



Lowcountry Long-Range Regional Transportation Plan

**Lowcountry Council of Governments
April 2007**

Table of Contents

Part 1: Background

1.1	Population Growth: Past and Projected.....	3
	1.1.1 Trends.....	3
	1.1.2 Forecasts.....	5
1.2	Incomes.....	6
1.3	Employment, Wages, Commuting and Congestion.....	7
1.4	Development and Land Use Trends.....	11
1.5	Freight Transportation and Future Lowcountry Economic Development.....	14
1.6	Tourism.....	18
1.7	Road and Highway Congestion	19

Part 2: Policy Recommendations

1.	Introduction and Subcommittees.....	26
2.	Bicycle and Pedestrian Facilities Component.....	28
2.1	Bicycle and Pedestrian Planning Goals.....	28
2.2	Recommendations.....	28
2.3	Project Prioritization.....	34
3.	Environmental Component.....	35
3.1	Environmental Component Goal.....	35
3.2	State of the Environment.....	35
3.3	Recommendations.....	38
3.4	Prioritization.. ..	38
3.5	Next Steps.....	38
4.	Freight Transportation Component.....	42
4.1	Lowcountry Freight Transportation Component Goals.....	42
4.2	General Planning Recommendations.....	42
4.3	Infrastructure Planning Recommendations.....	43
4.4	Operations Planning Recommendations.....	44
5.	Public Transportation Component.....	45
5.1	Public Transit Goal.....	45
5.2	Public Transit Background.....	45
5.3	Recommendations.....	47
5.4	Project Prioritization.....	54



6.	Roadways Component.....	55
6.1	Roadways Goal.....	55
6.2	Recommendations.....	55
6.3	Prioritization.. ..	57
Part 3:	Preliminary Project Proposals.....	58
Part 4:	Concluding Comments and Public Participation.....	63

Tables

Table 1.1	Population Growth in the Lowcountry	3
Table 1.2	County, City, Town Growth	4
Table 1.3	LCOG Population Forecasts	5
Table 1.4	State Data Center Projections	6
Table 1.5	Median Household Incomes	7
Table 1.6	Median Household Income Changes	7
Table 1.7	Private Sector Average Weekly Wage	8
Table 1.8	Number of Jobs by County	9
Table 1.9	Vehicle Ownership	9
Table 1.10	Lowcountry Commuting Patterns	10
Table 1.11	Interstate Commuting Patterns	10
Table 1.12	Building Permits	11
Table 1.13	208 Certification	12
Table 1.14	Truck AADT Interstate I-95: 1999-2003	15
Table 1.15	Freight Shipments	16
Table 1.16	SCPRT Virtual Population	19
Table 1.17	Volume/Capacity Ratios: 2005, 2015, and 2025	21
Table 2.1	Proposed Bus Stop Locations	49
Table 3.1	High Accident Intersections	60
Table 3.2	Intersections Needing Improvements	61

Figures

Figure 1.1	Lowcountry Unemployment Rates	8
Figure 1.2	Lowcountry Development Patterns	13
Figure 1.3	I-95 Economic Diversification Zones	14
Figure 2.1	US Highway 278 Corridor Proposed Bus Service	48
Figure 3.1	Lowcountry Evacuation Routes	59



Appendices

APPENDIX A:	BEAUFORT COUNTY TRAILS PLAN
APPENDIX B:	MUNICIPAL EXAMPLES OF FACILITIES ASSESSMENTS
APPENDIX C:	WALKING AND BICYCLING SUITABILITY ASSESSMENT (WABSA) PROJECT MANUAL
APPENDIX D:	AMERICAN ASSOCIATION OF STATE HIGHWAY TRANSPORTATION OFFICIALS (AASHTO) OUTLINE
APPENDIX E:	BEAUFORT COUNTY TRANSPORTATION PROJECTS



Part 1: Background

Note: All data in this section is the most recently available as of April 2007.

Introduction

Long-range transportation planning is a process of looking forward (in this case 20 years), trying to forecast what is likely to happen that will impact the transportation system and then recommending system improvements to accommodate those changes. While it is a straightforward process to identify major problem areas and situations where major road improvements are already needed, STIP funding for such improvement projects has become even more limited during the process of preparing this plan (as of September 28, 2006 less than \$3,000,000 per year was available for new projects through Fiscal Year 2012).

As a result, the project recommendations resulting from this planning do not include major new roads or road-widening projects; they are not financially feasible at this time unless other large-scale funding sources are identified and accessed. Smaller scale road-related projects (such as intersection improvements) are recommended instead, as is an increased emphasis on public transportation system improvements. As well, other relatively inexpensive transportation modes, including pedestrian and bicycle, are stressed. As is appropriate in a multi-modal, long-range Regional transportation, recommendations include a variety of land use and policy recommendations as well as projects. With limited funding available, the implementation of these recommendations will become increasingly important to the solution of congestion and other present and future transportation problems.

In a Region that has experienced rapid growth and change during the past ten years, Lowcountry transportation planning is made more problematic by several factors:

- It is very difficult to project the rate of future growth, especially in Beaufort County and southern Jasper County, for a 20-year period. Although many major developers have assembled land and prepared master plans for their large-scale holdings, the build-out rate may not be as fast as had been predicted, due to economic and market conditions (including ongoing high oil prices, increasing interest rates, a finite number of wealthy baby boomers, a housing market that has slowed notably during the past several months—nationally and locally).
- At the same time it is difficult to think very far ahead about transportation projects and improvements when not all *existing* needs can be met. The very rapid growth in the Lowcountry, especially in southern Beaufort County, between 1995 and



2005, has strained the existing highway system and many bridges and thoroughfares are already at more than 100 percent capacity. With funds for new roads and major road improvements limited for the foreseeable future, it is difficult for many Lowcountry residents, including elected and appointed officials, to look beyond trying to solve the present problems.

- Changing transportation conditions in the Lowcountry are further complicated by the issue of hurricane evacuation needs in a high growth area and a large visitor population during hurricane season.

Regional transportation planning is very closely related to economic and land use growth and development. Even if the future isn't certain, an understanding of what has been taking place and what is expected to take place in the foreseeable future is the first step in the planning process. They form the basis for the recommendations for the different transportation policies and projects that will follow.

1.1 Population Growth: Past and Projected

1.1.1 Trends

The four counties of South Carolina's Lowcountry—Beaufort, Colleton, Hampton and Jasper—together have been one of the fastest growing Regions in the state.

Beaufort County had the fastest growth rate in the state (and one of the fastest on the Southeast coast), while Jasper County ranked fifth in South Carolina.

Table 1.1 Population Growth in the Lowcountry

	1990 Census	2000 Census	% Growth 1990-2000	2006 Estimates	% Change 2000-2006
Beaufort County	86,425	120,937	39.9	142,045	13.13
Colleton County	34,377	38,264	11.3	39,467	2.81
Hampton County	18,191	21,386	17.6	21,268	-0.97
Jasper County	15,487	20,678	33.5	21,809	3.27
Region Total	154,480	201,265	30.3	224,589	11.6
South Carolina	3,486,703	4,012,012	15.1	4,321,249	0.77



Since 2000, the Census Bureau estimates population annually, with the results for the previous year available during the summer of the following year. From 2001 through 2005 growth in the Lowcountry slowed, as the table on the following page shows, although Beaufort County's pace continues as the fastest in the Region.

Table 1.2 County, City, Town Growth

	% Population Change 2000-2005	July 1, 2005 Population	July 1, 2004 Population	July 1, 2003 Population	July 1, 2002 Population	July 1, 2001 Population
Beaufort County	13.98%	137,849	135,725	132,889	127,977	124,884
.Beaufort city	-6.89%	12,058	12,289	12,343	12,417	12,369
.Bluffton town	58.07%	2,341	2,259	1,978	1,829	1,706
.Hilton Head Island town	1.88%	34,497	34,371	34,499	34,531	34,001
.Port Royal town	6.18%	9,347	9,188	9,227	8,786	8,763
.Balance of Beaufort County	15.73%	79,606	77,618	74,842	75,147	72,817
Colleton County	3.50%	39,605	39,595	39,173	38,804	38,580
.Cottageville town	0.14%	708	712	710	713	710
.Edisto Beach town	9.98%	705	695	682	676	655
.Lodge town	0.88%	115	115	114	114	114
.Smoaks town	-0.71%	139	140	139	140	140
.Walterboro city	7.21%	5,548	5,516	5,390	5,164	5,147
.Williams town	2.59%	119	119	118	118	117
.Balance of Colleton County	2.80%	32,271	32,298	32,020	31,946	31,719
Hampton County	-0.27%	21,329	21,301	21,391	21,316	21,384
.Brunson town	-2.04%	576	580	585	582	586
.Estill town	-1.28%	2,394	2,392	2,411	2,398	2,413
.Furman town	-1.05%	283	283	285	284	285
.Gifford town	-0.81%	367	367	371	368	370
.Hampton town	-1.34%	2,799	2,795	2,817	2,802	2,820
.Luray town	-0.87%	114	114	115	114	115
.Scotia town	-0.44%	226	226	228	227	228
.Varnville town	-1.25%	2,048	2,047	2,062	2,051	2,063
.Yemassee town	3.97%	839	830	827	817	815
.Balance of Hampton County	-0.76%	11,683	11,667	11,690	11,803	11,818
Jasper County	3.48%	21,398	21,193	20,998	20,969	20,831
.Hardeeville city	2.79%	1,843	1,838	1,814	1,818	1,819
.Ridgeland town	0.31%	2,618	2,612	2,600	2,605	2,609
.Balance of Jasper County	3.48%	16,937	16,743	16,584	16,552	16,416



1.1.2 Forecasts

With a global, national and state economic future that even the experts find difficult to project with certainty, it is even more problematic to try to determine what the next 20 years holds for the Lowcountry and its component counties. As a result, two sets of trend forecasts were prepared by LCOG to provide an indication of what scale of future growth may be in store in order to develop Regional transportation planning policies.

Following those tables are the forecasts prepared for the Lowcountry by the State Data Center, which are between the higher and lower LCOG rates for Jasper and Hampton counties, slightly lower than the lower LCOG rate for Colleton County and considerably lower than the lower LCOG forecasts for Beaufort County. [Note: The State’s projections for 2005 were very close to the Census estimates for all four counties, especially Beaufort].

