purchasing credits to offset the adverse impacts of transportation projects.

III. Promote sound growth principles that strengthen the connection between land use and transportation planning.

- Encourage street connectivity, neo-traditional neighborhood design, transit supportive development and bike and pedestrian accessibility.
- Identify and encourage the development of land use patterns that improve and support transportation efficiency, increase mobility and support alternative modes of transportation.
- Work with local governments to integrate these principles into their comprehensive plans and land development regulations.

Maintenance

I. Preserve the existing transportation network

- Collaborate with SCDOT to identify opportunities for making intersection improvements, shoulder widenings, signal timings, and resurfacing.
- Work with the Lexington County Transportation Committee to develop maintenance strategies for county roads.

Safety

I. Identify hazardous corridors and intersections

- Work with SCDOT and Law Enforcement Officials to stay informed of crash information (in particularly, roadway segments and accident locations)
- Provide more planning and safety improvements along the identified emergency evacuation routes for the VC Summer Nuclear Station
- Identify schools eligible for Safe Routes To School funding to promote safe mobility of parents and children to school

II. Encourage the continual development of safe roadway design

- Identify areas of county where strong congregations of seniors reside
- Work with SCDOT to improve the roadway/driving environment that would include some of these amenities:
 - Advance guide/warning signs and street name signs
 - Removal of oversized signs
 - Improved lighting
 - Retro-reflective strips in the channelization posts
 - High intensity sheeting on all signs to increase sign visibility
 - 2'- 4' paved shoulders
 - Guardrails near hazardous locations
 - Center turn lanes/left-turn lanes

5.2 Lexington County

Lexington County is the fastest growing county in the region (28% since 2000). The county is also one

County	Fairfield	Lexington (rural)	Newberry	Richland (rural)
Population	23,454	26,279	36,108	7,424
Land area (sq mile)	687	304	631	192
Population Density (per mile)	34	86	60	38

of the leading residential centers in the state due to its proximity to Columbia and the recreational opportunities at Lake Murray. The county has a total of 15 towns and cities located within its borders, of which the county seat, the Town of Lexington, is the largest city.

While the majority of Lexington County is urbanized, there are three portions of the county that fall into the rural planning area. They include the incorporated and unincorporated areas in proximity of Batesburg-Leesville, Pelion, and Swansea. Together, these areas account for nearly 12% of Lexington County's population.

5.2.a Accessibility & Mobility

Like many places across the region, the automobile serves as the primary means of travel in throughout the county. Bicycling and pedestrian facilities (i.e. sidewalks) are prevalent in many of the established urban centers. Additional funding is needed in order to establish a more comprehensive network available to all residents throughout the county.

While there have been formal discussions with CMRTA about the potential for transit, the county currently is not served with any bus transit. Efforts to increase accessibility and mobility would be served by expanding the existing services provided by CMRTA. This is important considering that one of the region's top three potential commuter rail routes is the Columbia to Batesburg-Leesville connection.⁶ CMCOG is currently undertaking a transit feasibility study that will examine the feasibility of providing express bus route service from Batesburg-Leesville to Columbia.

Another important environmental component for the study area in Lexington County is related to maintaining positive air quality. In recent years, meeting NAAQS for ground-level ozone, particulate matter (PM_{2.5}) and sulfur dioxide have become major issues for the county. Although the county has no ozone monitor, its proximity to

⁶ For more information, refer to the *CMCOG Commuter Rail Study (2006)*.

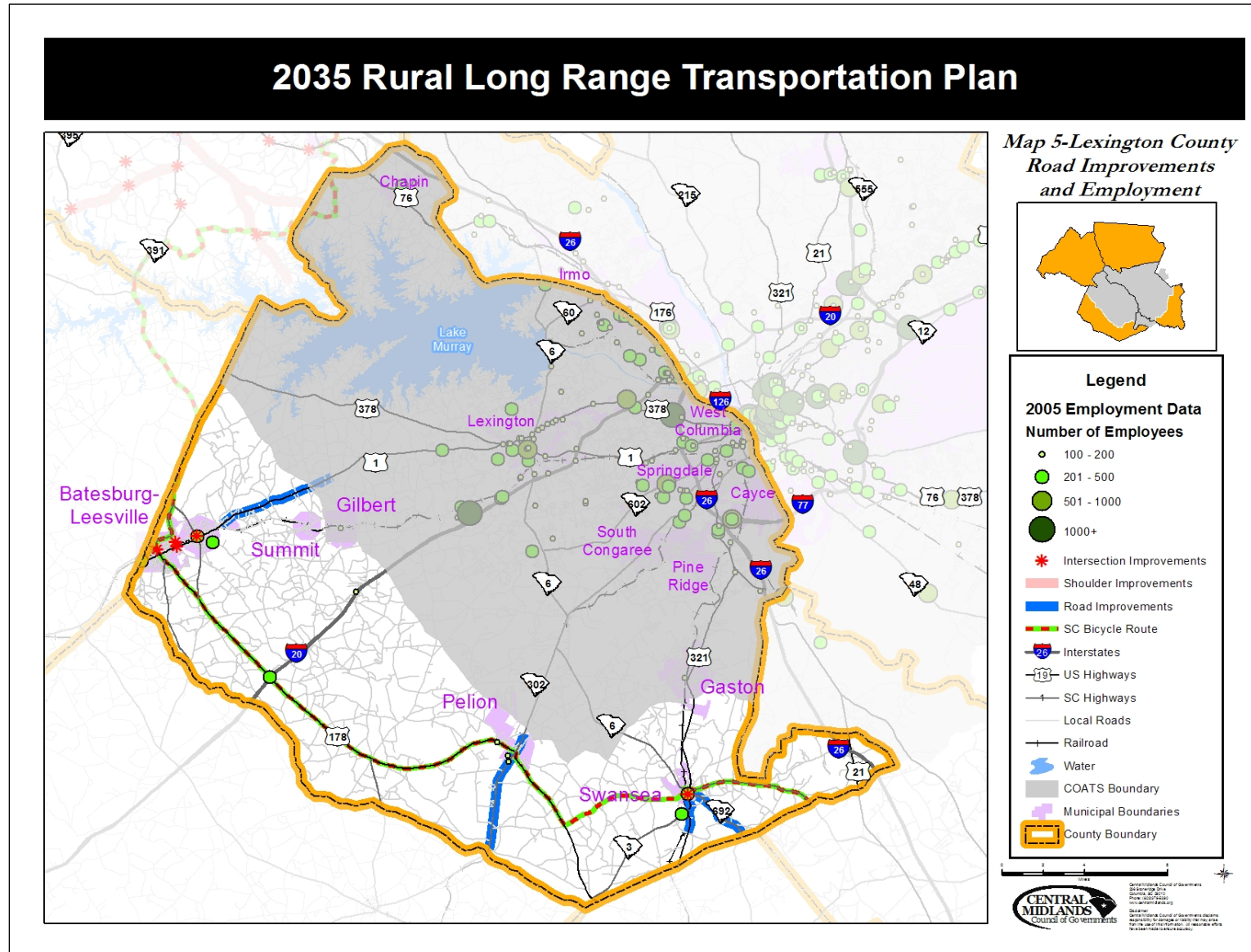
Richland County groups the county into the same geographical location. Meanwhile, monitors in Lexington County have registered levels of concern regarding sulfur dioxide. As EPA seeks to issue more stringent standards (which consequently will cause our region to become designated as “non-attainment”), instituting policies and programs that ease traffic congestion and lessen mobile source pollution will be vital for the county and the region at large.

5.2.b Economic Vitality

Map 5 shows the highway network and the location of major industry in the study area along with funded road improvement and intersection projects. Travel patterns in the Lexington County portion of the planning area are directed primarily to the Town of Lexington, the City of Columbia, and the City of Orangeburg for goods and services. For the most part, the portions of Lexington County in the study area are considered more suburban residential-type uses, wherein commuters live there but travel to Lexington and Columbia for jobs and medical services.

There are a number of state and US highways that traverse through the area. They are I-20, US 1, US 321, US 178, SC 6, SC 23, SC 245, SC 302, and SC 692. According to AADT data over the past several years, the roadways in proximity of the town center of Batesburg-Leesville, particularly SC 23, US 1, and Pond Branch Road, are congested and primed for more congestion in the future. Currently, several intersection improvements are planned for Batesburg-Leesville, particularly along SC 23 (Church Street), to help ameliorate traffic flow throughout the town. The rest of the Lexington rural planning area shows no significant levels of congestion, although according to population trends in the Swansea area, US 321 may continue to see an increase in traffic. Some potential major traffic generators in the future might come from companies relocating to the industrial parks in the Pelion and Batesburg-Leesville areas as well as increased residential housing around unincorporated areas near Batesburg-Leesville.

