Table of Contents **Page**

Introduction and Regional Overview	2
Public Transportation	5
Bicycle and Pedestrian Facilities	6
Environmental and Cultural Review	7
Bridges	9
Intersections and Safety	14
Maintenance and Resurfacing	16
Signalization	16
Highways and System Upgrades	17
Policy Recommendations	18
Financial Plan	19
Other Needs	20

Introduction

Upper Savannah Council of Governments consists of six counties in northwest South Carolina, between the metropolitan areas of Greenville/Spartanburg, Columbia, and Augusta, Georgia. The region contains a diverse mix of counties, which range in size from just over 10,000 to over 70,000, and which are mainly rural in character.

The overall economic growth potential is excellent. In fact, much of the nation's recent growth has taken place in medium-size and smaller communities within driving distance of major cities, especially when those communities contain assets such as a major universities and good infrastructure. Not surprisingly, half of the counties in USCOG region expanded at a rate more than that of the State's 15.1 percent growth between 1990 and 2000 (which, in turn, was also more than the national average). Edgefield County grew at the third highest rate in SC, exceeded only by Beaufort and Horry Counties, respectively. The region as a whole, however, has increased more than the statewide growth rate, indicating a need for increased attention to development opportunities.

In addition to USCOG staff partnerships with SCDOT, the Upper Savannah COG Board of Directors meets regularly to discuss and plan for regional issues. From this overall brainstorming effort, a consensus was established that good transportation is a particularly important concern to citizens of the region.

Population Trends

At the time of the 2000 Census, 215,739 people lived in the six counties comprising USCOG region. This total number was a 23.8 percent increase from the 1980 Census, with the majority of that increase taken place between 1990 and 2000. The South Carolina Office of Research and Statistics has projected the region's 2010 population to be 212,700. The problem with this data is that according to the 2000 Census, we have already surpassed that. The table below indicates the 1980-2000 population trends for all the counties in USCOG region. The counties within the region range in size from McCormick with 9,958 people to Laurens with 69,567 people.

The fastest growing counties in the region over the entire 1980-2000 period were Edgefield (40.5 percent increase), Laurens (32.5 percent increase), and McCormick (27.7 percent increase). The counties with the largest actual numerical increase during this 20-year period were Laurens (17,067), Greenwood (8,671), and Edgefield (7,095).

Population Trends

County	Census 1980	Census 1990	Census 2000	1980-2000 Difference	Percent Change
Abbeville	22,700	23,862	26,167	3,467	15.3%
Edgefield	17,500	18,360	24,595	7,095	40.5%
Greenwood	57,600	59,567	66,271	8,671	15.1%
Laurens	52,500	58,132	69,567	11,435	19.7%
McCormick	7,800	8,868	9,958	1,090	27.7%
Saluda	16,200	16,441	19,181	2,740	18.4%
Total	174,300	185,230	215,739	34,498	22.8%

Source: U. S. Census Bureau, 1980,1990 and 2000.
South Carolina Office of Research and Statistics, 1980 – 2010.

Population Density

The table below shows the counties of the USCOG region contain 3,057.16 square miles of total area. Of this amount, 67.53 square miles are included in rivers, streams, ponds, and portions of numerous reservoirs. When the region's 2000 population of 215,739 is divided by the remaining 2,989.61 square miles of land area, the resulting overall population per square mile is 73. Greenwood County, with 145.48 people per square mile, is the most densely populated county in the region.

Population Density

	Upper Savannah Region Area and Density				
County Name	*Total Square Mile*	*Land Area (sq. mile)*	*Water Area (sq. mile)*	*Population 2000 Census*	*Population/ Square Mile*
Abbeville	511.1	508.05	3.05	26,167	51.5
Edgefield	506.56	501.91	4.64	24,595	49
Greenwood	462.95	455.53	7.42	66,271	145.48
Laurens	722.02	713.16	8.86	69,567	97.55
McCormick	393.89	359.59	34.29	9,958	27.69
Saluda	460.64	451.37	9.27	19,181	42.49
USCOG	**3,057.16**	**2,989.61**	**67.53**	**215,739**	**413.71**
SC	32,007.13	30,111.13	1,896	4,012,012	133.24

Source: South Carolina Statistical Abstract, 1999
U.S. Bureau of the Census, 2000

Population Characteristics

The population within USCOG region is aging along with all other parts of South Carolina, and, for that matter, most of the United States. Between 1980 and 2000, every county in South Carolina, had an increase in the median age. The table below indicates the change in the median age for counties in USCOG region between 1980 and 2000. Two counties in the region had increases of more than 6.9 years, with McCormick County (13.2 years) and Abbeville County (7.0 years) having the largest increases.

Median Age

County	Median Age		
	Census 1980	Census 1990	Census 2000
Abbeville	29.90	34.20	36.90
Edgefield	28.30	32.80	35.60
Greenwood	30.70	33.70	35.20
Laurens	30.50	34.20	36.20
McCormick	27.90	32.70	41.10
Saluda	30.30	34.40	37.00
Average	29.70	33.70	37.00

Source: U. S. Census Bureau, 1980,1990 and 2000.
South Carolina Office of Research and Statistics, 1980 – 2000.