Table 1.3 LCOG Population Forecasts

Beaufort County Population Projections 2000 – 2025			
	1990-2000 Rate	Current Population 2004	2000-2004 Rate
<i>Rate/Year</i>	3.99%	135,725	3.05%
2000			
2005	147,068		140,540
2010	178,844		163,320
2015	217,487		189,793
2020	264,479		220,556
2025	321,624		256,306
Colleton County Population Projections 2000 – 2025			
	1990-2000 Rate	Current Population 2004	2000-2004 Rate
<i>Rate/Year</i>	1.13%	39,173	0.87%
2000			
2005	40,475		39,958
2010	42,814		41,726
2015	45,289		43,573
2020	47,906		45,502
2025	50,675		47,516
Hampton County Population Projections 2000 – 2025			
	1990-2000 Rate	Current Population 2004	2000-2004 Rate
<i>Rate/Year</i>	1.76%	21,301	-0.10%
2000			
2005	23,335		21,279
2010	25,462		21,173
2015	27,783		21,068
2020	30,316		20,963
2025	33,079		20,858



Jasper County Population Projections 2000 – 2025			
	1990-2000 Rate	Current Population 2004	2000-2004 Rate
<i>Rate/Year</i>	3.35%	21,193	0.62%
2000			
2005	24,382		21,327
2010	28,748		21,996
2015	33,897		22,687
2020	39,969		23,399
2025	47,127		24,133

Table 1.4 State Data Center Projections

	Census	Estimate	Projection	Projection	Projection	Projection
	1-Apr	1-Jul	1-Jul	1-Jul	1-Jul	1-Jul
COUNTY	2000	2005	2010	2015	2020	2025
Beaufort	120,937	137,814	152,020	166,210	180,410	194,590
Colleton	38,264	39,610	41,280	42,940	44,600	46,260
Hampton	21,386	21,331	22,190	23,050	23,910	24,770
Jasper	20,678	21,452	23,060	24,680	26,290	27,900

As a result of the uncertain future, in preparing the population forecasts for Colleton, Hampton and Jasper counties (Beaufort County has prepared its own with its own growth assumptions) to be utilized in the SCDOT TRANSCAD model, LCOG has used both its high and its low forecasts. The model run is expected to be completed by SCDOT in 2007.

There are uncertainties that could cause much faster growth, including future economic development in the four counties as the recently-completed *Lowcountry Economic Diversification Plan* is implemented, the proposed construction of the South Atlantic Marine Terminal (and spin-off businesses) in southern Jasper County and the actual construction of the proposed residential communities around Hardeeville. Consequently, the situation will be monitored continually, the forecasts updated accordingly and those numbers passed on to SCDOT for the purposes of updating the model.

1.2 Incomes

Incomes are distributed as unevenly as is growth in the Lowcountry, with Beaufort County ranking as the wealthiest and Hampton as the fourth poorest, according to data from the 2000 Census; only Beaufort County had incomes higher than the state average. However,



without adjusting for the inflation that occurred over the course of the decade, the increases in incomes in all four counties were substantial, as shown in the following chart. Household median incomes grew at a greater rate in all four counties than the state average rate; Jasper County’s increases were the largest in the Region.

Table 1.5 Median Household Incomes

	1989	1999	% Change 1989/1990—1999/2000
Beaufort			
	\$30,450	\$46,992	54.3%
Colleton			
	\$20,617	\$29,733	44.2%
Hampton			
	\$18,615	\$28,771	54.6%
Jasper			
	\$18,071	\$30,727	70%
State Average			
	\$26,256	\$37,082	41.2%

More recent data (below) show that these trends have continued.

Table 1.6

	Beaufort County	Colleton County	Hampton County	Jasper County	South Carolina	US
2000	\$32,464	\$19,106	\$18,549	\$17,683	\$24,426	\$29,847
2001	\$34,726	\$19,885	\$19,355	\$18,258	\$25,067	\$30,527
2002	\$34,935	\$20,298	\$19,920	\$19,171	\$25,502	\$30,906
% Increase 2000-2002	7.6%	6.2%	7.4%	8.4%	4.4%	3.5%

1.3 Employment, Wages, Commuting and Congestion

South Carolina’s Labor Market Information (SCLMI) division adopted a new methodology a year ago for determining unemployment rates for the counties. It takes into account commuting patterns and rates. Beaufort County still consistently has among the lowest rates in the state and Colleton and Hampton counties have continually had unemployment rates that are notably higher than the rest of the Region and the state and US averages.

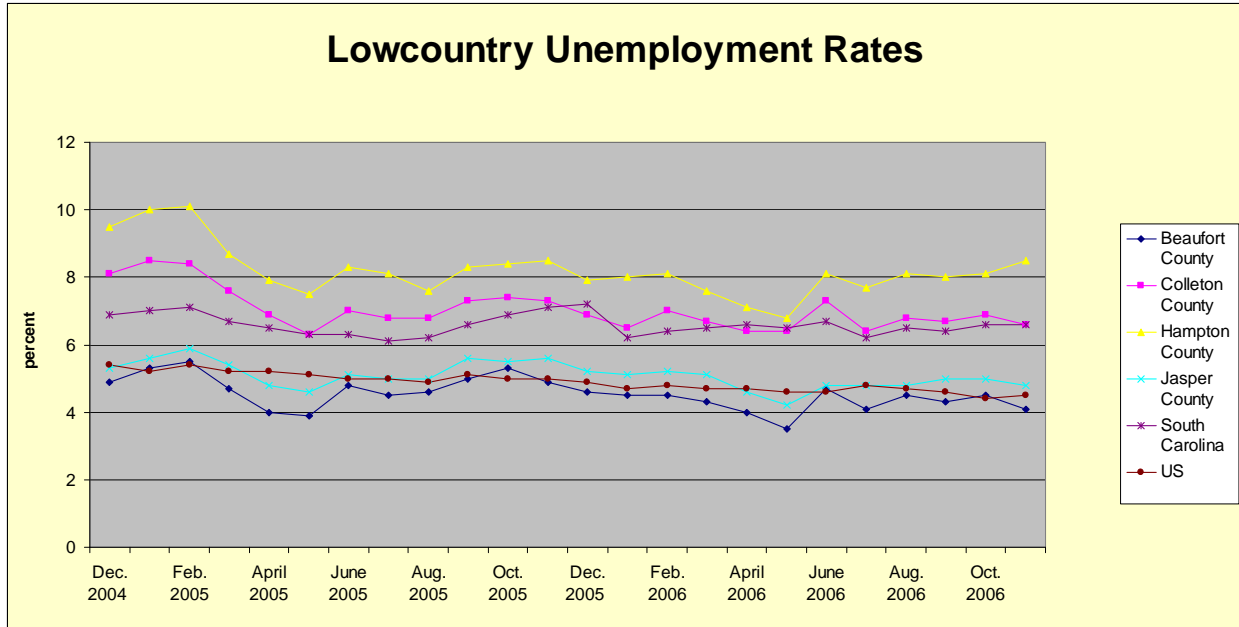


Figure 1.1 Lowcountry Unemployment Rates

Low unemployment rates do not translate into unalloyed good economic news for the Lowcountry, however. SCLMI’s private sector weekly wage data show that, while the average pay in all of the four counties has increased significantly during the past decade, it is less than the state average; a large number of the jobs are in the hospitality and retail sectors.

Table 1.7 Lowcountry Private Sector Average Weekly Wages

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	1st Quarter 2006	Change 1995-2006
Beaufort County	\$404	\$423	\$440	\$460	\$480	\$493	\$516	\$505	\$525	\$560	\$564	\$587	45.30%
Colleton County	\$364	\$374	\$382	\$404	\$427	\$445	\$458	\$445	\$457	\$491	\$511	\$529	45.33%
Hampton County	\$393	\$411	\$434	\$460	\$468	\$497	\$536	\$524	\$531	\$570	\$581	\$540	37.40%
Jasper County	\$309	\$325	\$339	\$361	\$390	\$428	\$447	\$441	\$474	\$531	\$568	\$617	99.68%
South Carolina	\$448	\$462	\$481	\$501	\$523	\$541	\$562	\$567	\$582	\$602	\$623	\$657	46.65%

And job growth has been concentrated in southern Beaufort and Jasper counties. During this period Jasper County showed the greatest growth in the number of jobs for not only the Lowcountry but for the whole state of South Carolina, as the chart on the following page demonstrates.



Table 1.8 Number of Jobs

		2002	2003	2004	2005	% Change 2002-2005
Beaufort County	Number of Jobs	46,788	48,153	50,187	51,820	10.75%
Colleton County	Number of Jobs	8,361	8,120	8,356	8,245	-1.39%
Hampton County	Number of Jobs	4,238	3,825	3,788	3,777	-10.88%
Jasper County	Number of Jobs	3,861	4,015	4,302	4,763	23.36%

The job growth in Jasper County has occurred almost entirely in the southern portion of the county, centered along US 278 between I 95 and the Beaufort County Boundary. Likewise, job growth in Beaufort County has mainly taken place in the southern section along the US 278 corridor. The congestion this has already created and will continue to create is being partially solved by the widening of the highway in Beaufort County (now completed). The widening will not fully solve the problem as vehicle registration continues its upward trend and workers commute to the new jobs from all over the Lowcountry Region and from Georgia.

The following tables show that the growth rates for the number of vehicles in the Lowcountry have approximately matched the population growth rates, but the roadway mileage increases have lagged far behind (which also has implications for hurricane evacuations).

Table 1.9

Vehicle Ownership								
	1999	2000	2001	2002	2003	2004	2005	%increase 1999-2005
<i>Beaufort</i>	85,757	89,851	94,554	98,067	104,828	112,350	128,351	49.67%
<i>Colleton</i>	29,751	27,653	30,509	31,356	32,617	35,648	38,209	28.43%
<i>Hampton</i>	14,008	13,733	14,633	14,596	15,090	16,400	17,605	25.68%
<i>Jasper</i>	13,599	13,696	14,402	14,807	15,115	17,738	20,728	52.42%
TOTAL	143,115	144,933	154,098	158,826	167,650	182,136	204,893	43.17%
Public Roadway Miles								
	1999	2000	2001	2002	2003	2004	2005	%increase 1999-2005
<i>Beaufort</i>	771.2	771.2	n/a	879.3	880.7	881	884.2	14.65%
<i>Colleton</i>	1347	1347	n/a	1347	1347	1347	1347	0.00%
<i>Hampton</i>	835.4	835.4	n/a	835.2	838.9	838.7	838.7	0.40%
<i>Jasper</i>	651.1	648	n/a	652.5	652.5	653.7	659.5	1.29%
TOTAL	3604.7	3601.6	n/a	3714	3719.1	3720.4	3729.4	3.46%



The large increase in motor vehicle registrations is due in part to the fact that many people in the four counties commute to and from work, mostly in their own cars and trucks, as the following table shows.

Table 1.10 Lowcountry Commuting Patterns

	Percent in Car Pools	Percent Using Public Transportation	Mean Commuting Time (minutes)
Beaufort County	14.4	1.2	23.3
Colleton County	21.6	1.3	32.7
Hampton County	19.1	1.6	33.1
Jasper County	25.8	1.2	34.2

Source: US Census

There is also considerable in-commuting from Georgia (more than in than in the opposite direction), which adds to the flows of traffic in both directions.