Map 5: Lexington County Road Improvements & Employment



5.2.c Environment

The protection and enhancement of the environment helps to sustain and improve our region's quality of life. This may include promoting consistency between transportation improvements and locally planned growth patterns as well as assisting in reducing air pollution by reducing motorized vehicle miles traveled. The land use in the area is a mixture of agriculture and low density residential, except in the town centers of Batesburg-Leesville, Pelion, and Swansea, where there is more concentrated industrial and commercial uses. The highest concentration of commercial development is in the Town of Batesburg-Leesville. According to future land use and comprehensive plans as well as population forecasts, the study area will continue to remain agriculture and low-density residential in the long term with growth occurring more so in and around the towns of Batesburg-Leesville, Pelion and Swansea. Of the three towns, Swansea is projected to grow substantially by 2035. This is primarily due to increased commercial development along US 321, reasonably priced land, and the increase in available water and sewer services.

5.2.d Maintenance

One of the primary goals of the 2035 Plan is to preserve the existing transportation network. Where it is not feasible (cost prohibitive) to widen lanes or construct new location roadways, other options must be considered, such as intersection improvements, shoulder widenings, signal timings, and resurfacing. In consultation with SCDOT, no concerns or needs were identified on SCDOT roads. The objectives and strategies of this plan will provide options to enhance maintenance activities in Lexington County. CMCOG will continue to work with the Lexington County Transportation Committee to develop maintenance strategies for county roads.

5.2.e Safety

Safety in the planning area is crucial. Although the study area serves primarily rural, low-density areas, it has close connections to the urban area and experiences commuter-type travel problems (like congestion). This results in heavy traffic flows during weekday peak hours on major external and internal roadways. Increased traffic flow and the potential for inadequate road design could result in an automobile crash with dire consequences. Transportation safety requires that all opportunities to reduce the frequency and severity of incidents should be systematically pursued, regardless of the current level of safety.

According to SCDOT Crash Data over the past three years (2006 – 2008), Batesburg-Leesville had the highest levels of vehicular accidents (319) in the Lexington County RPA over that three-year period (Table 5.2). The areas of Batesburg-Leesville, Pelion, and Swansea have averaged total crashes per year of 106, 36, and 11 respectively.

Table 5.2: Crashes in Lexington County RPA (2006-2008)

Lexington County	2006			2007			2008		
	Fatal/ Injury	Property Damage Only	Total Crashes	Fatal/ Injury	Property Damage Only	Total Crashes	Fatal/ Injury	Property Damage Only	Total Crashes
Lexington County Sherriff	59	163	222	21	72	93	19	57	76
Batesburg PD	31	79	110	34	91	125	24	60	84
Pelion PD	2	11	13	4	3	7	4	10	14
Swansea PD	20	29	49	11	20	31	11	18	29
Highway Patrol	1,224	3,282	4,506	1,246	3,432	4,678	1,188	3,214	4,402
State Transport Police	1	1	2	-	-	-	-	-	-
Totals	1,337	3,565	4,902	1,316	3,618	4,934	1,246	3,359	4,605

In addition to the intersection improvements planned for Batesburg-Leesville (noted earlier), the addition of paved and widen shoulders along with rumble strips are two recommended safety improvements for the study area. These improvements are recommended along the corridors of US 1, US 321, SC 302, and SC 692.

5.2.f Objectives & Strategies

Accessibility & Mobility:

- I. Work with County Officials, CMRTA, and other partners in promoting regional bus transit and ridesharing opportunities to key employment centers in Lexington and Columbia.
 - Establish a regional educational program on the benefits of transit.
 - Partner with SCDOT, CMRTA, and/or large employers in promoting Transportation Demand Management strategies (e.g. carpool / vanpool, transit incentives).
 - Participate in community meetings and other local events to build support for the system at the grassroots level.
 - Coordinate on a continual basis with freight rail operators regarding future commuter rail opportunities.

II. Encourage land development and travel patterns that support transit and bike/walking opportunities

- Promote “transit-friendly” development in potential transit corridors.
- Continue to develop express routes in major corridors (US 1, US 178, US 321, & I-20).
- Expand transit options in unserved or underserved areas.
- Improve the transportation system to accommodate bicycle and pedestrian access along roadways.
- Encourage the removal of physical barriers and the provision of facilities (such as ramps, curb cuts, and adequate sidewalks) for persons with physical disabilities.
- Encourage land development regulations that require nonmotorized facilities, support bicycle and pedestrian connectivity, promote the efficient use of the existing transportation network, and foster regional coordination;
- Encourage local governments to update land development regulations to support bicycle and pedestrian connectivity and the efficient use of the transportation network through the inclusion of pedestrian facilities as a requirement of development and performance standards that promote multimodal access.

III. Increase bicycle and pedestrian safety through public awareness

- Partner with Lexington County School Districts to establish *Safe Routes To School* policies that encourage local and state entities to provide adequate pedestrian and bicycle facilities, linking residential areas and school campuses and encourage students to walk or bike to school.
- Partner with DHEC, members governments, municipal recreation departments, and health providers to promote pedestrian and bicycle transportation as a means of obtaining physical activity, improving personal health, and enhancing area quality of life.

IV. Encourage municipalities to participate in annual SCDOT Transportation Enhancement (TE) process

- Continue circulating information on the benefits of the TE Program through Rural Transportation Committee and member governments
- Partner with SCDOT in sponsoring annual introductory workshops on the SCDOT Transportation Enhancement Program

Economic Vitality

I. Ensure minimal traffic congestion to large employment centers along key highway/roadway corridors

- Partner with large employment centers and FCTS to create transit and/or ridesharing opportunities to large employers

- II. Support the regional transportation system and alternatives and solutions supporting efficient movement of citizens and freight and economic development growth
 - Encourage and support greater alignment between local economic development stakeholders and regional transportation organizations
 - Continue support of organizations and initiatives seeking regional alternative transportation modes
 - Work with counties on planning and funding sustainable roadway networks
 - Work with local governments and business to develop dedicated funding for public transit

Environment

- I. Support local and regional air quality initiatives that keep the region in attainment with EPA air quality standards.
 - Continue to invite county officials to participate in Midlands Air Quality Forum
 - Encourage the local adoption of action strategies for conserving energy and reducing air pollution.
- II. Encourage regional consultation and coordination with environmental organizations, state agencies and local governments in order to mitigate the environmental impacts of transportation projects, identify potential areas for conservation, and ensure compliance with ongoing conservation initiatives and local land use plans.
 - Continue to work with SCDOT to coordinate and consult with relevant environmental organizations on the compatibility of transportation plans with regional conservation goals.
 - Encourage the local implementation of the *CMCOG Open Space Preservation Plan*.
 - Market the Central Midlands Wetlands Mitigation Bank for use by SCDOT in purchasing credits to offset the adverse impacts of transportation projects.
- III. Promote sound growth principles that strengthen the connection between land use and transportation planning
 - Encourage street connectivity, neo-traditional neighborhood design, transit supportive development and bike and pedestrian accessibility.
 - Identify and encourage the development of land use patterns that improve and support transportation efficiency, increase mobility and support alternative modes of transportation.
 - Work with local governments to integrate these principles into their comprehensive plans and land development regulations.

Maintenance

I. Preserve the existing transportation network

- Collaborate with SCDOT to identify opportunities for making intersection improvements, shoulder widenings, signal timings, and resurfacing.
- Work with the Lexington County Transportation Committee to develop maintenance strategies for county roads.

Safety

I. Identify hazardous corridors and intersections

- Work with SCDOT and Law Enforcement Officials to stay informed of crash information (in particular, roadway segments and accident locations)
- Identify schools eligible for *Safe Routes To School* funding to promote safe mobility of parents and children to school

II. Encourage the continual development of safe roadway design

- Work with SCDOT to improve the roadway/driving environment that would include some of these amenities:
 - Advance guide/warning signs and street name signs
 - Removal of oversized signs
 - Improved lighting
 - Retro-reflective strips in the channelization posts
 - High intensity sheeting on all signs to increase sign visibility
 - 2' - 4' paved shoulders
 - Guardrails near hazardous locations
 - Center turn lanes/left-turn lanes

5.3 Newberry County

Newberry County is the western gateway to the Central Midlands region. The county is uniquely situated

County	Fairfield	Lexington (rural)	Newberry	Richland (rural)
Population	23,454	26,279	36,108	7,424
Land area (sq mile)	687	304	631	192
Population Density (per mile)	34	86	60	38