The smallest increases occurred in Greenwood (4.5 years) and Laurens (4.7 years) counties. Greenwood County's increase was the eleventh lowest percent change in the State. The impacts of an aging population are significant to every aspect of life-business, social, cultural, and governmental. Within the transportation sector alone, the consequences of aging can eventually bring about necessary changes in patterns and modes of personal transportation, especially for those financially less fortunate segments of the population. For example, increased need for, and utilization of, public and/or non-profit para-transit services for the elderly is taking place across America in communities with aging low or fixed income populations.

Public Transportation

The need to develop and expand public transportation systems in the Upper Savannah region has been debated for several years. Because of the rural nature of the area, countywide systems would be expensive to build and maintain. Preliminary cost estimates for a start-up system of buses indicate that costs would be high and potentially prohibitive. People who have cars are generally not willing to give up the independence and perceived convenience. For those without cars, lack of familiarity with public transport and even the limited cost of public transportation may be too much to overcome.

Greenwood and Laurens Counties partnered with the South Carolina Department of Transportation Division of Mass Transit and Upper Savannah Council of Governments to develop a coordinated transit study. Rather than focusing on purchasing equipment, this study examined how to use existing equipment in a more efficient and cost effective manner. Coordination within and between the two counties systems was also explored. Implementation of this plan and creating linkages with other systems in the region are longer term goals of this process.

Preliminary focus group meetings indicated a need to address priority issues such as getting people to jobs, with strong interest also expressed to helping people meet medical needs and to necessity shopping. Special attention will be given to minority populations, such as non-English speaking residents and those people who may have a disability.

Edgefield County Senior Citizens Council operates a coordinated public transportation system for their county. They use their vehicles to serve older adults, individuals with disabilities, Medicaid passengers, adult day center passengers and residents of assisted living facilities, Piedmont Technical College students, and privately paying individuals. ECSCC will break ground for a new transportation hub for the county as part of the new Senior Center Complex. The agency provides full transportation services five days per week, with limited schedules on weekends. Passengers using the system increased by 15% in 2005.

Commuting Patterns

For a variety of reasons, commuting patterns are one way of studying the economic health of a region. A county with a high number of people leaving the county to work each day could be either a developing suburban bedroom community, or suffering a lack of job opportunities. Large numbers of in-commuters would benefit from the expansion of mass transit systems and the improvement of road facility capacity. While each counties situation is different, these figures are provided to show general patterns of movement in and between counties in relation to employment.

Commuting patterns to work in 2004 are detailed on the table below. The table indicates the number and percent of workers in each county, aged 16 or over, that worked in their county of residence in 2004, as well as the number and percent that commuted to another county for employment. Of the total workers, 77.15 percent worked in their county of residence and 22.85 percent commuted to another county. Greenwood County had the largest number (29,795) of in-commuters, while McCormick County had the highest percentage (35.1 percent) of in-commuters, followed by Edgefield (24.9 percent) and Abbeville (22.2 percent) counties. Laurens County had the lowest percentage of in-commuters (17.1 percent).

USCOG Region Commuting Patterns – 2004

County Name	*Total Workers Working In County*	*Workers In-Commute*	*Percent In-Commute*
Abbeville	8,225	1,825	22.2
Edgefield	5,251	1,310	24.9
Greenwood	29,795	5,427	18.2
Laurens	22,172	3,788	17.1
McCormick	2,675	938	35.1
Saluda	4,099	803	19.6
USCOG	**72,217**	**14,091**	**22.85**

Source: South Carolina Office of Research and Statistical Services, STFS-5

Bicycle and Pedestrian Facilities

There are few, if any, bicycle and pedestrian facilities in the region that are designed for transportation purposes. Some towns and cities have limited walking trails. There are also a few recreational trails in the rural areas that are designed for limited hiking, jogging, horseback riding, bicycles, and some all terrain vehicles. Much of the bicycle and pedestrian traffic takes place on rural roads without any specific accommodation for this sort of traffic.

Rural areas can present conditions that are either inviting or threatening to bicycle and pedestrian travel. On one hand, small towns with low traffic volumes, compact size, and quaint downtowns can encourage people to walk from destination to destination. On the other hand, many rural roads are narrow and lack a paved shoulder, let alone any designated bicycle or pedestrian facility. Combined with low visibility and high speeds, these roads can be very dangerous for non-motorized travelers.

The Transportation Enhancement program, originally introduced as part of the ISTEA federal transportation legislation and continued under subsequent reauthorizations as TEA-21 and SAFETEA-LU, provides an important source of funding for transportation-oriented bicycle and pedestrian facilities. In rural areas, communities must

compete statewide for these funds. Typically, enhancement projects require at least a 20% local match.

The goal of this long range plan as it relates to bicycle and pedestrian facilities is to encourage both where it is practical and feasible. Paved shoulders should be considered for all rural facility upgrades. Sidewalks should always be considered for connecting people to school, work, or shopping in small communities.

Environmental and Cultural Review

Every construction project undertaken in the Upper Savannah region must complete and extensive review before beginning. Impacts of the potential project on adjacent property owners and on natural and cultural resources are assessed. If a potential project is deemed to be in negative conflict, alternatives are discussed and evaluated. Among the features that are reviewed at this stage are wetlands, endangered species, and historic properties.

Included in this document are preliminary GIS reviews of the projects included in the financial plan portion. Once each project nears entry into the STIP an Advanced Project Planning Report (APPR) will be conducted by the SCDOT Planning office in cooperation w/ USCOG and local county staffs.