Table 1.11 Interstate Commuting Patterns

South Carolina to Georgia	Beaufort County to Chatham County	1135
	Beaufort County to Effingham County	39
	Jasper County to Chatham County	840
	Jasper County to Effingham County	42
	Total	2056
Georgia to South Carolina	Chatham County to Beaufort County	1591
	Effingham County to Beaufort County	427
	Chatham County to Jasper County	201
	Effingham County to Jasper County	119
	Total	2338

Source: US Census



1.4 Development and Land Use Trends

The trends discussed above are likely to continue into the future, given development that has already taken place or is under construction. LCOG tracks this activity by means of both building permits and sewer certifications. The tables and the map that follow show the concentrations of activity in southern Beaufort and Jasper counties, with Jasper receiving a disproportionate amount (given its small existing population) of commercial development.

Table 1.12 Building Permits

Housing

	2001	2002	2003	2004	2005
Beaufort County					
SF Number	1,712	2,345	2,283	3,407	4,016
SF Value	\$411,004,579.50	\$541,668,600.00	\$468,015,037.60	\$654,005,255.40	\$962,236,649.00
Average SF (w/o Land)	\$240,072.77	\$230,988.74	\$205,000.02	\$191,959.28	\$239,600.76
MF Number	246	52	22	156	222
MF Value	\$54,279,912.00	\$20,172,293.00	\$35,826,598.00	\$29,764,630.50	\$69,201,596.00
Colleton County					
SF Number	62	83	68	122	111
SF Value	\$7,176,392.00	\$10,183,878	\$7,536,469.00	\$7,328,754.29	\$16,764,886.00
Average SF (w/o Land)	\$115,748.00	\$122,697.33	\$110,830.43	\$60,071.76	\$151,035.01
MH Number	500	N/A	377	0	320
MH Value	N/A	N/A	N/A	\$0.00	
MF Number	2	2	0	0	1
MF Value	\$497,280.00	\$186,000.00	\$0.00	\$0.00	\$91,000.00
Hampton County					
SF Number	25	33	31	33	35
SF Value	\$2,544,436.00	\$3,376,967.00	\$3,119,357.80	\$3,550,365.00	3,120,747.00
Average SF (w/o Land)	\$101,777.00	\$102,332.33	\$100,624.45	\$107,586.82	89,164.20
MH Number	230	169	0	158	209
MH Value	\$6,291,933.15	\$4,159,805.00	\$0.00	\$2,537,323.45	2,972,250.00
MF Number	1 (4 units)	0	0	0	1.00
MF Value	\$75,000.00	\$0.00	\$0.00	\$0.00	75,000.00
Jasper County					
SF Number	74	79	63	111	161
SF Value	\$6,315,951.00	\$16,011,284.00	\$6,033,664.00	\$11,199,465.00	16,505,249.00
Average SF (w/o Land)	\$85,351.00	\$202,674.48	\$95,772.44	\$100,896.08	85,000.00
MH Number	341	331	249	247	203
MH Value	\$13,640,000.00	\$13,240,000.00	N/A	\$8,645,000.00	6,000,000.00
MF Number	1	0	0	0	8
MF Value	\$190,320.00	\$0.00	\$0.00	\$0.00	2,921,000.00



Commercial Development					
	Year				
	2001	2002	2003	2004	2005
Beaufort County					
Commercial Number	149	97	111	105	126
Commercial Value	\$74,763,469.00	\$79,413,634.00	\$43,912,940.40	\$31,220,589.67	\$79,289,124.00
Colleton County					
Commercial Number	6	16	4	23	24
Commercial Value	\$2,659,998.00	\$7,267,394.00	\$3,710,800.00	\$2,954,774.00	\$4,936,750.00
Hampton County					
Commercial Number	19	10	12	23	4
Commercial Value	\$3,334,837.00	\$355,898.00	\$713,301.40	\$2,496,621.00	\$1,239,000
Jasper County					
Commercial Number	29	28	39	33	31
Commercial Value	\$9,213,997.00	\$14,926,632.00	\$13,617,564.00	\$11,875,439.00	17,233,724.00

Because LCOG certifies all new sewers and subdivisions on septic tanks, it is able to track construction activity that will take place during the subsequent year to 18 months. The following table shows the number and location of residential/units certified during the past four fiscal years and further demonstrates the concentration of development and the likely increase of congestion along roads and highways of development.

Table 1.13 208 Certifications

	FY 2004	FY 2005	FY 2006
Northern Beaufort County	350	185	895
Southern Beaufort County	3055	1384	3508
Colleton County	95	144	0
Hampton County	36	17	0
Jasper County	147	166	863
Lowcountry TOTAL	3683	1896	5266

The map on the following page illustrates this.

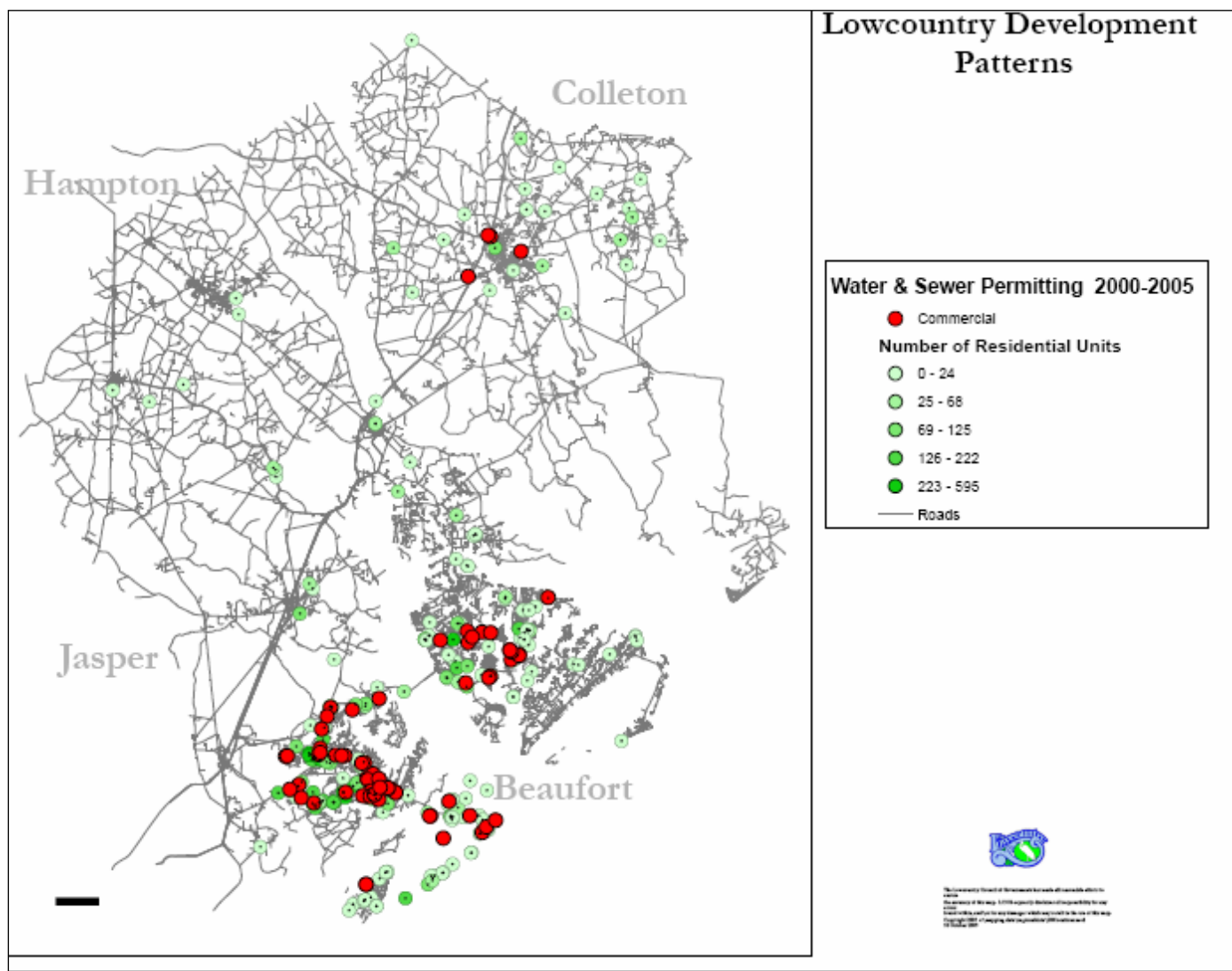


Figure 1.2

At the present time there is relatively little industrial employment in the Lowcountry, with Hampton County having the proportionately largest number of manufacturing jobs in the Region. The four counties are in the process of organizing themselves into a Regional Economic Development Alliance to implement the *Economic Diversification Strategy*. Future development is expected to be related to freight transportation logistics and centered around I 95 interchanges, as the map on the following page illustrates and the subsequent sub-sections explain.