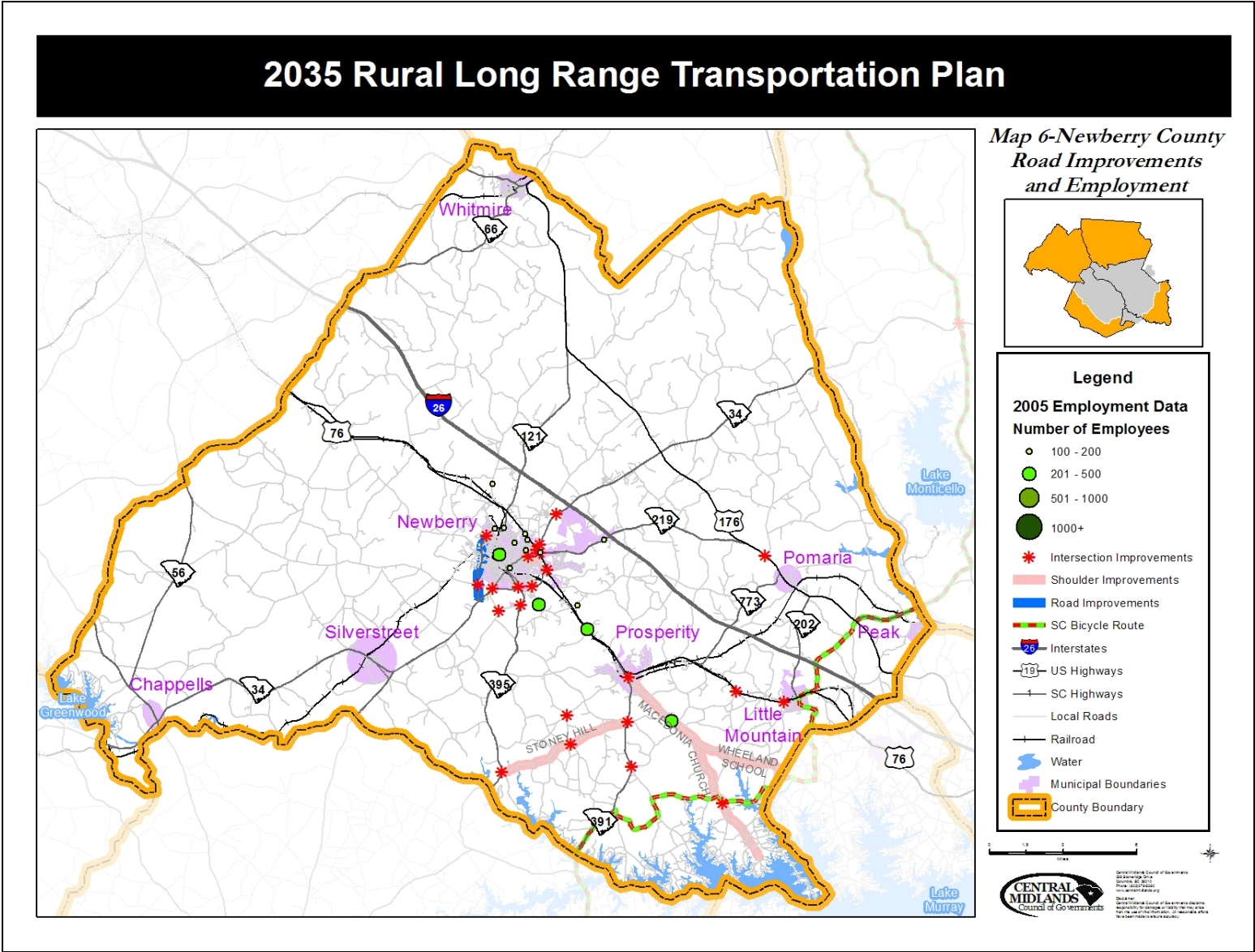
between two metropolitan areas (less than 60 miles each way):

Columbia and Greenville-Spartanburg. Nearly 78% of the county is forested, and the Sumter National Forest, Lynches Woods and Dreher Island State Park offer a variety of recreational opportunities. Bounded in part by the Broad, Saluda, Tyger and Enoree Rivers, Newberry is literally surrounded by waterways. Key attractions and destinations in the county include: two man-made lakes, Lake Murray (in the southeast) and Lake Greenwood (in the southwest), historic Newberry College, and the famed Newberry Opera House. The county seat is Newberry (population 10,542), which accounts for over 31% of the county's population. Other incorporated towns of the county are Little Mountain, Peak, Pomaria, Prosperity, Silverstreet, and Whitmire. The entire county is within the limits of the rural planning area. Map 6 shows the highway network and the location of major industry in the study area along with funded road improvement and intersection projects.

5.3.a Accessibility & Mobility

Like most places in the region, the automobile is the dominant means of travel. Bicycling and pedestrian trails can also provide increased transportation options in a region. The only existing trails in the study area are located in lower Newberry County by way of the Palmetto Trail (Peak, SC) and certain spots in the City of Newberry. Additional funding is needed in order to establish a more comprehensive network available to all residents throughout the rural planning area. Meanwhile, as typical for many rural towns and communities, sidewalks are prevalent, but limited to established urban centers.

Map 6: Newberry County Road Improvements & Employment



The county does provide transit services through part of the county by way of the Newberry County Council on Aging (NCCOA). NCCOA has partnered with SCDOT in providing express bus route service from Newberry to Columbia. This partnership, called SmartRide Newberry, provides services to downtown Columbia with a stop in Little Mountain. Efforts to increase accessibility and mobility would be served by expanding the existing services provided by NCCOA. This is paramount considering that one of the region's top three potential commuter rail routes is the Columbia-Newberry connection⁷, with possible rail stations in the towns of Prosperity and Little Mountain.

5.3.b Economic Vitality

An important regional activity is the development and enhancement of economic vitality. One of the essential components is good traffic flow. Newberry County benefits in this area as there is limited congestion throughout the transportation system. For the most part, many of the commuting patterns of county residents are directed to two general destinations: Newberry and Columbia. Newberry houses a number of government and medical jobs as well as the county's largest employer: Kraft Foods (1,375 employees).

Employment centers are located along the major highways of I-26, US 176 and US 76, SC 773, SC 391, SC 121, SC 34, and SC 219, which is a recently completed federal-aid widening project. The general commuting patterns of residents demonstrates that the majority of trips are along these roadways to the destinations of jobs, homes, and medical services. According to AADT data over the past several years, there are no significant levels of congestion in the county. Some potential major traffic generators in the future might come from companies relocating to the industrial parks (e.g. Mid-Carolina Commerce Park) in proximity of I-26.

5.3.c Environment

The protection and enhancement of the environment helps to sustain and improve our region's quality of life. This may include promoting consistency between transportation improvements and locally planned growth patterns as well as assisting in reducing air pollution by reducing motorized vehicle miles traveled. In examining existing land use conditions, an assessment was done for areas around the municipalities, the two lakes, and portions of the major state and US highway corridors in the county. Within these areas, there is a mixture of rural and urban land uses, including agricultural, residential, commercial, industrial,

⁷ For more information, refer to the *CMCOG Commuter Rail Study (2006)*.

public uses, and vacant land. Outside of these subset areas, the rest of the county (particularly the unincorporated areas) is a mixture of agricultural, low-density residential, and some commercial.

According to future land use and comprehensive plans, the existing mix of land use patterns outside of the incorporated areas will continue on into the future. The county will see further residential growth in proximity of the two lakes, the US 76 corridor between Newberry and Little Mountain and around the City of Newberry. A key factor to the county's residential and economic vitality is the improved access points to I-26. Such changes will continue to support the suburbanization of employment facilities in the county.

5.3.d Maintenance

One of the primary goals of the 2035 Plan is to preserve the existing transportation network. Where it is not feasible (cost prohibitive) to widen lanes or construct new location roadways, other options must be considered, such as intersection improvements, shoulder widenings, signal timings, and resurfacing. In consultation with SCDOT, no concerns or needs were identified on SCDOT roads. It is worth noting however that Belfast Road has been recently resurfaced with funds from the federal American Recovery and Reinvestment Act of 2009. The objectives and strategies of this plan will provide options to enhance maintenance activities in Newberry County. CMCOG will continue to work with the Newberry County Transportation Committee to develop maintenance strategies for county roads.

5.3.e Safety

Newberry County has over 855 miles of roadway; and typically the more vehicles on the road, the higher probability for accidents. Safety for all road users can be enhanced through analyses of each road and intersection. According to SCDOT Crash Data over the past three years (2006 – 2008), the county had a total of 2,566 accidents and 796 accidents with either injuries or deaths (Table 5.3).

Table 5.3: Crashes in Newberry County (2006-2008)

Newberry County	2006			2007			2008		
	Fatal/ Injury	Property Damage Only	Total Crashes	Fatal/ Injury	Property Damage Only	Total Crashes	Fatal/ Injury	Property Damage Only	Total Crashes
Newberry County Sherriff	2	3	5	0	3	3	0	1	1
Newberry PD	61	121	182	56	107	163	63	119	182
Whitmire PD	10	7	17	0	7	7	4	7	11
Little Mountain PD	0	1	1	0	0	0	1	1	2
Prosperity PD	3	7	10	4	13	17	3	10	13
Whitten Center PD	1	0	1	0	0	0	0	0	0
Highway Patrol	198	474	672	198	468	666	192	421	613
Totals	275	613	888	258	598	856	263	559	822

A leading cause of accidents in many rural parts of South Carolina is one-car accidents involving vehicles leaving the paved road ending up off on the side or embankment. For Newberry County however, most of the accidents are located along US 76 (Wilson Road) in vicinity of the City of Newberry (Table 5.4). The addition of paved and widen shoulders along with rumble strips are two recommended safety improvements. These improvements are particularly recommended along the corridors of SC 34, SC 773, US 76, and Jolleystreet Road, which all carry high levels of truck traffic.