Regional Highway System

There are more than 4,154 miles of roads in USCOG region; 4,116.15 miles are in the State system; 38.2 miles are Interstate. In 2005, according to the South Carolina Department of Transportation, there were an average of 5.09 million miles of travel every day over this road system. Of this total daily vehicle miles traveled, almost 4.1 million miles (81 percent) were on the State system.

USCOG Region Highway System Mileage Summary – 2005

County Name	*Completed Interstate*	*State Primary*	*State Secondary*	*Total System*
Abbeville	0	184.27	472.32	656.59
Edgefield	0	136.35	469.05	605.4
Greenwood	0	207.36	531.5	738.86
Laurens	38.2	256.24	758.56	1,053.0
McCormick	0	101.25	353.36	454.61
Saluda	0	160.55	485.34	645.89
USCOG	**38.2**	**1,046.02**	**3070.13**	**4,154.35**
SC	828.88	9,417.84	31,290.17	41,536.89

Source: South Carolina Statistical Abstract

The above illustration gives an example of the tremendous importance of the existing highway system to the economy and citizens of USCOG region. This section of the report will further investigate the region's existing highway system.

Emphasis will be placed on those highways or highway segments in the State numbered system that carried 1,000 vehicles or more per day in 2005.

Recommended Improvements to Transportation Facilities

Based on an analysis of the existing transportation infrastructure in the Upper Savannah region, this section will recommend any modal improvements that are deemed necessary to raise the region's level of economic competitiveness through the year 2030. In addition to looking at the movement of goods and electronic information, this section will recommend improvements to those modes of transportation, particularly highways, that will facilitate the movement of people within and through the region for business, employment, shopping, and leisure, including tourists who are just visiting.

In 2005, highways are the most important mode of transportation, by far, in the Upper Savannah region. In the year 2030, they still will be. By 2010 almost 80 percent of the cargo moved in this country will be moved by truck. The major railroad companies will be concentrating on high volume, high profit long distance shipments, such as pre-loaded containers, truck trailers, automobiles and bulk commodities like coal, grain and timber products. Except for the very largest American metropolitan areas, such as Atlanta, most local movement of people for business and pleasure will still be done on the highway system. Inter-city people movement may be somewhat more diversified by

the year 2030, if AMTRAK and the major airlines can stay financially solvent and add, rather than reduce, service to South Carolina and, potentially, through the Upper Savannah region.

By the year 2030, more diversity in the utilization of transportation modes within South Carolina and Upper Savannah region should be apparent. However, two factors need to be taken into consideration prior to thinking that any really great changes will occur in modal transportation usage over the next few years. First, between now and the year 2030, South Carolina will add almost 1.2 million new residents; and USCOG region will have at least 100,000 of these newcomers, creating significant additional transportation demand, regardless of the mode chosen to satisfy this demand. Second, the telecommunications industry will eventually revolutionize the way information services and products are handled in our society. However, much of this electronic innovation will emerge as new business opportunities and will not replace, overall, the current dependence on other transportation modes for the movement of goods and people. For instance, if telecommunications reduces the need, and related costs, for going to some central point to transact business, more time and resources should be available for leisure travel or the purchase of new consumer goodies, which will have to be shipped by a non-electronic mode.

Bridges

Currently, bridge replacement and rehabilitation projects are prioritized at the state level by SCDOT. Similar to the pavement management system used to prioritize road maintenance projects, SCDOT uses a Bridge Management System (BMS) to prioritize bridges. The development, implementation, and data collection of the BMS began in the early 1990's, with full-scale operations in 1998. The system provides detailed analyses of South Carolina's bridge needs and priority recommendations. Although replacement projects have been the primary focus, improvements such as widening and raising, and maintenance repairs and rehabilitation are now being considered.

Statewide bridge inspection continues to be a critical component of highway safety and is a major factor in the eligibility for federal aid Bridge Program funds. SCDOT inspects approximately 6,500 bridges per year and contracts for underwater bridge inspections of approximately 60 bridges per year. Data collected from inspection and maintenance activities are an integral part of the BMS.

Throughout the state, the number of substandard bridges continues to increase. The current bridge funding level is far below that required to make significant improvements. Some of the primary factors that affect this trend are the overall construction history and the age of the bridge infrastructure, historical lack of emphasis on bridge maintenance, and inadequate funding levels. Even though SCDOT uses a

BMS, it is difficult to overcome the lack of proper funding. This overall trend of an increase in substandard bridges is expected to continue because of a lack of funding and the growing transportation needs of the state.

SCDOT has provided the following list of bridges needing attention in each county of the Upper Savannah region.