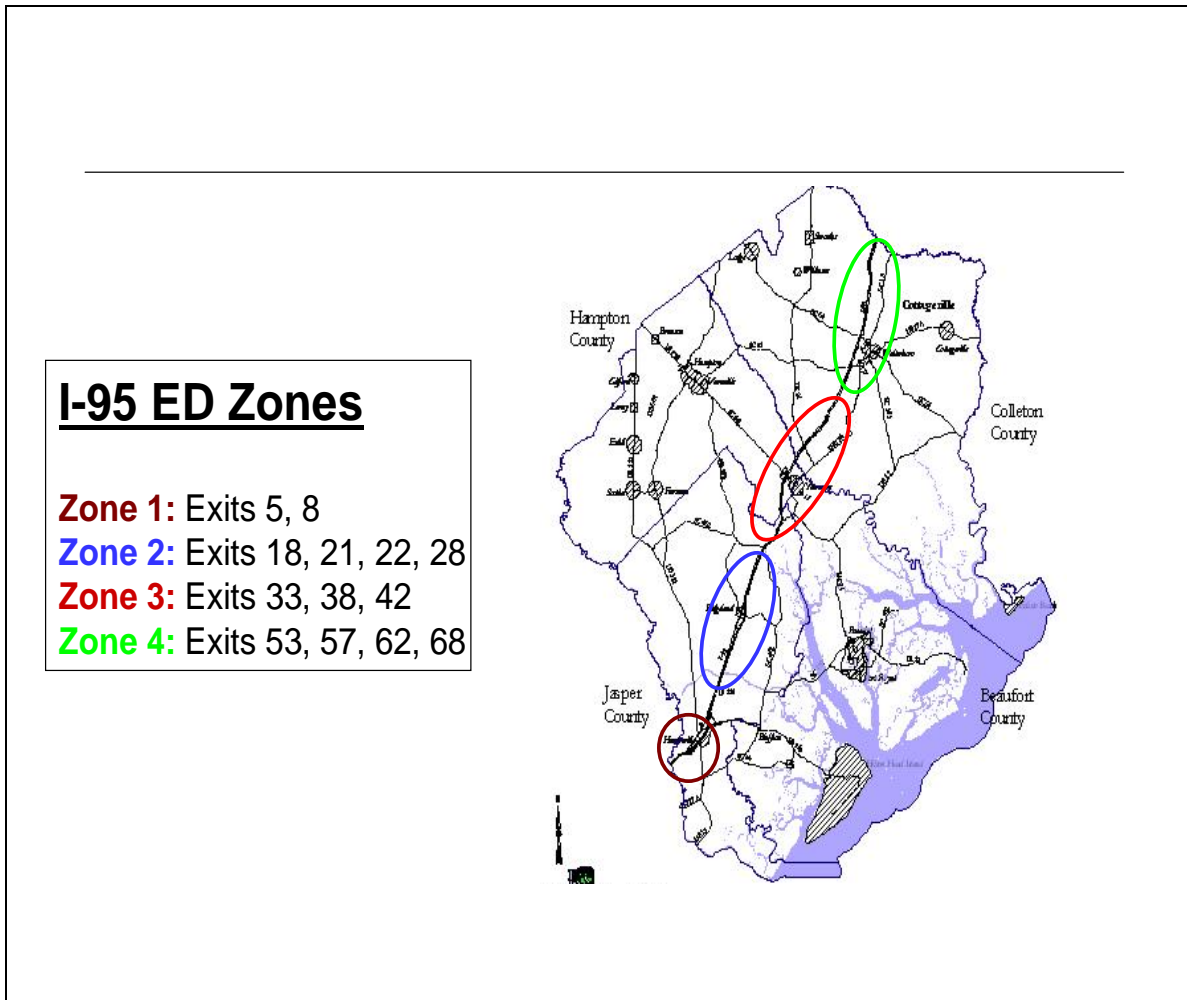


Figure 1.3

1.5 Freight Transportation and Future Lowcountry Economic Development

It is now widely recognized that freight transportation and economic development are closely related, or, as a presenter at a SCDOT/FHWA (Federal Highways) training session in late 2004 advised, “Be a ‘freight-friendly’ Region.” This will lead to decisions by site locators regarding operational advantages.” However, road and intermodal planning to accommodate efficient freight movement in municipalities and counties and across Regions and states has tended to be a “catch-up” process in much of the US. Such planning tends to be initiated when conflicts between passenger and freight transportation, including congestion and accidents, become too serious to ignore.



Truck traffic has already been increasing in the Lowcountry, as the Interstate 95 Average Annual Daily Traffic (AADT) volumes below demonstrate:

Table 1.14
Truck AADT Interstate I-95: 1999-2003
Colleton County

Station	Route	Location	1999 Total	1999 Truck	2003 Total	2003 Truck	Truck Increase
2377	95	S-34 TO S.C. 61	35,400	8,850	39,100	9,775	10.45%
2375	95	S.C. 64 TO S-34	35,500	8,875	39,000	9,750	9.86%
2373	95	S.C. 63 TO S.C. 64	36,400	9,100	39,100	9,775	7.42%
2371	95	U.S. 21 (Colleton) To S.C.63	35,400	8,850	39,500	9,875	11.58%

Hampton County

Station	Route	Location	1999 Total	1999 Truck	2003 Total	2003 Truck	Truck Increase
2369	95	(Jasper) U.S. 17 TO S.C. 68	35,500	8,875	39,900	9,975	12.39%
2367	95	S-39 TO Augusta Rd	34,100	8,525	40,300	10,075	18.18%

Jasper County

Station	Route	Location	1999 Total	1999 Truck	2003 Total	2003 Truck	Truck Increase
2365	95	S.C. 462 TO U.S. 17	38,800	9,700	46,700	11,675	20.36%
2363	95	U.S. 17 TO S.C. 462	37,000	9,250	44,600	11,150	20.54%
2361	95	SC 336 TO U.S. 17	36,200	9,050	43,600	10,900	20.44%
2359	95	S-13 TO SC 336	37,400	9,350	44,700	11,175	19.52%
2357	95	U.S. 279 TO S-13	38,800	9,700	45,900	11,475	18.30%
2355	95	U.S. 17/321 To U.S. 279	41,600	10,400	48,000	12,000	15.38%
2353	95	Ga. State Line To U.S. 17/321	40,400	10,100	45,900	11,475	13.61%

Note: I95 does not run through Beaufort County.

US highways in the Region, especially US 17 also carry a relatively large amount of freight traffic as well. For instance, US 17 carries a larger percentage of heavy truck traffic than is typical in the rest of the State. The South Carolina Trucking Association estimates that “medium and large trucks account for less than 3% of all vehicles.” On the other hand 20% of the vehicles were trucks and 15% were heavy trucks on US 17 in Colleton County, according to SCDOT counts in 2005. The Average Annual Daily Traffic (AADT) count at that location in 2005 was 16,000 vehicles (compared to 13,300 in 2000); approximately 2400 were heavy trucks.

As a result, the Lowcountry is presently experiencing some passenger and freight (trucks making deliveries to retail and hospitality operations) conflicts and congestion on US 278 in southern Beaufort County and serious transport truck-passenger vehicle collisions on the two-lane section of US 17 (through trucks traveling between Savannah and Charleston, especially



between the ports) in northern Beaufort County. Fortunately, though, this Region is in the position of undertaking planning ahead of expected economic development that is likely to bring increased truck and train freight movement, and the resulting increased conflicts, to the Lowcountry. A proposed new port in Jasper County, continued growth of the existing ports in Savannah and Charleston and the potential for such new businesses as major distribution centers means that freight traffic in the Lowcountry will probably grow by 2020 at the 92 percent forecast South Carolina rate (below), or even faster.

Table 1.15 SC Freight Shipments

Freight Shipments To, From, and Within South Carolina 1998, 2010, and 2020						
	Tons (millions)			Value (billions \$)		
	1998	2010	2020	1998	2010	2020
State Total	287	433	552	271	526	865
By Mode						
Air	<1	<1	<1	8	21	36
Highway	237	361	465	250	481	790
Other [a]	1	3	4	<1	<1	1
Rail	46	64	78	12	23	35
Water	3	4	5	<1	1	2
By Destination/Market						
Domestic	269	401	505	237	452	729
International	19	32	47	35	74	136

Air Freight in the Lowcountry

Within the Lowcountry there is a small commercial airport on Hilton Head; its future as a commercial facility is uncertain because residents are not in favor of expansion. At the present time it is served by commuter contractors to Delta and US Airways. There is also a general aviation airport on Lady’s Island (near the City of Beaufort), a small general aviation field in Ridgeland and a general aviation airport in Walterboro that has recently been upgraded to handle



jet traffic, which could include freight planes and Jasper County is undertaking a study to assess the feasibility of developing a Regional airport within its boundaries.

However, the Region has easy access to the international airports at Charleston and Savannah for freight and passenger travel. In the US at present 70 to 80 percent of air cargo comes in on passenger planes, and it is expected this will be a fast growing segment (in terms of value if not necessarily as a percent of total freight volume). Currently there are nearly 80 commercial passenger flights a day into and out of Charleston International Airport. To show that it serves not just the Georgia side of the river, the Savannah Airport changed its name about two years ago to the Savannah/Hilton Head International Airport, includes a Foreign Trade Zone and averages more than 100 flight operations per day. For commercial passenger traffic, 2004 was the best year ever for Savannah/Hilton Head International Airport, with emplanements totaling 969,173, a 16 percent increase from the previous year.

Rail Freight

CSX Transportation owns, maintains, and operates the majority of rail lines in the Lowcountry . In 1999, the Division of Public Railways listed CSX's traffic density in 1997 as 31.3 million gross ton-miles per mile (mgtm/m) between the Georgia line and Yemassee; 9.8 mgtm between Yemassee and a point just west of Brunson where the north-south rail line intersects with the east west line; 25.1 mgtm between the Georgia line and west of Brunson; and 41.0 mgtm between Yemassee and Charleston, partially beyond the Lowcountry borders.

The South Carolina Ports Authority owns and used to maintain the 26 miles between the Port of Port Royal and Yemassee, with CSX operating the line. With the closure of the port, the tracks are no longer being used or maintained, and the rail corridor may become a pedestrian and bicycle facility.

The Hampton & Branchville Railroad Company (H&B) was chartered in 1891 and currently operates over 36 miles of track in Hampton and Colleton counties, interchanging rail traffic with CSX in the Town of Hampton.

Ports

With the closing of the state-operated port at Port Royal, the Lowcountry now does not have a port within its boundaries. At this time Jasper County has been working closely with



Stevedoring Services of America (SSA) to develop a state-of-the-art container facility on the Savannah River, a number of political, legal and administrative hurdles still have to be overcome before construction can begin.

The major, and growing, ports at Charleston and Savannah already provide import and export shipping services to the Region and also opportunities for new business operations.

In 2006 the Port of Charleston, ranked fourth busiest nationally, handled 1.98 million TEUs, or 20-ft equivalent units—an increase of 17% from 2003. Shippers in 24 states use Charleston to access foreign customers and suppliers, but about 45 percent of tonnage of one-third of containers are related to South Carolina firms. The State Port Authority (SPA) estimates that spin-off enterprises include 131 truck lines and 51 customs house brokers and freight forwarders. SPA is in the process of adding improvements and equipment to their existing Charleston terminals and also for a new three-berth marine terminal at the former Charleston Naval Base.

The Port of Savannah has also been experiencing major growth, with 15.3 million TEU's in FY 2003 (the most recent data available), a 15.1 percent increase in tonnage from FY 2002. About 71 percent of the tonnage is containerized. Its niche spin-off impact is quite relevant to attracting new operations in the Lowcountry. The annual report discusses the “proliferation of distribution centers” in the area (so far only in Georgia). This did not happen accidentally; it has been a “key component” of the port’s marketing program: to attract additional major retail distribution centers to the “Savannah logistics hub.” More than 3500 jobs have already been created by large retail chains, such as Best Buy, Wal-Mart, Lowe’s and Home Depot, that import increasing amounts of their merchandise from countries such as China. In January 2005 Target stores announced that they too would be developing a distribution center in the area—in Midway, GA, which is further from the port than many locations in the Lowcountry.

1.6 Tourism

Hilton Head Island is a major US tourism destination, attracting up to 2 million visitors a year and bringing the island’s population up to 150,000 during peak times. To a lesser extent so is the historic City of Beaufort and the nearby Sea Islands, with upwards of 200,000 visitors a year. In Colleton County the ACE Basin is also drawing an increasing number of eco-tourists,



due in part to national media attention to the natural resources. Edisto Beach is also a Colleton County tourism draw.