Table 5.4: High Traffic Areas/Intersections in Newberry County (2004-2008)

Primary Route	Name	Secondary Route	Name	collisions	killed	injured
SC 219	Main St	US 76	Wilson Rd	53	0	22
SC 34	Winnsboro Hwy	US 76	Wilson Rd	45	0	30
SC 121	Kendall Hwy	US 76	Wilson Rd	27	0	17

Regarding security-related issues, of concern to residents in Fairfield and Newberry Counties is the VC Summer Nuclear Station in Jenkinsville. (Refer back to Figure 2 for a list of the nuclear station's evacuation routes.) SC 213 and SC 215 (in Fairfield County) are the roads that specifically carry traffic in and out of the nuclear plant vicinity. Other roads of importance are US 176, SC 219, SC 34, and I-26. Considering that these roads are identified evacuation routes, more planning and safety improvements should be provided along these corridors—at least to the respective “evacuation reception centers” as pointed out in Figure 2. Though AADT data reports low levels of traffic along these roads, it may be prudent to ensure that these roads, at a

minimum, in the future are equipped with shoulders and wider lanes as well as signage (indicating it as an emergency evacuation route), so that traffic will flow easily and safely in case of emergency evacuations.

5.3.f Objectives & Strategies

Accessibility & Mobility:

- I. Work with NCCOA and other partners in promoting regional bus transit and ridesharing opportunities to key employment centers in Newberry and Columbia.
 - Initiate a marketing program to highlight successes of NCCOA and build community support.
 - Establish a regional educational program on the benefits of transit.
 - Partner with NCCOA, SCDOT, and/or large employers in promoting Transportation Demand Management strategies (e.g. carpool / vanpool, transit incentives).
 - Participate in community meetings and other local events to build support for the system at the grassroots level.
 - Coordinate on a continual basis with freight rail operators regarding future commuter rail opportunities.
- II. Encourage land development and travel patterns that support transit and bike/walking opportunities
 - Promote “transit-friendly” development in potential transit corridors.
 - Continue to develop express routes in major corridors (US 76 & I-26).
 - Expand transit options in unserved or underserved areas.
 - Improve the transportation system to accommodate bicycle and pedestrian access along roadways.
 - Encourage the removal of physical barriers and the provision of facilities (such as ramps, curb cuts, and adequate sidewalks) for persons with physical disabilities.
 - Encourage land development regulations that require nonmotorized facilities, support bicycle and pedestrian connectivity, promote the efficient use of the existing transportation network, and foster regional coordination;
 - Encourage local governments to update land development regulations to support bicycle and pedestrian connectivity and the efficient use of the transportation network through the inclusion of pedestrian facilities as a requirement of development and performance standards that promote multimodal access.
- III. Increase bicycle and pedestrian safety through public awareness
 - Partner with Newberry County School District to establish Safe Routes To School policies that encourage local and state entities to provide adequate pedestrian and bicycle facilities, linking residential areas and school campuses and encourage students to walk or bike to school.
 - Partner with DHEC, members governments, municipal recreation departments, and health providers to promote pedestrian and bicycle transportation as a means

of obtaining physical activity, improving personal health, and enhancing area quality of life.

IV. Encourage municipalities to participate in annual SCDOT Transportation

Enhancement (TE) process

- Continue circulating information on the benefits of the TE Program through Rural Transportation Committee and member governments
- Partner with SCDOT in sponsoring annual introductory workshops on the SCDOT Transportation Enhancement Program

Economic Vitality

- I. Ensure minimal traffic congestion to large employment centers along key highway/roadway corridors
 - Partner with large employment centers and NCCOA to create transit and/or ridesharing opportunities to large employers
- II. Support the regional transportation system and alternatives and solutions supporting efficient movement of citizens and freight and economic development growth
 - Encourage and support greater alignment between local economic development stakeholders and regional transportation organizations
 - Continue support of organizations and initiatives seeking regional alternative transportation modes
 - Work with counties on planning and funding sustainable roadway networks
 - Work with local governments and business to develop dedicated funding for public transit

Environment

- I. Support local and regional air quality initiatives that keep the region in attainment with EPA air quality standards.
 - Continue to invite county officials to participate in Midlands Air Quality Forum
 - Encourage the local adoption of action strategies for conserving energy and reducing air pollution.
- II. Encourage regional consultation and coordination with environmental organizations, state agencies and local governments in order to mitigate the environmental impacts of transportation projects, identify potential areas for conservation, and ensure compliance with ongoing conservation initiatives and local land use plans.
 - Continue to work with SCDOT to coordinate and consult with relevant environmental organizations on the compatibility of transportation plans with regional conservation goals.
 - Encourage the local implementation of the *CMCOG Open Space Preservation Plan*.

- Market the Central Midlands Wetlands Mitigation Bank for use by SCDOT in purchasing credits to offset the adverse impacts of transportation projects.

III. Promote sound growth principles that strengthen the connection between land use and transportation planning

- Encourage street connectivity, neo-traditional neighborhood design, transit supportive development and bike and pedestrian accessibility.
- Identify and encourage the development of land use patterns that improve and support transportation efficiency, increase mobility and support alternative modes of transportation.
- Work with local governments to integrate these principles into their comprehensive plans and land development regulations.

Maintenance

I. Preserve the existing transportation network

- Collaborate with SCDOT to identify opportunities for making intersection improvements, shoulder widenings, signal timings, and resurfacing.
- Work with the Newberry County Transportation Committee to develop maintenance strategies for county roads.

Safety

I. Identify hazardous corridors and intersections

- Work with SCDOT and Law Enforcement Officials to stay informed of crash information (in particular, roadway segments and accident locations)
- Provide more planning and safety improvements along the identified emergency evacuation routes for the VC Summer Nuclear Station
- Identify schools eligible for *Safe Routes To School* funding to promote safe mobility of parents and children to school

II. Encourage the continual development of safe roadway design

- Identify areas of county where strong congregation of seniors reside
- Work with SCDOT to improve the roadway/driving environment that would include some of these amenities:
 - Advance guide/warning signs and street name signs
 - Removal of oversized signs
 - Improved lighting
 - Retro-reflective strips in the channelization posts
 - High intensity sheeting on all signs to increase sign visibility
 - 2' paved shoulders
 - Guardrails near hazardous locations
 - Center turn lanes/left-turn lanes

5.4 Richland County

Richland County is the region's largest county with a 2005 population of 356,086 people. Of that, only 7,424

County	Fairfield	Lexington (rural)	Newberry	Richland (rural)
Population	23,454	26,279	36,108	7,424
Land area (sq mile)	687	304	631	192
Population Density (per mile)	34	86	60	38

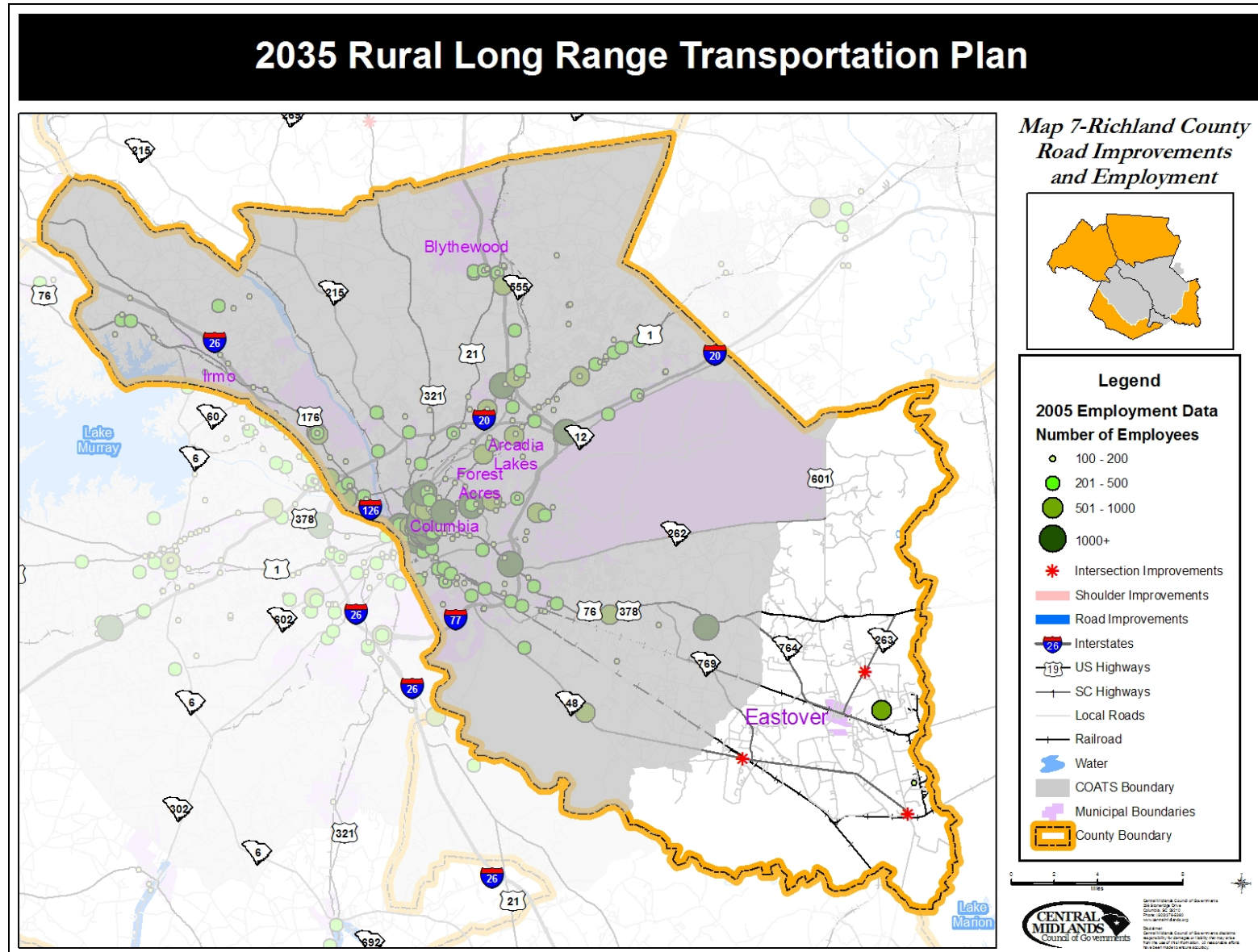
people reside in the rural planning area, approximately 1.75% of the total county population. At the heart of the county is the region's largest city, Columbia, which has over 128,000 people. Columbia is full of key attractions and destinations as it not only serves as the County Seat but also is home to the State Capital. Other key tourist and employment generators in the county, more specifically in the study area, are the Kensington Mansion, Congaree National Park, and International Paper, which has over 700 employees. Map 7 shows the highway network and the location of the major industry in the study area along with funded road improvement and intersection projects.