Abbeville County

Bridge_ID	Facility Carried	Feature Intersected	Location
014008100100	SC 81	CSX RAIL ROAD	13.8 MI SW OF ABBEVILLE
014018500200	SC 185	LONG CANE CREEK	7.9 MI OF ABBEIVLLE
014018500200	SC 185	LONG CANE CREEK	7.9 MI OF ABBEIVLLE
014020100200	SC 201	PARK CREEK	7.3 MI NW OF ABBEVILLE
017003200100	S-1-32	GILL CREEK	3.7MI NE CALHOUN FALLS
017003200200	S-1-32	SHANKLIN CREEK	8.0 MI SW ABBEVILLE
017003200300	S-1-32	LITTLE RIVER	6.6MI W OF ABBEVILLE
017003200300	S-1-32	LITTLE RIVER	6.6MI W OF ABBEVILLE
017003200400	S-1-32	CALHOUN CREEK	5.2MI SW ABBEVILLE
017003300400	S-1-33	LONG CANE CREEK	7.0MI SE OF ABBEVILLE
017003300400	S-1-33	LONG CANE CREEK	7.0MI SE OF ABBEVILLE
017003700100	S-1-37	LITTLE RIVER	3.6MI W DUE WEST
017006100300	S-1-61	DRY CREEK	7.0MI NE ABBEVILLE
017006100400	S-1-61	BAGG CREEK	7.0MI NE ABBEVILLE
017007300100	S-1-73	TURKEY CREEK	3.7 MI N DONALDS
017011100100	S-1-111	GOOSE CREEK	2.8MI NE DONALDS
017011100200	S-1-111	TURKEY CREEK	3.3MI NE DONALDS
017011300100	S-1-113	CHICKASAW CREEK	0.7MI NW DUE WEST
017013500100	S-1-135	BR TO TURKEY CR.	4.2 MI NW DONALDS
017015900100	S-1-159	LONG CANE CREEK	5.1 MI NE ABBEVILLE
017015900200	S-1-159	DRY CREEK	5.3 MI NE 0F ABBEVILLE
017015900300	S-1-159	JOHNS CREEK	5.3 MI NE ABBEVILLE
017019500100	S-1-195	SHANKLIN CREEK	8.0MI W ABBEVILLE
017021200100	S-1-212	LAKE SECESSION	2.0MI SW ANTREVILLE
017030700200	S-1-307	CSX RR	4.7MI SW ABBEVILLE

Edgefield Co.

Bridge_ID	Facility Carried	Feature Intersected	Location
192002500300	US 25	LOG CREEK	6.0 MI NW OF EDGEFIELD
192002500400	US 25	TURKEY CREEK	8.7 MI NW OF EDGEFIELD
192002500400	US 25	TURKEY CREEK	8.7 MI NW OF EDGEFIELD
194028300100	SC 283	TURKEY CREEK	10.9 MI NW EDGEFIELD
194028300100	SC 283	TURKEY CREEK	10.9 MI NW EDGEFIELD
194043000200	SC 430	TURKEY CREEK	5.5 MI N OF EDGEFIELD
194043000400	SC 430	LITTLE STEVENS CREEK	9.3 MI N OF EDGEFIELD
197001800200	S-19-18	BARTLEY BRANCH	2.5 MI NW JOHNSTON
197001800300	S-19-18	LITTLE TURKEY CK	2.5 MI NW JOHNSTON
197002100200	S-19-21	LITTLE STEVENS CREEK	9.2 MI N EDGEFIELD
197003600200	S-19-36	MOUTAIN CK	12.0 MI N EDGEFIELD

197003900100	S-19-39	TURKEY CREEK	5.2MI NW JOHNSTON
197004000100	S-19-40	TURKEY CREEK	3.1MI W JOHNSTON
197004100100	S-19-41	S. EDISTO RIVER	2.9MI SE JOHNSTON
197004100200	S-19-41	BR OF S EDISTO RIVER	5.1MI SE JOHNSTON
197006200300	S-19-62	MOUNTAIN CREEK	9.0 MI NW EDGEFIELD
197006800300	S-19-68	TURKEY CREEK	12.3MI W EDGEFIELD
197006800300	S-19-68	TURKEY CREEK	12.3MI W EDGEFIELD
197007500300	S-19-75	SOUTH EDISTO RIVER	4.5MI SE JOHNSTON
197010000100	S-19-100	TURKEY CREEK	6.6 MI NW EDGEFIELD
197011400100	S-19-114	LOG CREEK	3.8 MI NW EDGEFIELD
197014000100	S-19-140	SLEEPY CREEK	11.3MI NW EDGEFIELD
197014300100	S-19-143	HORN CREEK	12.5MI SW EDGEFIELD
197027500100	S-19-275	FLAT ROCK CREEK	7.1MI SE JOHNSTON
197027500200	S-19-275	WIMBLEY BRANCH	6.3MI SE JOHNSTON
197028400100	S-19-284	MOUNTAIN CREEK	12.0MI NW EDGEFIELD
197034000100	S-19-340	FOX CREEK	15.9MI SW EDGEFIELD

Greenwood Co

Bridge_ID	Facility Carried	Feature Intersected	Location
242017800100	US 178	CSX RR (ABAND)	8.2 MI NW OF GREENWOOD
242022100200	US 221	HARD LABOR CREEK	7.4 MI SW OF GREENWOOD
242022100300	US 221	C S X RWY (ABAND)	3.2 MI SE OF GREENWOOD
244003400100	SC 34	WILSON CREEK	11.9 MI E OF GREENWOOD
244024800100	SC 248	BR OF NINETY SIX CR	9.4 MI SE OF GREENWOOD
247002700100	S-24-27	HENLEY CREEK	2.5MI SE NINETY-SIX
247004400100	S-24-44	BR. TO CUFFEYTOWN CREEK	7.3 MI SW NINETY SIX
247009300100	S-24-93	BR TURKEY CREEK	2.7MI SW WARE SHOALS
247009500100	S-24-95	CAMP CREEK	5.0MI E HODGES
247010100100	S-24-101	WILSON CREEK	2.2MI NW NINETY SIX
247016600200	S-24-166	ROPER CREEK	3.5MI SW NINETY SIX
247018000100	S-24-180	MULBERRY CKEEK	5.0MI SW WARE SHOALS
247018800100	S-24-188	BIG CURL TAIL	3.3MI SW GREENWOOD
247022500100	S-24-225	BR TO HENLEY CREEK	2.4MI SW NINETY SIX
247022800100	S-24-228	BIG ROCK CREEK	1.2MI NW NINETY SIX
247026800100	S-24-268	ROCKY CREEK	2.6MI N GREENWOOD
247028500100	S-24-285	ROCKY CREEK	3.2MI NE GREENWOOD

Laurens Co.