South Carolina Department of Parks, Recreation and Tourism (SCPRT) has calculated the impact of tourism on areas, including full-time population equivalents:

Table 1.16

	2000 Census	SCPRT Virtual Population 2000 (includes Tourism impact)	Difference Between Census and Virtual Population	Based on Visitor Days/Year (1999-2002)
Beaufort	120,937	149,909	23.96%	10,574,847
Colleton	38,264	39,333	2.79%	390,204
Hampton	21,386	21,608	1.04%	81,032
Jasper	20,678	20,827	0.72%	54,416
Region Total	201,265	231,677	15.11%	11,100,499
South Carolina	4,012,012	4,249,703	5.92%	86,757,123

Visitors to the Lowcountry add their vehicles to the already crowded roadways, since most of even those who fly to Savannah-Hilton Head International and Hilton Head airports rent cars.

1.7 Road and Highway Congestion

The combination of all of the above social and economic conditions and trends means that a growing number of thoroughfares in the Region, but especially in southern Beaufort and Jasper counties are becoming seriously congested or, more precisely, have Volume/Capacity (V/C) ratios of over 1. The complete set of V/C tables for all four counties is on the following pages. The highway segments that are already at capacity or will be in the future are highlighted in red; those that are near capacity or will be in the future are highlighted in yellow.



The number and percentage of congested roads mirrors a combination of the population of each county as well as recent and expected growth rates. Beaufort County, as the most populous, most densely populated and fastest growing county, has the largest number of segments that fall into those congestion categories. The TRANS-CAD model, to be run for the Lowcountry by SCDOT during 2007, will demonstrate present levels of service (which are related to volume and capacity and, therefore congestion) on area highways and will project them 20 years into the future. This will identify specific highway segments that are likely to need widening or other major improvements in the long-term future.



Table 1.17 Volume/Capacity Ratios: 2005, 2015 and 2025

Beaufort County Average Annual Daily Traffic Counts: 5000 and Over

Station	Route	Location	2005 Volume	Capacity	2005 V/C Ratio	2015 Volume	2015 V/C	2025 Volume	2025 V/C
101	17	"Jasper Co. TO U.S. 17 ALT.	11500	29200	0.39	15800	0.54	19700	0.67
103	17	"U.S. 17 ALT. TO S-59	11400	33600	0.34	15900	0.47	20100	0.60
105	17	"S-59 TO U.S. 21	15800	33600	0.47	20500	0.61	25300	0.75
107	17	"U.S. 21 TO Colleton Co. Line	11400	14600	0.78	16400	1.12	20300	1.39
111	21	"S-38 TO U.S. 17	13200	33600	0.39	19300	0.57	24400	0.73
113	21	"S-71 TO S-38	13900	33600	0.41	18900	0.56	22900	0.68
115	21	"S.C. 116 TO S-71	20800	33600	0.62	29800	0.89	37200	1.11
117	21	"S.C. 280 TO S.C. 116	30300	33600	0.90	39700	1.18	47500	1.41
119	21	"S.C. 170 TO S.C. 280	23700	33600	0.71	29500	0.88	32600	0.97
121	21	"U.S. 21 BUS. TO S.C. 170	34500	33600	1.03	40300	1.20	43700	1.30
127	21	"S-171 TO U.S. 21	18100	29200	0.62	27200	0.93	31800	1.09
129	21	"S-107 TO S-171	11600	29200	0.40	14800	0.51	16100	0.55
131	21	"S-106 TO S-107	11700	10800	1.08	17500	1.62	20700	1.92
133	21	"S-168 TO S-106	12100	10800	1.12	16800	1.56	19400	1.80
135	21	"S-36 TO S-168	14600	10800	1.35	17200	1.59	19500	1.81
137	21	"S.C 802 TO S-36	19300	10800	1.79	24400	2.26	28900	2.68
139	21	"S-838/Rd 456 TO S.C. 802	20200	10800	1.87	25300	2.34	31300	2.90
141	21	"S-45 TO S-838/Rd456	17100	10800	1.58	20500	1.90	24900	2.31
143	21	"S-74 TO S-45	11500	10800	1.06	17200	1.59	21800	2.02
145	21	"S-77 TO S-74	5700	10800	0.53	8500	0.79	10800	1.00
153	46	"Jasper Co. Line TO S.C. 170	13400	10800	1.24	17900	1.66	22100	2.05
155	46	"S.C. 170 TO S-29	9300	10800	0.86	10300	0.95	12200	1.13
157	46	"S-29 TO Rd-13	13300	10800	1.23	15500	1.44	19300	1.79
159	120	S-163 TO S.C. 46 & S-66	5700	8600	0.66	7568	0.88	9138	1.06
161	46	"Rd-13 TO U.S. 278	10800	10800	1.00	14400	1.33	18600	1.72
163	116	"S-295 TO U.S. 21	7600	10800	0.70	9200	0.85	10400	0.96
165	170	"S.C. 46 TO U.S. 278	9400	8600	1.09	13200	1.53	16900	1.97
167	170	"US 278 To Jasper/SC 462	22100	10800	2.05	28400	2.63	35100	3.25
169	170	"SC 462 TO S-18	18500	10800	1.71	24800	2.30	31600	2.93
173	170	"S-18 TO S-20	18200	10800	1.69	25500	2.36	31900	2.95
175	170	"S-20 TO S.C. 280	12000	10800	1.11	17700	1.64	21300	1.97
177	170	"S.C. 280 TO U.S. 21	20800	24800	0.84	28000	1.13	33300	1.34
178	278	"Jasper Co. Line To SC 170	23100	33600	0.69	34200	1.02	48300	1.44
179	278	"S.C. 170 TO S.C. 46	40900	33600	1.22	54600	1.63	71700	2.13
181	278	"S.C. 46 TO S-242	55400	33600	1.65	77200	1.53	100111	1.99
183	278	"S-242 TO S-79	50000	33600	1.49	75600	2.25	96700	2.88
185	278	"S-79 TO S-482	42000	33600	1.25	57100	1.70	70000	2.08
186	278	"S-482 To S-44	32700	33600	0.97	60300	1.79	85400	2.54
187	278	"S-44 TO S-44/S-148	28900	33600	0.86	38100	1.13	42500	1.26
189	278	"S-44/S-148 TO S-200	37200	29200	1.27	41500	1.42	44000	1.51
190	278	"S-200 TO Shelter Cove Lane	37400	33600	1.11	46300	1.38	54500	1.62
191	278	"Shelter Cove Lane TO S-524	35700	33600	1.06	43800	1.30	48800	1.45
193	278	"S-524 TO US 278	28800	29200	0.99	34200	1.17	33700	1.15
194	278	"S-338 To US 278 BUS	22100	14600	1.51	38600	2.64	54500	3.73



Station	Route	Location	2005 Volume	Capacity	2005 V/C Ratio	2015 Volume	2015 V/C	2025 Volume	2025 V/C
195	280	"S.C. 802 TO S-23	18100	14600	1.24	21600	1.48	26400	1.81
196	278	"S-482 To S-338	22600	42000	0.54	38200	0.91	54000	1.29
197	280	"S-23 TO S.C. 170	18500	14600	1.27	17300	1.18	19200	1.32
199	280	"S.C. 170 TO U.S. 21	16100	14600	1.10	21100	1.45	26100	1.79
203	802	"S-5 To U.S. 21	28100	33600	0.84	35600	1.06	44100	1.31
205	21	"S.C. 802 TO S-151	23500	33600	0.70	27900	0.83	32800	0.98
207	21	"S-151 TO S-6	19000	33600	0.57	22500	0.67	25600	0.76
209	21	"S-6 TO S-54	14500	29200	0.50	16900	0.58	18000	0.62
211	21	"S-54 TO U.S. 21 Bus.	15900	29200	0.54	18300	0.63	19700	0.67
215	802	"S.C 170 TO S.C.280	10300	14600	0.71	14100	0.97	18000	1.23
217	802	"S.C. 280 TO S-5	29400	33600	0.88	37100	1.10	46300	1.38
219	21	"S-36 To S.C. 802	22600	10800	2.09	32200	2.98	41500	3.84
221	21	"U.S. 21 Bus/SC 802 To S-36	20300	10800	1.88	29800	2.76	38800	3.59
223	802	"U.S. 21 Bus. TO S-509	18300	10800	1.69	20200	1.87	26100	2.42
225	802	"S-509 TO S-112	13900	10800	1.29	17700	1.64	21700	2.01
245	40	"S-20 TO S-83	8200	8600	0.95	10600	1.23	13300	1.55
251	20	"S-40 TO U.S. 21	6800	8600	0.79	9300	1.08	11800	1.37
257	72	"S.C. 802 TO S-144	9000	10800	0.83	11400	1.06	15000	1.39
273	45	"S-37 TO U.S. 21	5200	8600	0.60	7100	0.83	8600	1.00
334	29	"S.C. 46 TO S-474	8100	8600	0.94	10300	1.20	13500	1.57
341	163	"S-120 TO U.S. 278	8500	8600	0.99	9600	1.12	11800	1.37
349	80	"U.S. 278 TO S-342	30900	24800	1.25	36600	1.48	41200	1.66
351	80	"S-342 TO S-80	22300	24800	0.90	26400	1.06	29500	1.19
355	243	"S-80 TO Dogwood St.	9600	17200	0.56	9400	0.55	9600	0.56
359	342	"S-243 TO S-80	9700	8600	1.13	9800	1.14	10600	1.23
389	6	"S.C. 281 TO S-69	6400	10800	0.59	6800	0.63	7000	0.65
391	6	"S-69 TO S-104/S-168	7600	10800	0.70	8500	0.79	8100	0.75
393	6	"S-104/S-168 TO S-100	6600	10800	0.61	7600	0.70	7600	0.70
395	6	"S-100 TO S-98	7000	10800	0.65	4300	0.40	2100	0.19
461	79	"U.S. 278 TO S-245	5700	8600	0.66	7100	0.83	8700	1.01
463	44	"U.S. 278 Bus TO S-333	9800	8600	1.14	13200	1.53	16900	1.97
465	44	"S-333 TO U.S. 278 Bus	8900	8600	1.03	9300	1.08	9600	1.12
467	44	"U.S. 278 Bus TO U.S. 278 Bus	12600	8600	1.47	13400	1.56	14600	1.70
469	245	"US 278 TO S-44	9700	8600	1.13	12700	1.48	16400	1.91
471	141	"U.S. 278 TO S-294	5900	8600	0.69	8200	0.95	10400	1.21
475	482	"U.S. 278 TO S-294	10400	8600	1.21	14600	1.70	18800	2.19
513	148	"S-44 TO S-758	6800	8600	0.79	12100	1.41	15800	1.84
525	524	"U.S. 278 Bus TO US 278	9600	8600	1.12	13800	1.60	18000	2.09

Notes: 2005 Volumes are actual 2005 AADT. The 2015 and 2025 Projected volumes are based on a trend lines from previous years; they are not modeled volumes.

Station 159 was added.

Station 477 (Hilton Head) was dropped. This is not a public road and counts are no longer available.

Station 181 capacity updated in 2015 and 2025 to reflect 6 lanes.