5.4.a Accessibility & Mobility

As evidenced through the public meetings in Eastover⁸, there is an overwhelming desire to have more transit services available in the area, particularly for those residents who do not own a vehicle. Currently, many residents are heavily dependent upon transit services, which are offered by the Santee-Wateree Regional Transit Authority (SWRTA). The SWRTA Eastover route connects Sumter, Eastover, Horrell Hill, Hopkins, and Columbia. SWRTA ridership is steady on the Eastover route and most riders use this route to access jobs, medical centers, and/or general commercial sites in Columbia. Most riders have expressed the need to increase the frequency of the Eastover route to include a mid-morning and Saturday morning service, especially for residents who commute to work during nontraditional hours. Current ridership numbers, however, do not warrant the additional services at this time.

⁸ As part of the CMCOG *Lower Richland Subarea Plan (2008)* and development of this 2035 Rural Plan (2009-2010).

Map 7: Richland County Road Improvements & Employment



5.4.b Economic Vitality

Travel patterns in the Richland County RPA are directed primarily to the City of Columbia. There are a number of state and US highways that traverse through the area. They are US 76/378 (Garners Ferry Road), US 601 (McCords Ferry Road), SC 764, SC 769, SC 263, and SC 48 (Bluff Road). According to AADT data over the past several years, there is little evidence of congestion in any of these corridors. Notable new industries such as International Paper and Huron Technologies have increased both local employment opportunities and investment in the existing housing stock of Eastover. These new industries and housing opportunities along with the increased tourism of Kensington Mansion and Congaree National Park may serve as potential major traffic generators in the future, particularly along US 601. There is however not enough traffic at this time on any of the corridors to warrant congestion mitigation strategies.

5.4.c Environment

The protection and enhancement of the environment helps to sustain and improve our region's quality of life. This may include promoting consistency between transportation improvements and locally planned growth patterns as well as assisting in reducing air pollution by lessening mobile and stationary source violations. The land use in the area is a mixture of agriculture and low density residential. The highest concentration of commercial development appears to be within the Town of Eastover. According to future land use and comprehensive plans, the study area will continue to remain agriculture and low-density residential in the long term. Even though the town of Eastover provides sewer service to the immediate areas around the town, no sewer service exists in most of Lower Richland County, which is a major reason for why projected growth for this part of the county is minimal.

To that end, Eastover officials and residents have expressed the need for visibility along the corridors of US 601 and US 378 as a means for luring residential and commercial growth. Some recommended transportation enhancement projects that were noted from the public meeting process include: signage on US 378 at SC 764 to highlight the Town of Eastover and construction of more sidewalks along SC 764 in the town limits of Eastover. Public comments from meetings held in the area suggest that such enhancements along the corridors of SC 263, SC 764, US 601, and US 378 will help to lure industry and stimulate business opportunities in the Town.

Another important environmental component for the study area is related to maintaining positive air quality. In recent years, meeting

NAAQS for ground-level ozone has become an issue. One the region's three ozone monitors is located in the study area. As EPA seeks to issue more stringent standards, consequently causing our region to become designated as "non-attainment", instituting policies and programs that ease traffic congestion and lessen mobile source pollution will be vital for the region.

5.4.d Maintenance

No concerns or needs were identified on SCDOT roads with the exception of the bridge replacement on US 601 over the Congaree River in proximity of the unincorporated community of Wateree, near the Congaree National Park. It is recommended that the County pursue funding from some resurfacing programs as well as funding for the paving of certain dirt roads to facilitate travel throughout the area.

5.4.e Safety

Although the RPA serves a primarily rural, low-density area, it has close connections to the urban area and experiences commuter-type travel problems (like congestion). This results in heavy traffic flows during weekday peak hours on major external and internal roadways. Increased traffic flow and the potential for inadequate road design could result in an automobile crash with dire consequences. Transportation safety requires that all opportunities to reduce the frequency and severity of incidents should be systematically pursued, regardless of the current level of safety.

According to SCDOT Crash Data over the past three years (2006 – 2008), the rural area of Richland County has experienced only a handful of accidents and no fatalities. Though the Eastover area shows a very low number of incidents, many residents in the public meetings cited safety concerns related to automobiles speeding through the town and the lack of adequate sidewalks for pedestrians getting around town.

A leading cause of accidents in many rural parts of South Carolina is one-car accidents involving vehicles leaving the paved road ending up off on the side or embankment. The addition of paved and widen shoulders along with rumble strips are two recommended safety improvements. These improvements are recommended along the corridors of US 601 and SC 764, which both have high volumes of truck traffic.

5.4.f Objectives & Strategies

Accessibility & Mobility:

- I. Work with CMRTA, Santee-Wateree RTA, and other partners in promoting more transit services from the RPA to Columbia.
 - Establish a regional educational program on the benefits of transit.
 - Partner with SCDOT, CMRTA, Santee-Wateree RTA, and/or large employers in promoting Transportation Demand Management strategies (e.g. carpool / vanpool, transit incentives).
 - Participate in community meetings and other local events to build support for the system at the grassroots level.
 - Coordinate on a continual basis with freight rail operators.
- II. Encourage land development and travel patterns that support transit and bike/walking opportunities
 - Promote “transit-friendly” development in potential transit corridors.
 - Continue to develop express routes in major corridors (SC 48, SC 764 & US 76/378)
 - Expand transit options in unserved or underserved areas.
 - Improve the transportation system to accommodate bicycle and pedestrian access along roadways.
 - Encourage the removal of physical barriers and the provision of facilities (such as ramps, curb cuts, and adequate sidewalks) for persons with physical disabilities.
 - Increase bicycle and pedestrian safety through public awareness and partnerships with Richland County School Districts, local governments, Richland County Parks & Recreation, SCDOT, and SC Department of Health & Environmental Control and Richland County Recreation Commission.
 - Encourage land development regulations that require nonmotorized facilities, support bicycle and pedestrian connectivity, promote the efficient use of the existing transportation network, and foster regional coordination;
 - Encourage local governments to update land development regulations to support bicycle and pedestrian connectivity and the efficient use of the transportation network through the inclusion of pedestrian facilities as a requirement of development and performance standards that promote multimodal access.
- III. Encourage municipalities to participate in annual SCDOT Transportation Enhancement (TE) process
 - Continue circulating information on the benefits of the TE Program through Rural Transportation Committee and member governments
 - Partner with SCDOT in sponsoring annual introductory workshops on the SCDOT Transportation Enhancement Program

Economic Vitality

- I. Ensure minimal traffic congestion to large employment centers along key highway/roadway corridors
 - Partner with large employment centers and Santee-Wateree (and/or CMRTA) to create transit and ridesharing opportunities to large employers
- II. Support the regional transportation system and alternatives and solutions supporting efficient movement of citizens and freight and economic development growth
 - Encourage and support greater alignment between local economic development stakeholders and regional transportation organizations
 - Continue support of organizations and initiatives seeking regional alternative transportation modes
 - Work with counties on planning and funding sustainable roadway networks
 - Work with local governments and business to develop dedicated funding for public transit

Environment

- I. Support local and regional air quality initiatives that keep the region in attainment with EPA air quality standards
 - Continue to invite county officials to participate in Midlands Air Quality Forum
 - Encourage the local adoption of action strategies for conserving energy and reducing air pollution.
- II. Encourage regional consultation and coordination with environmental organizations, state agencies and local governments in order to mitigate the environmental impacts of transportation projects, identify potential areas for conservation, and ensure compliance with ongoing conservation initiatives and local land use plans.
 - Continue to work with SCDOT to coordinate and consult with relevant environmental organizations on the compatibility of transportation plans with regional conservation goals.
 - Encourage the local implementation of the *CMCOG Open Space Preservation Plan*.
 - Market the Central Midlands Wetlands Mitigation Bank for use by SCDOT in purchasing credits to offset the adverse impacts of transportation projects
 - Work with Congaree National Park
- III. Promote sound growth principles that strengthen the connection between land use and transportation planning
 - Encourage street connectivity, neo-traditional neighborhood design, transit supportive development and bike and pedestrian accessibility.
 - Identify and encourage the development of land use patterns that improve and support transportation efficiency, increase mobility and support alternative modes of transportation.