Bridge_ID	Facility Carried	Feature Intersected	Location
302002503100	US 25 BUS	SALUDA RIVER	14.6 MI SW LAURENS
302007600200	US 76	SOUTH RABON CREEK	8.2 MI NW OF LAURENS
302007600300	US 76	NORTH RABON CREEK	7.2 MI NW OF LAURENS
302007600400	US 76	LICK CREEK	6.7 MI NW OF LAURENS
302022100100	US 221	BURNT MILL CREEK	1.8 MI SW OF LAURENS
302022100300	US 221	ENOREE RIVER	10.8 MI NE OF LAURENS
304004900400	SC 49	ENOREE RIVER	9.6 MI NE LAURENS
304004900400	SC 49	ENOREE RIVER	9.6 MI NE LAURENS
304005600300	SC 56	DUNCAN CREEK	9.8 MI NE OF LAURENS
304007200100	SC 72	CANE CREEK	14.5 MI SW OF LAURENS
304007201000	SC 72	ALLISONS BRANCH	12.6 MI E OF LAURENS
304007201000	SC 72	ALLISONS BRANCH	12.6 MI E OF LAURENS

304007201100	SC 72	DUNCAN CREEK	18.6 MI E OF LAURENS
304007201200	SC 72	DUNCAN CREEK	18.7 MI E OF LAURENS
304010100200	SC 101	NORTH RABON CREEK	10.7 MI NW OF LAURENS
304010100700	SC 101	DURBIN CREEK	13.6 MI NW OF LAURENS
304010100800	SC 101	ENOREE RIVER	13.8 MI NW OF LAURENS
304010100800	SC 101	ENOREE RIVER	13.8 MI NW OF LAURENS
307000600200	S-30-6	RABON CREEK	8.0 MI SW LAURENS
307001900100	S-30-19	CANE CREEK	11.6MI S LAURENS
307002300100	S-30-23	I-385	4.9MI N LAURENS
307002600100	S-30-26	S.FORK - DUNCAN CK	6.9MI E CLINTON
307003100200	S-30-31	I-385	3.8 MI NE LAURENS
307003400300	S-30-34	SHELL CREEK	2.8 MI SE CLINTON
307003600100	S-30-36	RABON CREEK	7.2 MI SW LAURENS
307003800200	S-30-38	LITTLE RIVER	8.5 MI S CLINTON
307003800200	S-30-38	LITTLE RIVER	8.5 MI S CLINTON
307003800300	S-30-38	BEAVERDAM CREEK	8.8 MI S CLINTON
307004500100	S-30-45	CSX RAILROAD	5.8 MI SW CLINTON
307004600100	S-30-46	SIMMONS CREEK	9.0 MI SE CLINTON
307004900100	S-30-49	CSX RAILROAD	7.2 MI SW CLINTON
307006700100	S-30-67	DURBIN CREEK	14.8 MI NW LAURENS
307009100100	S-30-91	LAKE GREENWOOD BAY	19.3 MI SE LAURENS
307010700100	S-30-107	REEDY CREEK	4.2 MI NW GRAY COURT
307011000100	S-30-110	NORTH LICK CREEK	6.2 MI NW LAURENS
307026700200	S-30-267	GRANNY CREEK	6.7 MI NE LAURENS
307030000100	S-30-300	BR OF SHELL CK.	1.4 MI SE CLINTON
307031500100	S-30-315	BR OF REEDY RIVER	11.6 MI SW LAURENS
307034000100	S-30-340	MOUNTAIN CREEK	2.1MI SW GRAY COURT
307034100100	S-30-341	BEAVER DAM CREEK	7.1MI SE LAURENS
307034400100	S-30-344	BANKS CREEK	15.5 MI SW CLINTON
307037700100	S-30-377	SOUTH RABON CREEK	6.0 MI W GRAY COURT
307038000100	S-30-380	GINGER CREEK	8.3 MI SE LAURENS
307039800100	S-30-398	DIRTY CREEK	7.3 MI SW LAURENS
307048000100	S-30-480	BR OF SALUDA RIVER	16.0 MI SW LAURENS

McCormick Co

Bridge_ID	Facility Carried	Feature Intersected	Location
332022100300	US 221	ROCKY CREEK	1.5MI NE OF MCCORMICK
332037800100	US 378	LITTLE RIVER	4.8MI SW OF MCCORMICK
332037800100	US 378	LITTLE RIVER	4.8MI SW OF MCCORMICK
332037800300	US 378	ROCKY CREEK	1.5MI NE OF MCCORMICK
332037800400	US 378	HARD LABOR CREEK	3.9MI NE OF MCCORMICK
334002300100	SC 23	STEVENS CREEK	14.1 MI SE MC/CORMICK
334002300100	SC 23	STEVENS CREEK	14.1 MI SE MC/CORMICK
334028300100	SC 283	STEVENS CREEK	5.5MI SE OF MCCORMICK
334028300100	SC 283	STEVENS CREEK	5.5MI SE OF MCCORMICK
334082300200	SC 823	LITTLE RIVER	13.3MI NW OF MCCORMICK
334082300200	SC 823	LITTLE RIVER	13.3MI NW OF MCCORMICK
337002100100	S-33-21	BR TO CUFFEYTOWN CK	7.0 MI E MCCORMICK
337003800200	S-33-38	LEE CREEK	5.4 MI NE MT CARMEL
337003800300	S-33-38	WHITE CREEK	4.9 MI NE MT CARMEL
337004200100	S-33-42	CUFFEYTOWN CREEK	5.2 MI E MCCORMICK