Colleton County Average Annual Daily Traffic Counts: 5000 and Over

Station	Route	Location	2005 Volume	Capacity	05V/C Ratio	2015 Vol	2015 V/C	2025 Vol	2025 V/C
100	15	"U.S. 17 ALT. TO S.C. 64	20700	24800	0.83	29700	1.20	37400	1.51
101	15	"S.C. 64 Bus TO SC 64	15900	21600	0.74	12800	0.59	11900	0.55
103	15	"SC 64 TO S-459	8300	17200	0.48	10800	0.63	12500	0.73
107	17	"Beaufort Co. Line S.C. 64	10800	14600	0.74	13200	0.90	15700	1.08
108	17	"S.C. 64 TO Charleston Co.	16000	29200	0.55	24400	0.84	31600	1.08
111	17	"S.C. 63 TO S.C. 303/S-282	13000	21600	0.60	8800	0.41	6700	0.31
113	17	"S.C. 303/S-282 TO U.S. 15	20200	24800	0.81	19200	0.77	20100	0.81
115	17	"U.S. 15 TO S.C. 64 Bus	6600	10800	0.61	6800	0.63	7100	0.66
117	17	"S.C. 64 Bus TO S.C. 64 Bus	7900	14600	0.54	4700	0.32	2600	0.18
119	17	S.C. 64 Bus TO S-21	5200	10800	0.48	3200	0.30	2000	0.19
121	17	"S-21 TO S-91	7700	10800	0.71	9500	0.88	11100	1.03
122	17	"S-91 To Dorchester Co. Line	7400	10800	0.69	13200	1.22	17800	1.65
132	63	"I-95 TO U.S. 17 ALT.	10200	24800	0.41	11300	0.46	12600	0.51
133	63	"U.S. 17 ALT. TO S.C. 64	5200	10800	0.48	4900	0.45	4600	0.43
143	64	"I-95 TO S-206/SC 64 Bus	14000	24800	0.56	15600	0.63	17000	0.69
145	64	"SC 64 TO U.S. 15	15000	24800	0.60	16400	0.66	19400	0.78
151	64	S.C. 64 Bus TO S-199	5700	8600	0.66	7600	0.88	9200	1.07
169	64	"S-206/SC 64 Bus TO U.S. 15	14200	19600	0.72	21100	1.08	26300	1.34
171	64	U.S. 15 to U.S. 17 ALT	11400	8600	1.33	14900	1.73	17900	2.08
173	64	"U.S. 17 ALT. TO S.C. 64 Bus	8000	8600	0.93	10400	1.21	12400	1.44
261	21	"U.S. 17 Alt. TO S-459	5600	8600	0.65	9500	1.10	12200	1.42
2371	95	"U.S. 21 (Colleton) To S.C.63	40300	58600	0.69	62100	1.06	78700	1.34
2373	95	"S.C. 63 TO S.C. 64	40300	58600	0.69	63100	1.08	80200	1.37
2375	95	"S.C. 64 TO S-34	40200	58600	0.69	62400	1.06	79300	1.35
2377	95	"S-34 TO S.C. 61	40300	58600	0.69	57600	0.98	71300	1.22

Notes: 2005 Volumes are actual 2005 AADT. The 2015 and 2025 Projected volumes are based on a trend lines from previous years; they are not modeled volumes.

Stations 119 and 151 were added.



Hampton County Average Annual Daily Traffic Counts: 5000 and Over

Station	Route	Location	2005 Volume	Capacity	05 V/C	2015 Vol	2015 V/C	2025 Vol	2025 V/C
107	278	Allendale Co. Line TO S-287	5400	10800	0.50	6500	0.60	7400	0.69
109	278	"S-287 TO S-83	5800	21600	0.27	7000	0.32	8000	0.37
111	278	"S-83 TO S.C. 363/S-232	11100	21600	0.51	14000	0.65	16400	0.76
113	278	"S.C. 363/S-232 TO S-356	12600	21600	0.58	12300	0.57	12800	0.59
115	278	"S-356 TO S.C. 63/S-50	8800	21600	0.41	12600	0.58	15200	0.70
117	278	"S.C. 63/S-50 TO S.C. 68	6000	10800	0.56	7400	0.69	8600	0.80
131	321	"S.C. 333/S-25 TO S.C. 3/S-39	5900	10800	0.55	6900	0.64	7800	0.72
133	321	"S.C. 3/S-39 TO S-616	5400	10800	0.50	7700	0.71	9000	0.83
381	363	U.S. 278/S-232 TO S-31	5500	10800	0.51	5400	0.50	5300	0.49
2367	95	"(Jasper) U.S. 17 TO S.C. 68	41200	58600	0.70	62900	1.07	80200	1.37
2369	95	S.C. 68 TO U.S. 21 (Colleton Co.)	40700	58600	0.69	63700	1.09	81100	1.38

Notes:

Stations 107 and 381 were added.



Jasper County Average Annual Daily Traffic Counts: 5000 and Over

Station	Route	Location	2005 Volume	Capacity	2005 V/C	2015 Vol	2015 V/C	2025 Vol	2025 V/C
102	17	"SC 170 TO S-34	9200	29200	0.32	10900	0.37	12600	0.43
103	17	"S-34 TO I-95	10000	29200	0.34	11700	0.40	13600	0.47
105	17	"I-95 TO U.S. 321	10700	29200	0.37	12800	0.44	14800	0.51
107	17	"U.S. 321 TO S.C. 46	7000	21600	0.32	5900	0.27	5800	0.27
109	17	S.C. 46 TO S-413	5500	17200	0.32	5200	0.30	5400	0.31
111	17	S-413 TO US 278	7100	8600	0.83	6000	0.70	7600	0.88
119	17	S-29 TO S-32/124	5100	17200	0.30	3900	0.23	3700	0.22
121	17	"S-32/124 TO S.C. 336	5900	17200	0.34	7000	0.41	7200	0.42
123	17	"U.S. 278/S.C. 336 TO S-32	9800	17200	0.57	10000	0.58	10800	0.63
127	17	"I-95 TO Beaufort County Line	9700	33600	0.29	15100	0.45	18900	0.56
129	17	"Ga. State TO S.C.170 Alt.	13600	14600	0.93	17400	1.19	20800	1.42
131	17	"S.C. 170 Alt. TO SC 170	5600	14600	0.38	7000	0.48	8300	0.57
141	278	"S.C. 652 TO S-32	6000	10800	0.56	8100	0.75	9800	0.91
143	278	"S-32 TO U.S. 17	6500	10800	0.60	7900	0.73	9300	0.86
145	336	"U.S. 17 TO I-95	9700	10800	0.90	14800	1.37	18800	1.74
147	336	"I-95 To S-13	6300	10800	0.58	9100	0.84	11500	1.06
153	462	"S.C. 336 TO S-54	8100	10800	0.75	10000	0.93	11600	1.07
155	462	"S-54 TO S.C. 170/Beaufort Co.	6600	10800	0.61	8500	0.79	10100	0.94
179	46	"S.C. 170 TO Beaufort Co. Line	12600	10800	1.17	18000	1.67	22000	2.04
184	170	"Beaufort Co. To Beaufort Co.	18300	10800	1.69	26200	2.43	34800	3.22
185	170	"U.S. 17 ALT TO S-34	8000	8600	0.93	1000	0.12	13300	1.55
187	170	"S-34 TO S.C. 170	10400	8600	1.21	12900	1.50	16000	1.86
195	336	"S-32 TO U.S. 17	5600	8600	0.65	7600	0.88	9300	1.08
239	278	"I-95 To S-141	22100	33600	0.66	30700	0.91	42900	1.28
240	278	"S-141 to Beaufort County Line	20900	33600	0.62	22600	0.67	31400	0.93
293	278	U.S. 17 TO I-95	7000	29200	0.24	6100	0.21	8400	0.29
2353	95	"Ga. State Line To U.S. 17/321	48500	58600	0.83	66000	1.13	82000	1.40
2355	95	"U.S. 17/321 To U.S. 279	50400	58600	0.86	76600	1.31	98300	1.68
2357	95	"U.S. 279 TO S-13	46300	58600	0.79	70800	1.21	90200	1.54
2359	95	"S-13 TO SC 336	45100	58600	0.77	69200	1.18	88300	1.51
2361	95	"SC 336 TO U.S. 17	44400	58600	0.76	67000	1.14	85200	1.45
2363	95	"U.S. 17 TO S.C. 462	45400	58600	0.77	62200	1.06	76900	1.31
2365	95	"S.C. 462 TO U.S. 17	47200	58600	0.81	71400	1.22	90800	1.55

Notes: 2005 Volumes are actual 2005 AADT. The 2015 and 2025 Projected volumes are based on a trend lines from previous years; they are not modeled volumes.

Station 239 capacity updated.

Stations 109, 111,119 and 293 were added.



Part 2: Policy Recommendations

Introduction

The number and variety of transportation issues and opportunities to be dealt with in this plan led to the formation of subcommittees within the Transportation Advisory Committee, each given the responsibility of preparing recommendations related to that specific subject area. The size and composition varied of the subcommittees varied, given the interests, expertise and professional experience of each member, as well as the varying amounts of time people had available for this project. All of the results were valuable, but took somewhat different forms and lengths. Instead of “homogenizing” them into a single style, the subcommittee sections are reproduced here (with some editing and reformatting) in subcommittee alphabetical order.

The members of the subcommittees were:

Transportation Advisory Committee Subcommittees

Bicycle and Pedestrian Facilities Subcommittee:

- Bob Stoothoff, Pathways Connect
- Karen Heitman, Greater Bluffton Pathways
- Kevin Griffin, (former) Colleton Co. Planning & Dev. Director; (presently) City of Hardeeville Assistant City Manager
- John Holloway, Beaufort County Environmental. Planner
- Heather Landry, (former) Colleton County GIS Manager; (presently) NOAA
- Laura Bailey, Bluffton Natural Resources Planner
- Charlie Sweat, City of Walterboro Mayor
- Colin Kinton, Beaufort County Transportation Planner

Environmental Subcommittee:

- David Jirousek, (former) Lowcountry Council of Governments Regional Planner; (presently) Town of Bluffton Long-Range Planner
- Heather Landry, Colleton County
- John Holloway, Beaufort County
- Louise Moore, SCDOT Planning

Freight Transportation Subcommittee:

- Ginnie Kozak, Lowcountry Council of Governments Planning Director
- Chris Phillips, CSX
- Andy Fulghum, Jasper County Administrator

Public Transportation Subcommittee:

- Darrin Shoemaker, Town of Hilton Head Island
- David Jirousek, (former) Lowcountry Council of Governments



- Rochelle Ferguson, LRTA
- Doug Frate, SCDOT
- Jim Frierson, SCDOT
- Russell Byrd, (former) Beaufort County Planner; (presently) City of Beaufort Planner
- Bernie Zurenda, Hampton County DSS Director
- Allen Grayson, Beaufort/Jasper DSS Director

Roadways Subcommittee:

- Colin Kinton, Beaufort County
- Darrin Shoemaker, Hilton Head
- Louise Moore, SCDOT Planning
- Mark Pleasant, SCDOT Planning
- Robert Clark, Beaufort/Jasper/Colleton Engineering (SCDOT)
- Dean Campbell, Hampton SCDOT Engineering
- Ems Baskin, SCDOT
- Bryan Webb, SCDOT



Bicycle and Pedestrian Facilities Component

2.1 Bicycle and Pedestrian Planning Goals

The main goals of the bicycle and pedestrian component are to provide the residents of and visitors to the Lowcountry Region with:

- *Reduced reliance on the automobile;*
- *Safe and efficient pedestrian and bicycle facilities;*
- *A less congested road system;*
- *A reduction of ground level ozone and reduction of dependence on fossil fuels;*
- *More livable and walkable communities;*
- *A safer bicycling environment with well designed, clearly marked, well-maintained and safe facilities for all types of cyclists;*
- *Safe routes to schools so children have the choice of biking or walking within a two-mile radius of the school;*
- *Healthy places to exercise to promote physical and mental well-being.*

2.2 Recommendations

In order to reach these goals, the following objectives should be met and their actions carried out to improve upon the state of bicycle and pedestrian transportation in the Lowcountry.