- Work with local governments to integrate these principles into their comprehensive plans and land development regulations.

Maintenance

I. Preserve the existing transportation network

- Collaborate with SCDOT to identify opportunities for making intersection improvements, shoulder widenings, signal timings, and resurfacing.
- Work with the Richland County Transportation Committee to develop maintenance strategies for county roads.
- Support bridge replacement and upgrades.

Safety

I. Identify hazardous corridors and intersections

- Work with SCDOT and Law Enforcement Officials to stay informed of crash information (in particular, roadway segments and accident locations)
- Identify schools eligible for *Safe Routes To School* funding to promote safe mobility of parents and children to school

II. Encourage the continual development of safe roadway design

- Work with SCDOT to improve the roadway/driving environment that would include some of these amenities:
 - Advance guide/warning signs and street name signs
 - Removal of oversized signs
 - Improved lighting
 - Retro-reflective strips in the channelization posts
 - High intensity sheeting on all signs to increase sign visibility
 - 2' paved shoulders
 - Guardrails near hazardous locations
 - Center turn lanes/left-turn lanes

CHAPTER 6 - SUMMARY LIST OF OBJECTIVES & STRATEGIES

Based on the goal categories established in the previous chapter, below are the goals and their respective objectives and strategies.

Goal #1: Increase Accessibility & Mobility

Objectives & Strategies:

- I. Work with RTAs and other partners and stakeholders in promoting regional bus transit and ridesharing opportunities to key employment centers in and around Columbia.
 - Initiate a marketing program to highlight successes of transit and build community support.
 - Establish a regional educational program on the benefits of transit.
 - Partner with SCDOT, RTAs, and/or large employers in promoting strategies and incentives for carpooling, ridesharing and transit.
 - Participate in community meetings and other local events to build support for the system at the grassroots level.
 - Coordinate on a continual basis with freight rail operators.
- II. Encourage land development and travel patterns that support transit and bike/walking opportunities
 - Promote “transit-friendly” development in potential transit corridors.
 - Continue to develop express routes in major corridors.
 - Expand transit options in unserved or underserved areas.
 - Improve the transportation system to accommodate bicycle and pedestrian access along roadways.
 - Encourage the removal of physical barriers and the provision of facilities (such as ramps, curb cuts, and adequate sidewalks) for persons with physical disabilities.
 - Encourage land development regulations that require nonmotorized facilities, support bicycle and pedestrian connectivity, promote the efficient use of the existing transportation network, and foster regional coordination;
 - Encourage local governments to update land development regulations to support bicycle and pedestrian connectivity and the efficient use of the transportation network through the inclusion of pedestrian facilities as a requirement of development and performance standards that promote multimodal access.
- III. Increase bicycle and pedestrian safety through public awareness
 - Partner with area School Districts to establish *Safe Routes To School* policies that encourage local and state entities to provide adequate pedestrian and bicycle facilities, linking residential areas and school campuses and encourage students to walk or bike to school.

- Partner with DHEC, members governments, and health providers to promote pedestrian and bicycle transportation as a means of obtaining physical activity, improving personal health, and enhancing area quality of life

IV. Encourage municipalities to participate in annual SCDOT Transportation Enhancement (TE) process

- Continue circulating information on the benefits of the TE Program through Rural Transportation Committee and member governments
- Partner with SCDOT in sponsoring annual introductory workshops on the SCDOT Transportation Enhancement Program

Goal #2: Enhance Economic Vitality

Objectives & Strategies:

- I. Ensure minimal traffic congestion to large employment centers along key highway/roadway corridors
 - Partner with large employment centers and RTAs to create transit and/or ridesharing opportunities to large employers
- II. Support the regional transportation system and alternatives and solutions supporting efficient movement of citizens and freight and economic development growth
 - Encourage and support greater alignment between local economic development stakeholders and regional transportation organizations
 - Continue support of organizations and initiatives seeking regional alternative transportation modes
 - Work with counties on planning and funding sustainable roadway networks
 - Work with local governments and business to develop dedicated funding for public transit

Goal #3: Preserve the Environment

Objectives & Strategies:

- I. Support local and regional air quality initiatives that keep the region in attainment with EPA air quality standards.
 - Continue to invite county officials to participate in Midlands Air Quality Forum
 - Encourage the local adoption of action strategies for conserving energy and reducing air pollution.

- II. Encourage regional consultation and coordination with environmental organizations, state agencies and local governments in order to mitigate the environmental impacts of transportation projects, identify potential areas for conservation, and ensure compliance with ongoing conservation initiatives and local land use plans.
- Continue to work with SCDOT to coordinate and consult with relevant environmental organizations on the compatibility of transportation plans with regional conservation goals.
 - Encourage the local implementation of the *CMCOG Open Space Preservation Plan*.
 - Market the Central Midlands Wetlands Mitigation Bank for use by SCDOT in purchasing credits to offset the adverse impacts of transportation projects.
- III. Promote sound growth principles that strengthen the connection between land use and transportation planning
- Encourage street connectivity, neo-traditional neighborhood design, transit supportive development and bike and pedestrian accessibility.
 - Identify and encourage the development of land use patterns that improve and support transportation efficiency, increase mobility and support alternative modes of transportation.
 - Work with local governments to integrate these principles into their comprehensive plans and land development regulations.

Goal #4: Maintain the Existing Transportation Network

Objectives & Strategies:

- I. Preserve the existing transportation network
- Collaborate with SCDOT to identify opportunities for making intersection improvements, shoulder widenings, signal timings, and resurfacing.
 - Work with the County Transportation Committees to develop maintenance strategies for county roads.

Goal #5: Enhance Safety (& Security)

Objectives & Strategies:

- I. Identify hazardous corridors and intersections
 - a. Work with SCDOT and Law Enforcement Officials to stay informed of crash information (in particularly, roadway segments and accident locations)
 - b. Provide more planning and safety improvements along the identified emergency evacuation routes for the VC Summer Nuclear Station
 - c. Identify schools eligible for *Safe Routes To School* funding to promote safe mobility of parents and children to school
- II. Encourage the continual development of safe roadway design
 - Identify areas of county where strong population of seniors reside
 - Work with SCDOT to improve the roadway/driving environment that would include some of these amenities:
 - Advance guide/warning signs and street name signs
 - Removal of oversized signs
 - Improved lighting
 - Retro-reflective strips in the channelization posts
 - High intensity sheeting on all signs to increase sign visibility
 - 2' paved shoulders
 - Guardrails near hazardous locations
 - Center turn lanes/left-turn lanes

CHAPTER 7 - CAPITAL IMPROVEMENTS PROCESS

It is simply not enough to identify needs and then propose improvements to meet those needs; it is imperative to provide a framework for implementation of recommendations. This section provides an overview of the framework for project implementation, transportation needs analysis and methodologies as well as a look at the 2035 Rural LRTP Cost-Constrained List.

7.1 Project Delivery Process

The **Rural LRTP** identifies critical transportation needs of the region over a 30-year period and establishes a broad vision for meeting these needs. Potential projects are ranked according to criteria established at the state and regional level and are financially constrained based on anticipated funding.

Based on the vision established in the Rural LRTP, more focused planning projects are developed to assist in refining the Rural LRTP vision and provide additional details on the nature of these future recommendations. These planning projects are executed through the CMCOG **Rural Planning Work Program (RPWP)**. As a result, there is a constant symbiotic relationship between the Rural LRTP and the RPWP. The RPWP incorporates in one document all transportation planning and directly supporting comprehensive planning activities in the non-urbanized area of the Central Midlands Region. The RPWP is intended to provide a mechanism for the coordination of planning efforts by local, State, and regional agencies through the Central Midlands Council of Governments (CMCOG).

From there, projects that have actual federal-aid funding (i.e. Guidesshare) assigned to them are included in the **Rural Transportation Improvement Program (RTIP)**. The RTIP is predominantly composed of projects that make their way onto the Rural LRTP's fiscally-constrained lists and then are promoted onto the RTIP once actual funding is allocated. There are instances however when some projects are added to the RTIP without being included in the Rural LRTP, if dedicated federal funding sources are assigned to them. The RTIP becomes part of the larger Statewide Transportation Improvement Program (STIP) for implementation by the SCDOT. SCDOT will then move projects through its own Project Development Process, which can



include detailed study and analysis, public participation, environmental documentation, design, permitting, right-of-way acquisition, and construction.⁹

7.2 Identification of Needs

Transportation needs for the study area were assessed using standard methods typically employed in regional transportation planning. The analysis of needs was based on population and employment growth forecasts to establish overall demand for transportation. Transportation needs associated with the movement of goods and services were identified as part of the technical analysis and public involvement process as well as from the outcomes of the plan development process for the respective plans noted in Table 2.2 of this planning document. The projects identified were based on transportation need analysis as well as project ranking criteria consistent with Senate Bill 355, Act 114, also known as SCDOT Reform Act of 2007 (“Act 114”).¹⁰

7.3 Act 114 & Project Ranking

The background of the project selection process is Act 114. This 2007 South Carolina legislation directs SCDOT to follow a new project selection process and maintain a statewide list of ranked transportation projects. Act 114 establishes weighted ranking criteria for three categories:

- New Location projects
- Widening projects
- Intersection improvement projects

As part of Act 114, nine criteria factors were identified that require that Council of Governments and MPOs (of which CMCOG is both) must consider in developing a project selection process that will be used to prioritize future road projects. In complying with Act 114 measures, CMCOG considers following criteria as part of the 2035 Rural LRTP project ranking process:

- Financial Viability – based on estimated project cost and estimated 20-year maintenance cost in relation to the current vehicle miles of travel.
- Public Safety – based on accident data.