337007900100	S-33-79	SAWNEY CREEK	3.7 MI NW MT CARMEL
337008500100	S-33-85	HARD LABOR CREEK	5.8 MI NE MCCORMICK
337008800100	S-33-88	STEVENS CREEK	2.1 MI E CLARKS HILL
337008800100	S-33-88	STEVENS CREEK	2.1 MI E CLARKS HILL
337011700100	S-33-117	LONG CANE CREEK	7.0 MI NW MCCORMICK
337011700100	S-33-117	LONG CANE CREEK	7.0 MI NW MCCORMICK

Saluda Co.

Bridge_ID	Facility Carried	Feature Intersected	Location
412017800100	US 178	LITTLE SALUDA RIVER	0.8 MI SE OF SALUDA
412017800200	US 178	RICHLAND CREEK	5.0 MI SE OF SALUDA
412017800300	US 178	CLOUDS CREEK	9.3 MI SE OF SALUDA
412017800400	US 178	MOORES CREEK	10.0 MI SE OF SALUDA
412037800300	US 378	RICHLAND CREEK	4.7 MI NE OF SALUDA
412037800500	US 378	BEAVER DAM CREEK	10.6 MI NE OF SALUDA
412037800600	US 378	CLOUDS CREEK	12.2 MI NE OF SALUDA
414012100300	SC 121	BIG CREEK	4.1 MI N OF SALUDA
417002900100	S-41-29	DRY CREEK	5.5MI SE SALUDA
417003100100	S-41-31	PERSIMMON CREEK	5.7MI NE SALUDA
417003700100	S-41-37	ROCKY CREEK	8.8MI SW SALUDA
417004300100	S-41-43	BIG CREEK	4.8MI NE SALUDA
417004400100	S-41-44	BR TO LAKE MURRAY	9.3MI NE SALUDA
417004400300	S-41-44	BR TO SALUDA RIVER	9.6 MI N OF SALUDA
417005900200	S-41-59	TRIB TO RICHLAND CREEK	5.8MI E SALUDA
417007000100	S-41-70	TRIB TO INDIAN CREEK	9.8MI NE SALUDA
417007900100	S-41-79	SHILOH BRANCH	5.8 MI NW OF SALUDA
417009800100	S-41-98	TRIB TO HALFWAY SWP CK	9.7MI NW SALUDA
417009800200	S-41-98	HALFWAY SWAMP CREEK	10.3MI NW SALUDA
417010700200	S-41-107	TRIB TO LTL SALUDA RV	2.0MI SW SALUDA
417012200100	S-41-122	BIG CREEK	5.6MI NE SALUDA
417012900100	S-41-129	INDIAN CREEK	8.7MI NE SALUDA
417014800100	S-41-148	TRIB TO DRY CREEK	5.9 MI SE OF SALUDA
417016400100	S-41-164	BR OF LITTLE SALUDA RV	5.5 MI NE OF SALUDA
417019200200	S-41-192	DAILEY CREEK	8.5 MI NE OF SALUDA
417028100100	S-41-281	TRIB TO LAKE MURRAY	8.4MI E SALUDA

Intersections and Safety

Improving safety is a goal of the long range transportation plan for this region. Rural areas in particular have many areas of concern. Low traffic volumes encourage speeding along some routes. Narrow, two-lane roads are basically paved dirt roads in many areas and do not leave much room for driver error. Furthermore, intersections are often angled in ways that are dangerous due to limited visibility of oncoming traffic.

The need for safety and intersection improvements in rural areas is widespread. When there is a need to widen a road in a rural area, the new design can often be adjusted to upgrade the safety of the road and its intersections at the same time. However, many rural roads have safety concerns but do not need widening. There are a number of options for addressing safety concerns on rural roads. These include:

- *Widening and paving shoulders* – Many rural roads are narrow and have very narrow or no paved shoulders, and frequently grassed shoulders slope steeply down into drainage ditches. This means that drivers veering even slightly out of a lane can lose control of their vehicles. Stabilizing and paving shoulders can provide a needed buffer for travelers on the road. As an added benefit, these facilities can be designed to accommodate pedestrians and bicyclists. Rural accidents involving non-motorists have very high fatality rates due to high speeds and limited visibility. Providing them facilities out of the travel lanes can be very beneficial in helping prevent these accidents.
- *Realigning intersections and curves* – Rural roads are frequently winding and feature dangerous intersections. This can lead to drivers losing control of their vehicle, or failing to yield to oncoming traffic. Redesigning and straightening curves, as well as realigning intersections, can address problem locations.
- *Traffic calming* – Traffic calming can be defined as a combination of mainly physical measures that reduce the negative effects of motor vehicle use, alter driver behavior and improve conditions for non-motorized street users. The SCDOT outlines a range of options for traffic calming in their "Traffic Calming Guidelines" publication, including speed bumps, raised crosswalks, traffic circles, raised landscaped medians, road closures and physically reducing lane widths. These are generally applied to low volume streets without a substantial amount of through traffic.
- *Other intersection improvements* – Review of the situation at key intersections can result in other suggested improvements, based on the problems experienced there.
- *Lowering speed limits* – This low-cost measure can help reduce speeding, and therefore reduce the number of severe accidents on a roadway. However, enforcement is key in ensuring speed limits are obeyed.
- *Median barriers* – Most prominently, this is shown in SCDOT's interstate cable barrier initiative. In general, the purpose of this is to prevent head-on collisions resulting from vehicles crossing over a median.
- *Land and road restrictions* – Also primarily used on interstates, truck lane restrictions can result in fewer fatal accidents involving heavy trucks. A similar