Objective 1: Improve and expand upon the existing transportation system to better accommodate non-motorized traffic and give residents alternatives to driving

Actions:

1.1 Wide shoulders and bike lanes

Wide shoulders (4 feet or more not including gutter pan) are recommended as Regional connectors for bicyclists traveling the Lowcountry. All main transportation routes should have this minimum width for bicycle travel to the right of the white side line. Bike lanes should be considered for these areas as well, when appropriate and feasible. Wide shoulders are recommended for roads with higher speed limits and higher AADT.

1.2 Local bicycle and pedestrian needs assessment

An assessment of the needs of bicycle and pedestrian facilities for each Lowcountry municipality is recommended. The following factors should be considered:

1. Sidewalk improvement
2. Sidewalk additions



3. Crosswalks
4. Bike lanes
5. Wide medians
6. Existing sidewalks

The facility assessments and mapping can be modeled after Beaufort County’s “Trails Plan” (Appendix A) and the following municipal examples prepared by LCOG (Appendix B):

1. Brunson
2. Hampton
3. Varnville
4. Ridgeland
5. Walterboro

Another effective bicycle and pedestrian suitability resource is the *The WABSA (Walking and Bicycling Suitability Assessment) Project Manual*. WABSA is a tool to assess and improve our current sidewalks and roadways. An assessment form can be completed for each segment and entered into a database to provide a color-coded map to show where improvements are needed in the bikeability and walkability of the community. Step by step instructions in this manual guide the user to assess the suitability of sidewalks for walking and roads for bicycling (Outline in Appendix C)

1.3 Addition of crosswalks

Crosswalks are recommended to create a safer bicycle and pedestrian travel. There are many busy streets in the Lowcountry that are required to be crossed to access community facilities, commercial and natural areas. Crosswalks should be installed based on established criteria to ensure safer travel by pedestrians. Additional crosswalks can result in safer travel across streets and will allow motorists to be aware of areas of high bicycle and pedestrian activity. The following are examples from the sample facility assessments.

1. Town of Varnville: crosswalks across Holly Street near the ball fields.
2. Brunson: second crosswalk across US 278 at Manker Street.

1.4 Uniform signing and marking at strategic locations to alleviate conflicts and accidents

It is recommended to place trail markers on roadways which are frequently shared by automobiles, pedestrians and bicyclists. Trail markers can make motorists aware of potential trail users and “Share the Road” signs can remind motorists of bicycle traffic.

1.5 Usage of power line easements and abandoned railways for bicyclists and pedestrians

Power line easements and abandoned railway corridors should be investigated for potential multi-use pathway locations. The “Beaufort County Trails Plan” identified, as a top trail priority, the development of the Port Royal to Yemassee railroad right of way as a multi use



trail. Since that document was completed, Beaufort-Jasper Water and Sewer Authority has begun negotiations to purchase that right away to use as a utility corridor/trail and preservation of the state's unused railway corridors has become a priority issue in the preparation of SCDOT's new State Transportation Plan.

1.6 Amenities to improve bicycle and pedestrian facilities

The following types of amenities can be installed and included: signage on trails, bike lanes and wide shoulders, sign kiosks, benches, trashcans, shade trees (that are not detrimental to safety and function of roadways) and water fountains. These amenities can be placed at appropriate rest areas or facility boundaries.

1.7 Improvement of facilities to accommodate residents and visitors with disabilities

Pedestrian facilities should be consistent with current Americans with Disabilities Act standards.

1.8 Usage of the AASHTO guide for the development of bicycle facilities

The AASHTO guide can be used when improving or building roads that will or should include bicycle facilities (American Association of State Highway Transportation Officials: Outline, Appendix D).

Objective 2: Link trails and facilities for a more integrated bicycle and pedestrian system

Actions:

2.1 Local bicycle and pedestrian linkages

Linkages between residential areas, community facilities (schools, libraries, parks), cultural and natural resources (historic sites, preserves) are recommended. Potential links can be completed by installing pathways, crosswalks and sidewalks. As well as the examples in Beaufort County's Trails Plan (Appendix A), the following facilities and resources are critical to link in the Lowcountry for its residents' use. Examples from the sample facility assessments (Appendix B) are presented for each category:

1. Community Facilities (recreational areas, schools, etc)
 - a. Town of Varnville: possible linkages to ball fields, park, and community facilities.
 - b. Town of Ridgeland: possible linkage to future high school.

2. Cultural Resources
 - a. Town of Varnville: sidewalks can link residential area to historic walking trail.
 - b. Town of Hampton: sidewalks can link residential area to the historic walking tour of Hampton.



3. Natural Resources

- a. City of Walterboro: linking the Great Swamp Sanctuary to downtown and residential areas.

2.2 Regional Linkages

The following routes are a priority for a general connectivity between municipalities and counties within the Lowcountry. Wide shoulders or bike lanes are recommended for these routes to create an efficient Regional linkage.

Beaufort County

1. US 21 (Gardens Corner to Hunting Island)
2. SC 170 (Beaufort to Bluffton)
3. US 17 (Colleton County Line to Jasper County Line)
4. Bluffton to Jasper County via SC 170

Colleton County

1. US 17 (Beaufort County Line to Charleston County Line)
2. US 17 A (Beaufort County Line to Dorchester County Line)
3. SC 63 (Hampton County Line to Walterboro)

Hampton County

1. SC 68 (Beaufort County Line to Varnville)
2. US 278 (Varnville to Allendale County Line)
3. US 601 (Jasper County Line to Colleton County Line)
4. US 321 (Jasper County Line to Allendale County Line)

Jasper County

1. US 17 (Beaufort County Line to Chatham County Line)
2. US 278 (Beaufort County Line to Hampton County Line)
3. To Chatham County line at Tallmadge Bridge via SC 170/170A.

2.3 Inventory of facilities to promote linkages

An inventory of bicycle and pedestrian facilities which includes existing, funded, and planned facilities should be maintained. The following is included for each county (see included inventory):

1. Inventory of Existing Facilities
2. Inventory of Programmed Facilities (funded)
3. Inventory of Planned Facilities

Objective 3: Improve bicycle and pedestrian system maintenance to ensure safety to users



Actions:

3.1 Sidewalk repair

Sidewalks are an essential part of the bicycle and pedestrian system. However, there are many sidewalks in the Lowcountry that are not up to standards for residents and visitors using the facility. It is recommended that sidewalks be inspected and repaired for the safety of pedestrians and bicyclists. Sidewalk improvements are shown in the town facilities examples.

1. Town of Hampton: First Street sidewalk is in need of repair.
2. Town of Varnville: Palmetto Street sidewalk is in need of repair.
3. Town of Ridgeland: Wilson Street sidewalk is in need of repair.

3.2 Shoulder maintenance

Wide paved shoulders to the right of the white line need to be maintained and cleaned or they will not be safe for bicycle travel.

3.3 Maintenance practices to preserve bikeways and walkways in a smooth, clean and safe condition.

Maintenance of bicycle and pedestrian facilities is essential to ensuring a safe system. Facilities are to be repaired, cleaned and inspected frequently to prevent accidents and injury.

3.4 Safety inventory

It is recommended to create an inventory for safety issues to address problems (on an annual basis) such as low-hanging vegetation, inadequate signage, lines of sight and irregular asphalt.

3.5 Markings

Coordinate with SCDOT and other agencies as well as private road owners to mark major intersection crossings with colored and textured pavement or painted crosswalks, and install pedestrian signals where needed on lower class roadways.

Objective 4: Encourage intermodal transportation in the Lowcountry

Actions:

4.1 Public transit bicycle racks



All new and existing public transit vehicles should be equipped with bicycle racks to encourage “intermodal” commuting to work, shopping, and school.

4.2 Bicycle facilities at public transportation terminals

Current bus stops, passenger rail terminals and new facilities (such as park-and-ride lots) should provide residents and visitors convenient areas to secure and store bicycles.

Objective 5: Create policies and recommendations for new development

Actions:

5.1 Work with Counties and Municipalities to Encourage developers to include bicycle and pedestrian facilities in new developments

Developers of commercial and residential developments should be encouraged to include lanes and sidewalks for bicyclists and pedestrians, bicycling parking and links among residential and commercial nodes.

5.2 Educate developers about the value of bicycle and pedestrian facilities

Developers should be informed of future multiuse pathway locations in relation to their development during pre-application conferences or meetings. Developers should also be encouraged to include pathways or sidewalks along all roads within their development with connections to the existing public system.

Objective 6: Continue educational efforts and community involvement

Actions:

6.1 Public outreach

Educational efforts and community involvement should be encouraged and expanded upon for education and instruction on safe pedestrian and cycling practice.

6.2 Produce educational material

Brochures showing the relationship of multi-use pathways, bike lanes and pedestrian and bicycle facilities to shopping areas and other areas of interest should be distributed to the general public through bicycle rental shops, hotels and other appropriate places.



6.3 Public education through the development of signs and kiosks

New signs and kiosks should be established for key points in bicycle and pedestrian systems and routes. Signs and kiosks will provide more detailed information for facility users displayed on large easy-to-read maps. The maps provide information to the public regarding points of interest, routes (planned and existing) and some area land uses.

6.4 Development of websites to promote bicycle and pedestrian facilities

Educate the public about multi-use pathways via the internet.

6.5 Educate young people about bicycle and pedestrian safety

Safety education materials should be provided to students in K-12 and targeted population groups on appropriate pedestrian and bicycle actions and practices.

6.6 Educate drivers and cyclists on the rules of the road

Programs should be instituted that educate drivers and cyclists of the rules of the road.