⁹ The STIP and SCDOT Project Development Process area available online at www.scdot.org.

¹⁰ SC Code of Laws Sections 57-I-370 and 57-I-460.

- Potential for Economic Development – based on an assessment of short-term, intermediate, and long-term development potential as a result of the proposed improvement.
- Traffic Volume and Congestion – based on current traffic volumes and the associated level-of-service condition.
- Truck Traffic – based on current volume and average daily truck traffic estimates.
- Pavement Quality Index – based on pavement condition assessments.
- Environmental Impact – based on an assessment of potential impacts to natural, social, and cultural resources.
- Alternative Transportation Solutions – considered, but not assigned any points. Transit propensity is evaluated based on surrounding population and employment characteristics to support transit service as a potential alternative or in addition to a proposed improvement.
- Consistency with Local Land Use Plans – considered, but not assigned any points. A determination of consistency will be made during the long-range plan development process.

The ranking criteria of Act 114 are utilized to develop the widening, intersection, and new-location lists contained in the Rural LRTP. Those projects rankings highest on each of these lists become part of the financially-constrained portion of the Rural LRTP and thus have the greatest opportunity for advancement to the RTIP and actual implementation.

7.4 Methodologies for each of the Three Categories

7.4.a Methodology for New Location Projects

Here are the Categories (maximum points) that were used to assess New Location Projects in the planning area, followed by Table 7.1, which shows the recommended list of new location projects by county.

- | | |
|---|---|
| • Environmental Impact
(15%) | Scored by the SCDOT Environmental Office. |
| • Economic Development
(30%) | Scored by the Department of Commerce |
| • Financial Viability
(20%) | Project Cost plus 20-year maintenance cost divided by the project length multiplied by the 20-year projected AADT. The result is the cost per vehicle traveled and the lower the value, the higher the score. |
| • Traffic
Volume/Congestion
(35%) | Traffic Demand Model computes the total network delay: in hours, with no improvement and with the new location improvement. The Traffic Volume/Congestion scored based on the difference in delay times. |

Table 7.1: Recommended New Location Projects

Ranking	County	Route	Route Name	Project Limits
1	Newberry	S-60	Main St Extension	Nance St to O'Neal St

7.4.b Methodology for Widening Projects

Below are the categories (and maximum points assigned) that were used for ranking widening projects, followed by a list of the ranked recommended widening projects. Table 7.2 shows the list of recommended Widening Projects. Based on the total available funding of \$79 M, only the top three projects—as noted by rank—will be given priority.

- Financial Viability & Maintenance Cost (15%)**
 Project cost estimates developed in coordination with SCDOT Preconstruction Office. 20-year funding estimate developed consistent with SAFETEA-LU guidelines that considered inflation rate for year of expenditure. Used project cost per vehicle mile of travel and a 20-year maintenance cost per mile in combination as a scoring system.
- Public Safety (15%)**
 Data provided by SCDOT Traffic Engineering. Safety score based on an adjusted accident rate calculated by the number of crashes with in given location divided by the volume and multiplied by the number of years. Adjusted accident rate to use ADT factor to give greater consideration to higher volume roads.
- Potential for Economic Development (10%)**
 SC Department of Commerce scores projects. Projects judged based on potential impact to employment and investment
- Truck Traffic (10%)**
 Data provided by SCDOT Road Data services. Truck percentage is converted to a truck ADT to give greater consideration to higher volume roads.
- Environmental Impact (10%)**
 Assessment will come from the long-range plan environmental screening analysis. Will consider potential impacts to environmental, social, and cultural resources.
- Traffic Volume and Congestion (35%)**
 Volume-to-Capacity ratio derived from LOS C capacity threshold. LOS based on most recent average annual daily traffic count (AADT).
- Pavement Quality Index (10%)**
 Data provided by SCDOT Road Data services. Based on the most current pavement evaluation assessment.
- Alternative Transportation Solutions**
 Implies consideration of transit as an alternative to or in addition to a widening project. Considered as either a yes or no evaluation. No quantifiable points assigned.
- Consistency with Local Land Use Plans**
 Considered as either a yes or no evaluation. No quantifiable points assigned.

Table 7.2: Recommended Widening Projects

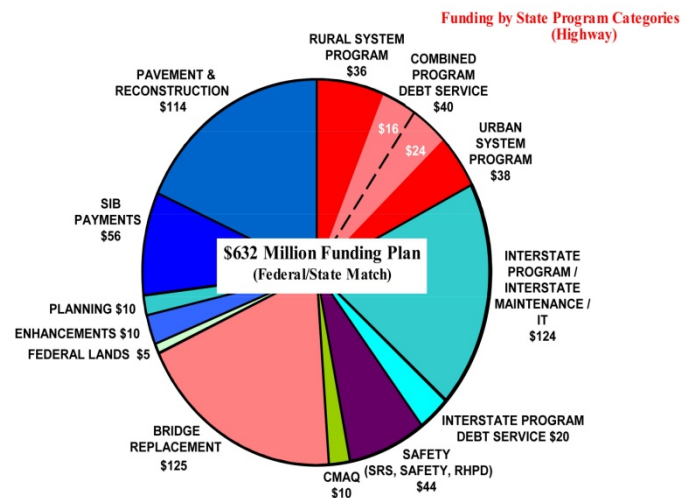
<u>Overall CMCOG Widening Rank</u>	<u>Route</u>	<u>Route Name</u>	<u>Length</u>	<u>County</u>	<u>Project Limits</u>	<u>Existing Lanes</u>	<u>Improved # of Lanes</u>	<u>Total Score</u>	<u>Estimated Project Cost with a 2.5% Inflationary Increase</u>	<u>Running Total of Estimated Project Cost</u>
1	SC 302	Pine St. / Edmunds Highway (B)	2.2	Lexington	S-245 (Hartley Quarter Road) to S-73 (Fish Hatchery Road)	2	5	81.66	\$ 15,811,429.78	\$ 15,811,429.78
2	SC 302	Pine St. / Edmunds Highway (A)	4.1	Lexington	S-45 (Cedar Creek Road) to S-245 (Hartley Quarter Road)	2	5	68.76	\$ 30,372,653.48	\$ 46,184,083.25
3	US 1	Augusta Highway (C)	3.2	Lexington	S-31 (W. Hampton Road) to S-24 (Priceville/Peach Festival Rd.)	2	5	63.54	\$ 23,680,373.90	\$ 69,864,457.15
4	US 1	Augusta Highway (B)	1.9	Lexington	S-955 (Breezy Hill) to S-31 (W. Hampton Road)	2	5	57.66	\$ 13,899,349.90	\$ 83,763,807.04
5	US 1	Augusta Highway (A)	0.8	Lexington	SC 23 (Leesburg Road) to S-955 (Breezy Hill Road)	2	5	54.97	\$ 5,956,864.24	\$ 89,720,671.28
6	SC 121	Kendall Road (B)	1.2	Newberry	S-91 (Drayton Street) to SC 395 (Nance Street)	2	5	51.65	\$ 8,972,067.13	\$ 98,692,738.41
7	US 321	Church St./Savannah Highway	2.1	Lexington	S-102 (Burton Gunter Rd.) to SC 692 (East Fifth St./Redmund Mill Rd.)	2	5	45.88	\$ 15,076,014.44	\$ 113,768,752.85
8	SC 121	Kendall Road (A)	1.6	Newberry	SC 34 (Boundary St.) to (S-91) Drayton Street	2	5	35.71	\$ 11,987,270.02	\$ 125,756,022.86
9	SC 692	East Fifth St./Redmund Mill Rd.	3.4	Lexington	US 321 (Church St./Savannah Hwy.) to near S-164 (Calhoun Rd.)	2	5	29.47	\$ 25,224,746.11	\$ 150,980,768.97

7.4.c Methodology for Intersection Improvements

The first step in the project selection for the Intersection Improvement program consists of identifying spot locations throughout the region that would benefit from minor geometric improvements resulting in both a significant reduction in congestion and improved intersection operation. These locations were then prioritized based on volume/capacity ratios, intersection accident rates, and a side street level of service. The Volume of Capacity ratio and the Level of Service (LOS) are calculated through SCDOT's Highway Capacity Software. A coefficient was then assigned to the side street LOS as follows: A=0, B=0, C=0.05, D=0.1, E=0.2, and F=0.3. Refer to Table 7.4 (at the end of this chapter) for a list of the ranked recommended intersection improvements.