concept is designating certain roads as truck routes, and limiting truck access to other roads.

- *Traffic law enforcement* – Since driver error is a substantial contributing factor to rural accidents, law enforcement can be an important partner in addressing safety concerns in certain target areas. Additionally, law enforcement personnel can be very effective in identifying trouble spots that need to be addressed in some manner.

SCDOT, through their safety program, already evaluates and prioritizes safety and intersection projects statewide. The following projects have been ranked by SCDOT as needed projects in the Upper Savannah region:

1. SC 254 with S-97 – Greenwood (Deadfall and Cokesbury)
2. SC 225 with S-148 – Greenwood (Hwy 225 S and W Alexander)
3. SC 72 Bus. with S-108 – Greenwood (W Cambridge and Mathis)
4. S-178 with S-339 – Edgefield (Springhaven Rd and Murrah Rd)
5. SC 56 Bus. with SC 72 Bus. and S-162 – Laurens (Musgrove, Willard, N Adair)
6. SC 39 and SC 702 – Saluda (Chappells Hwy and Hwy 702)
7. S-39 and S-285 – Greenwood (Airport Rd and Old Laurens Hwy)
8. SC 20 with SC 201 – Abbeville
9. US 76 with S-312 – Laurens (Hwy 76 and Wilsontown Rd)
10. SC 10 with SC 28 - McCormick
11. SC 72 Bypass in K-mart area - Greenwood
12. SC 121 with S-41 and S-104 – Edgefield (Lee and Edisto in Johnston)
13. SC 20 with SC 185 - Abbeville
14. US 25 with S-257 – Edgefield (Augusta Rd and Star Rd)
15. S-11 with S-22 – McCormick (Main St and Whitetown Rd)
16. SC 121 with S-37 – Saluda (Johnston Hwy and Rocky Creek Rd)
17. SC 28 with S-432 – McCormick (Hwy 28 and Lost Wilderness Rd)
18. SC 20 with Connector to SC 28 - Abbeville
19. S-43 with S-51 – Saluda (Yarborough Rd and Butler Rd)
20. US 221 from US 76 to SC 49 - Laurens

Maintenance and Resurfacing

Maintenance is an essential part of any transportation network. Proper maintenance keeps a system functioning properly and safely. Improper or deferred maintenance can create hazards, as well as requiring a much larger expense for rebuilding of facilities at a later date. Regular maintenance activities include repaving and resurfacing, chip seal, shoulder and slope maintenance, pavement marking, mowing, drainage system improvements, maintenance of roadside facilities, and related activities.

The condition of the state maintained route system is assessed by the SCDOT Pavement Management Office. One-third of the state system is assessed annually to determine the surface conditions of the driving lanes. As with other categories, maintenance funding is limited and does not generally meet the need of the state at any given time. Upper Savannah COG has committed to apply any increase in Guideshare funding over 2005 levels to address needs of safety, intersections, and maintenance.

Signalization

Traffic signals are an important part of the transportation system. Properly used, they can ensure the safe and orderly progression of traffic. If not installed and maintained correctly, however, they can result in unnecessary delays in traffic flows.

In the Upper Savannah region, the traffic signal system is maintained by SCDOT. Repair, replacement, and installation are functions of the SCDOT maintenance staff. This staff conducts traffic studies at intersections to see whether new signals are needed. The factors considered in determining whether a signal is warranted include the number of vehicles approaching the intersection, frequency and type of accidents, physical layout of the intersection, average speed, and future road construction plans.

At-grade railroad crossings are another location where signals are important. SCDOT staff also perform the function of inspecting and maintaining these crossings, and a pool of funding is available to upgrade these crossings as need is determined. However, these funds are extremely limited, which means that only a few crossings are able to be completed on a yearly basis statewide. Projects are prioritized based on similar criteria to other safety projects.

Highways

As already indicated, highway travel is currently the most important transportation mode being utilized in Upper Savannah region. This pre-eminent position will continue through the remainder of this decade, and, most probably, until the 2030 target year of this planning process. After examining some growth parameters related to increased highway travel demand in Upper Savannah region, recommendations will be made for improving the existing highway system in the region to meet this increased demand, in addition to providing the enhanced surface transportation facilities required for increased economic growth in the region.

Recommended Improvements Program

Based on anticipated increased travel demand in the period between now and the year 2030, plus the need to continually expand the highway system in the region to provide enhanced economic development opportunities, the following program of highway system improvements is recommended for Upper Savannah region. Many of these recommended improvements are already included in the South Carolina Department of Transportation Study.

Abbeville County	SC 252/US 25 Connector Hwy 178 SC 28 Bypass SC 81
Edgefield County	Hwy 25 (Trenton to North Augusta) Hwy 25 (Edgefield to Trenton) Hwy 121 (Johnston to Trenton)
Greenwood County	Northside Drive Emerald Road Phase II SC 246 Eastern Bypass
Laurens County	US 221 North SC 56 SC 14 (Gray Court to Laurens) SC 76 S-54 Neely Ferry Road
McCormick County	Hwy 28 in Town of McCormick Hwy 28 (passing lanes) Hwy 378 to Town of McCormick to Georgia line
Saluda County	Hwy 121 (Saluda to Newberry County line) Hwy 121 (Saluda to Edgefield County line) Hwy 378 (Saluda to Lexington County line)

Regional Policy Recommendations

The following policy recommendations are meant to serve as a guide for the development of future transportation issues and concerns in the Upper Savannah region. Where applicable, the Council of Governments will take the lead in the efforts and continue to work closely with other regional and statewide partners to insure their implementation.

1) Address Safety Concerns
   a) Identify High Accident Roads and Intersections
   b) Recommend that all roads intersect in a "T" pattern with adequate visibility for on-coming traffic
   c) Recommend the construction of cleared shoulders on roadways of appropriate width
   d) Review placement of and maintenance of signage on a regular basis
   e) Encourage the construction of sidewalks to connect various uses

2) Plan for Growth
   a) Use available tools (traffic model, traffic counts, etc.) to identify areas of high growth and high need
   b) Continue using groups interested in highway improvement issues
   c) Identify corridors to promote economic development and movement within and through the region
   d) Study land use patterns to determine areas of focus for future improvements
   e) Continue on-going consultation with local officials on needs
   f) Encourage public input and involvement in the planning process

3) Transit Coordination
   a) Continue to work with existing transit providers to determine available funding to study coordination issues
   b) Continue to work with SCDOT Division of Mass Transit
   c) Continue to act as facilitator for regional discussions of coordination issues
   d) Encourage continuing public education on transit issues
   e) Encourage reduction of vehicle trips and reduce impact on the environment

4) Economic Development
   a) Study ways to obtain grant funds to improve area airports
   b) Encourage development of economic corridors featuring access to air, rail, utilities, and highway transportation
   c) Study land use patterns to determine areas of focus for future improvements

5) Environmental Protection
   a) Encourage awareness of the impact of all ground disturbing activities
   b) Encourage low impact crossing of streams and rivers
   c) Encourage transit coordination to reduce emissions
   d) Review air quality impact with neighboring metropolitan areas

Financial Plan

Based on approximate funding levels over the next thirty years, there will be $155 million available to spend on transportation improvements in the Upper Savannah region. Several projects, totaling $59 million, are already waiting on available funds to start engineering. That leaves $96 million worth of projects to prioritize over the next thirty years.

With the assistance of SCDOT and the use of our regional traffic model, we have identified the following prioritized recommendations using the high project estimates:

Current Projects

1)US 25	Edgefield County	Trenton to current 4-lane	$38 million
2)SC 14	Laurens County	Laurens City north	$15.5 million
3)Stagecoach Rd Phase II	Laurens Co		$5.5 million
			$59 million

Future Projects

1)US 221 N	Laurens County		$7 million
2)SC 56	Laurens County	I 26 to SC 72	$14 million
3)US 25(Ph II)	Edgefield County	Edgefield to Trenton	$30 million
4)US 178	Saluda County	Little Saluda River to SC 121	$2.5 million
5)Northside Dr	Greenwood County	US 25 to Airport Rd	$24 million
6)SC 121	Saluda County	US 178 to Saluda Nursing	$3.5 million
7)US 76	Laurens County	Intersections	$2 million
8)US 25/252 connector	Abbeville County	(Erwin Mill Rd)	$8.5 million
9)US 378	McCormick County	Turn lanes/shoulders	$4.5 million
			$96 million

These costs are based on 2006 estimates and will need to be revised once Preliminary Engineering starts.

Other Needs

Although presently not funded and not prioritized, the following needs have also been identified:

Project	County	Location	Length	Scope	Estimate
US 178	Abbeville	Anderson Co. to Greenwood Co.	7.2	4L	$34 - 49M
SC 28 Bypass	Abbeville	SC 72 – SC 20	4.2	3L C&G	$8 - 15M
SC 81	Abbeville	Anderson County line to SC 72	13.8	4L Div	$65-100M
SC 121	Edgefield	SC 19 – SC 23	8.4	3 Lane	$12 - 25M
Emerald Rd Phase II	Greenwood	S-258 – SC 246	3.8	5L C&G	$24 - 38M
SC 246	Greenwood	SC 702 – S-271	4.9	5L C&G	$23 - 33M
Eastern Bypass	Greenwood	US 25/178 – S-29 (E. Cambridge Av)	3.5	5L C&G	$22 - 33M
SC 14	Laurens	SC 101 – I-385	4	4/5 Lane	$10 - 15M
S-54 (Neely Ferry Rd)	Laurens	US 221 – Greenville County line	22.5	3 Lane	$34 - 68M
US 221/SC 28	McCormick	US 378 – Georgia State line	6.3	Turn Lanes/Shoulder	*
US 378	Saluda	Traffic Circle – Lexington Co. line	3	4/5 Lanes	$14 - 20M

*- Around $10M for shoulders and $300-$500K/intersection

These costs are based on 2006 estimates and will need to be revised once Preliminary Engineering starts.