7.5 Funding

Funding of Rural LRTP roadway projects comes from federal-aid funds (also known as "Guideshare"). Guideshare funding comes from USDOT via SCDOT. Each year, SCDOT receives \$114 M in Guideshare, which is sub-allocated into two programs: Urban System and Rural System. As depicted in the pie chart on the right, SCDOT provides the Urban System Program with \$62 M to fund transportation improvements projects within the urbanized areas of the state; while the Rural System Program receives \$52 M for the non-urbanized areas.¹¹ The \$52 M in the Rural System Program is dispersed to each of the 10 COGs across the state which oversee rural transportation planning projects. CMCOG's share of that \$52 M is approximately \$2.8 M per year.¹² This \$2.8 M per year allocation establishes the cost-constraint budget for the 2035 Rural LRTP.



¹¹ For more information about the funding of projects in the urbanized areas, refer to SCDOT STIP at www.scdot.org.

¹² As of July 2010, SCDOT is considering an increase of its annual appropriations to the Rural Program. As a result, CMCOG would experience an increase from \$2.8 M to \$4.6 M. This likely scenario could take effect late 2010.

Table 7.3 below identifies the road widening and new location projects that make up the 2035 Rural LRTP Cost-Constrained Project List. Unlike the New-Location and Road Widening programmed project lists, the Intersection programmed project list is financially-unconstrained. However, Table 7.4 provides a list of the recommended intersection improvements. A description of how (and/or on what projects) the annual allocation of \$2.8 M is spent can be found in the CMCOG Rural TIP.¹³

Table 7.3: 2035 Rural LRTP Cost-Constrained Project List

Road Widening Projects

Rank	Route	Route Name	Project Limits	County
1	SC 302	Pine St/Edmonds Hwy	S-245 (Hartley Quarter Rd) to S-73 (Fish Hatchery Rd)	Lexington
2	SC 302	Pine St/Edmonds Hwy	S-45 (Cedar Creek Rd) to S-245 (Hartley Quarter Rd)	Lexington
3	US 1	Augusta Hwy	S-31 (W. Hampton Rd) to S-24 (Priceville/Peach Festival Rd)	Lexington

New Location Projects

Rank	Route	Route Name	Project Limits	County
1	S-60	Main St Extension	Nance St to O'Neal St	Newberry

Roadway projects are expensive. Typically, the overall approximate cost of a project is much greater than the amount of funding CMCOG receives every year to match the cost. CMCOG's \$2.8 M per year allocation is divided into \$500,000 for intersection improvements and \$2.3 M for roadway widening projects. Intersection improvements typically cost \$1 M and road widenings (i.e. converting a two-lane road into a five-lane road) typically costs \$6 - \$8 M per mile. In short, this annual allocation is not enough to fund any major improvements; and depending on the project(s) for which the annual allocation is designated, according to Act 114 requirements, all funded projects must be completed within six years of allocation. Consequently, if local officials would like to have their respective projects done in a more expedient manner in order to fund more projects (and/or projects in their respective geographical area), it is highly encouraged that alternate sources of funding, such as local sales tax initiatives, be pursued.

¹³ For more information about the CMCOG Rural Transportation Improvement Program, visit www.centralmidlands.org.

Table 7.4: 2035 Prioritized List of Intersection Improvement Projects

<u>Overall CMCOG Intersection Rank</u>	<u>Major Route</u>	<u>Major Route Name</u>	<u>Minor Route</u>	<u>Minor Route Name</u>	<u>County</u>	<u>Total Score</u>
1	US 76	Wilson Road	SC 219	Main Street	Newberry	74.4
2	US 76	Wilson Road	SC 34	Winnsboro Road (south intersection)	Newberry	61.798
3	US 76	Wilson Road	SC 34	Winnsboro Road (north intersection)	Newberry	60.856
4	SC 23	Church Street	S-17	Mitchell Street	Lexington	48.151
5	SC 23	Church Street	US 178/SC 391	N. Pine Street	Lexington	44.191
6	SC 23	Church Street	SC 245	Lee Street	Lexington	41.861
7	US 321		SC 34		Fairfield	39.251
8	SC 34	Winnsboro Road	S-44	Mt. Bethel Garmany Road	Newberry	37.743
9	SC 34	Winnsboro Road	S-462/S-505		Newberry	36.368
10	SC 391		S-41	Stoney Hill Road	Newberry	31.257
11	SC 34	Boundary St.	SC 121	Kendall Road	Newberry	30.585
12	US 76		S-41	Pilgrim Church Road	Newberry	29.911
13	SC 121	Kendall Road	SC 395	Nance Road	Newberry	28.338
14	SC 34 BP	Bob Lake Blvd.	S-68	Glenn Street	Newberry	28.165
15	S-20	Camp Welfare Rd.		Shoulder improvements	Fairfield	27.646
16	SC 34 BP	Bob Lake Blvd.	SC 395	Nance Road	Newberry	26.135
17	US 601	McCords Ferry Road	SC 263	VanBoklen Road	Richland	25.958
18	SC 269	Hinnants Store Rd.		Shoulder improvements	Fairfield	25.86
19	US 76	Main Street in Little Mountain	S-20	Wheeland Road	Newberry	25.632
20	US 321		S-30	Peach Road	Fairfield	25.383
21	SC 34 BP	Bob Lake Blvd.	S-90	Boundary St.	Newberry	23.04

Please note that this program is financially unconstrained

Please be advised that 20% of the guideshare annually will be used for intersection improvement projects

This project is receiving \$160,000 in economic stimulus funding

Table 7.4: 2035 Prioritized List of Intersection Improvement Projects (cont.)

<u>Overall CMCOG Intersection Rank</u>	<u>Major Route</u>	<u>Major Route Name</u>	<u>Minor Route</u>	<u>Minor Route Name</u>	<u>County</u>	<u>Total Score</u>
22	US 601	McCords Ferry Road	SC 48	Bluff Road	Richland	23.016
23	S-233		S-	@Industrial Park near Peach Road	Fairfield	22.754
24	SC 34	(In Ridgeway)	US 21		Fairfield	22.575
25	SC 391	Main Street in Prosperity	S-244	Counts Sausage Road	Newberry	21.959
26	SC 395		S-400	Hawkins Road	Newberry	21.095
27	S-17	St. Lukes Church Road	S-244	Counts Sausage Road	Newberry	19.827
28	SC 215		SC 34		Fairfield	18.648
29	SC 269		S-62	Kelly Mill Road/Greenbrier Mossyvale Road	Fairfield	18.648
30	S-26	Macedonia Church Road	S-20	Wheeland Road	Newberry	18.442
31	SC 48	Bluff Road	S-2558	RR crossing @ Sidetrack Lane/St. Marks St.	Richland	18.045
32	S-66	Dennis Dairy Road	S-400	Hawkins Road	Newberry	17.945
33	S-41	Stoney Hill Road	S-17	St. Lukes Church Road	Newberry	17.741
34	US 176		S-97	New Hope Road	Newberry	16.951
35	SC 395		S-41	Stoney Hill Road	Newberry	16.808

Please note that this program is financially unconstrained

Please be advised that 20% of the guideshare annually will be used for intersection improvement projects

APPENDIX

LISTING OF FUTURE PROJECTS

Throughout the two rounds of public meetings, held August 2009 to May 2010, members from the general public were asked to share their concerns about the existing transportation network. As a result, certain improvements were identified and/or recommended along various roadways in the planning area. In response to these “potential” roadway improvements, CMCOG Staff in coordination with SCDOT will further research these projects for future development and consideration. The list below summarizes these comments by county, roadway (i.e. location) and type of improvement.

<u>Road</u>	<u>Type of Improvement</u>
<i>Fairfield County</i>	
Horse Creek Road (S-21)	Add Lanes: US 321 to I-77
SC 34 @ US 21	Intersection
Congress St (US 321 Business) @ Washington St (S-61)	Intersection in Winnsboro
<i>Lexington County</i>	
US 178 (Fairview Road)	Add Lanes: US 1 to I-20
SC 23 (Church Road)	Add Lanes: through Batesburg-Leesville
Pond Branch Road (S-34)	Add Lanes: US 1 to I-20
SC 6	Add Lanes: SC 302 to US 321 (Swansea)
<i>Newberry County</i>	
Stoney Hill Road (S-41)	Add Lanes: SC 391 to SC 395
SC 213 (Parr Road)	Add Lanes: US 176 to Fairfield County line
SC 121	Add Lanes: Newberry city limits to Whitmire town limits
SC 34	Add Lanes: Newberry city limits to I-26
SC 34 Bypass (Dixie Street)	Add Lanes: SC 121 (Kendall Rd) to US 76 (Wilson Rd)
Johnstone Street (S-30)	Add Lanes/Shoulders: Main Street (Newberry) to US 76
<i>Richland County (Eastover)</i>	
US 601 (McCords Ferry Road)	Elevate railroad track over US 601 near SC 764 / US 601 intersection

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