2.3 Project Prioritization

The following will be the criteria for bicycle and pedestrian project prioritization:

1. Cost Benefit Analysis
2. Safety
3. Geography
4. Deficiency
5. Integration with Comprehensive Plans
6. Connectivity



Environmental Component

3.1 Environmental Component Goal

The natural environment and the benefits it provides must be considered when planning for transportation improvements and enhancements. The important services that the Lowcountry's environmental features fulfill can become defunct or degraded if converted. Important environment services include (but are not limited to): flood control, water filtration and purification, stream bank stabilization, air purification and ground water recharge. These advantages are important to be considered during transportation project development, design and construction.

A strategy including a goal, objectives and actions was developed after assessing risks and discussing environmental issues in the Lowcountry. The overarching goal of the environmental subcommittee is to:

Improve and enhance the Regional transportation system while protecting and limiting the disruption to the natural resources of the Lowcountry.

3.2 State of the Environment

The Region's natural features—coastal and inland wetlands, an abundance of rivers and creeks, coastal and river islands, forests and farmland—have been very important to its economic development both historically and in terms of its recent popularity and growth. However, those same features have made travel within the Lowcountry difficult since the time of the earliest settlements. Back then the waterways served as the major transportation corridors, first for canoes, and then later for sail and steam craft.

In the mid-nineteenth century the builders of the Charleston & Savannah Railway (presently the CSX mainline with the parallel U.S. 17 highway) were the first to cope with constructing a man-made corridor in the area. They pioneered in the bridging of rivers, creeks and wetlands but paid no attention to damage they may have been causing the natural environment.



Today the same physical constraints prevail, but are combined with a need to cause as little harm as possible to the Region's ecological system. As a result, improvements to the Lowcountry's transportation infrastructure and operations have to strike a very delicate balance.

Visitors are drawn to the Lowcountry's environmental and recreational centers including four other State parks: Colleton State Park, Edisto Beach State Park (Colleton County), Givhens Ferry State Park (Colleton County), and Lake Warren State Park (Hampton County). Sgt. Jasper State Park was recently transferred to Jasper County, becoming Sgt. Jasper Park. Public beaches are located on Hilton Head Island and Hunting Island State Park and limited access is available to the beaches on Fripp and Harbor Islands.

Most of the Region's wildlife management areas listed below are open to the public for walking and wildlife observation:

Beaufort County:

1. Pinckney Island National Wildlife Refuge
2. Pritchard's Island
3. Sea Pines Preserve (on Hilton Head Island)
4. Audubon-Newhall Preserve (on Hilton Head Island)
5. Waddell Mariculture Center and Victoria Bluff Heritage Trust

Colleton County:

6. ACE Basin National Wildlife Refuge
7. ACE Basin National Estuarine Research Reserves (two locations)
8. Bear Island State Game Management Area
9. Donnelley Wildlife Refuge
10. Region 4 of the South Carolina Heritage Corridor

Hampton County:

11. Webb Wildlife Center
12. Palachicola Wildlife Management Area

Jasper County:

13. Savannah National Wildlife Refuge
14. Tybee Island National Wildlife Refuge
15. Tillman Sand Ridge Heritage Preserve
16. Turtle Island.

The following are specific issues and risks that should be taken into consideration when planning for transportation improvements and enhancements. Subcommittee discussions of these issues and risks helped to guide the development of the environmental component goal,



objectives and specific actions. Adhering to recommendations will lower the impact of transportation improvements and enhancements on the natural environment and the services it provides.

Wetlands

- Flooding due to conversion
- Water filtration and purification
- Conservation/preservation of wetlands
- Mitigation and construction of new wetlands

Water Quality

- Non-point source pollution, highway runoff
- Construction runoff and erosion
- Development in riparian areas
- Conversion of riparian buffer areas

Shorelines/Islands

- Erosion control
- Sediment
- Bridge building issues: opening up new lands to development

Air Quality

- Air pollution: automobile use
- Ground level ozone: current DHEC push to commence monitoring

Environmentally Sensitive Areas

- Endangered species living in the Lowcountry
- Unusual plant/animal associations and/or landforms
- Large, undisturbed habitat
- Unique habitat (small remnant of once larger habitat)
- Linkages: wildlife corridors
- Natural water storage or recharge area
- Cones of depression
- Sand hills
- Wetlands
- Long leaf pine forest

Construction Practices

- Pollutant runoff
- Erosion

Soils

- Unsuitable soils can make an area unfit to or uneconomical to build a roadway
- Compaction, scrape, fill with better soil/fill



Scenic Highways

- Potential scenic highways in the Lowcountry
- Requirements for scenic highways

Preservation and Conservation

- RCLP: easements, fee simple, development rights, donation
- Land preservation and conservation.

Bridges

- Opens up new islands
- Opens previous undeveloped lands
- Disruption of marshes
- Runoff and pollution

Wildlife and Wildlife Habitat

- Wildlife corridors
- Wildlife habitat
- Wildlife and automobile crashes

3.3 Recommendations

The actions under each objective are to be used as a guide for project development and planning in order to lessen the impact on the natural environment. As well as this guide, South Carolina Department of Transportation environmental screening will occur as well. The screening process will allow resource agencies to provide comments on project impacts and suggestions for potential mitigation measures.

Objective 1: Maintain and Improve Air Quality

Transportation planning should be integrated with air quality planning to maintain and improve the Lowcountry's air quality: specifically to minimize transportation-related fuel consumption and ground level ozone levels.

1. Include facilities that promote mass transit (bus pull outs, park and ride lots, etc).
2. Each project should take bicycle and pedestrian travel into consideration when applicable and appropriate.
3. Encourage the planting of vegetation (or discourage the cutting of vegetation) in highway medians to mitigate the effects of ground level ozone.

Objective 2: Maintain and Improve Water Quality

Transportation and water quality planning should be integrated to maintain and improve water quality in the Lowcountry.



1. Maintain 50' riparian buffers (at least): wider buffers for narrower rivers.
2. Impervious areas- Usage of Best Management Practices (BMP's) on all projects to reach higher standards (Example: Beaufort County impervious surface BMP)
3. Bridge retrofits and designs for treating runoff (baffles and treatment of runoff).
4. Construction practices: tree protection, silt fencing, and setbacks.



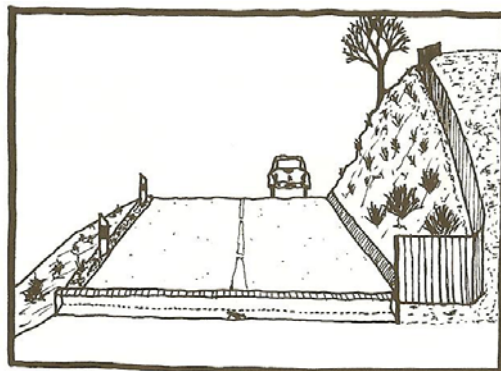
Silt Fence

5. Avoid areas within the FEMA 100-year flood plain (annual probability of flooding is 1% or higher).
6. Minimize the number of wetland (National Wetland Inventory) impacts.
7. Minimize the amount of each wetland impact (e.g., don't cross a wide wetland when a narrower one can be crossed).
8. Minimize or avoid stream crossings.
9. Minimize or avoid the construction of new facilities in critical watershed areas.

Objective 3: Preserve and Protect Open Space, Wildlife & Habitat

Transportation improvements and enhancements should strive to protect open space, critical habitat and the wildlife of the Lowcountry.

1. Avoid impacts to parks, designated open spaces, critical habitat and game lands.
2. Lessen wildlife/vehicle collisions with appropriate warning signage and speed limits.
3. Construction of tunnels for wildlife to pass under roadways.



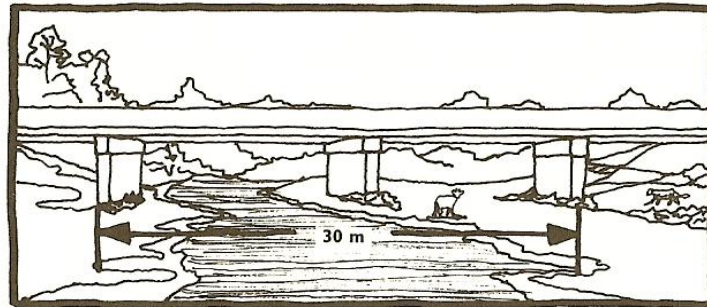
Amphibian Tunnel inserted
into road surface.

(Dramstad, Olson & Forman, 1996, p. 62)



4. Construct bridges designed for the movement of wildlife (example: leaving room for wildlife to pass underneath the bridge, away from automobiles).

Bridge Designed for Wildlife Movement



Underpass for water and wildlife movement.

(Dramstad, Olson & Forman, 1996, p. 60)

5. Continuous corridors should be protected and the creation of isolated habitat island resulting from conversion should be discouraged.

Objective 4: Protect the Residents of the Lowcountry

The residents of the Lowcountry should be protected from potential negative effects of transportation improvements and enhancements.

1. The impacts to school sites should be minimized.
2. Environmental Justice: avoid, minimize, or mitigate environmental impacts (including economic, social, and human health impacts) that affect minority and low-income communities and populations with disproportionate severity.
3. Minimize the number and size of impacts to hazardous waste sites.
4. Minimize or avoid impacts to neighborhoods.

Objective 5: Historic, Cultural and Community Resources

Transportation planning should take into consideration the present built environment and its value to the Lowcountry's population. Highway projects should avoid, or at least minimize, negative impacts upon the Region's resources.

1. Minimize the number and size of impact to historic features (structures and landmarks) and districts.
2. Minimize impact to cultural resources (churches, gathering areas, etc.).
3. Minimize impact to community resources (playgrounds, etc.)

3.4 Prioritization

Transportation projects can be ranked and prioritized according to their impact on the natural environment. The project environmental impact rank can then fit into a larger



transportation prioritization process, with the environmental impact acting as one of several key points in the evaluation criteria.

Each project can have an array of impacts on each of the five environmental factors:

1. Air Quality
2. Water Quality
3. Open Space, Wildlife & Habitat
4. Residents of the Lowcountry
5. Historic, Cultural & Community Resources

Each transportation improvement project will have an impact on the natural environment. A project with a higher impact on an environmental factor (factors 1 to 5) will have a higher impact score (range from 0-3) for each factor. When the scores are added, a project with a high environmental impact scores will be a lower ranked project in the environmental component of project evaluation. The following are the impact scores for each factor:

No Impact: 0
Minor Impact: 1
Moderate Impact: 2
Major Impact: 3

3.5 Next Steps

Decision makers are able to lower transportation improvement and enhancement scoring by adhering to the recommendations under each of the five objectives in this section as well as a through a environmental screening process. The actions and recommendations will help a project to lessen its environmental impact thus resulting in a higher environmental component score. Through Environmental Screening, GIS based maps will illustrate projects and potential impacts or issues. Maps and the write-ups (including a statement of purpose and need for the project) that accompany will be forwarded to the federal and state resource agencies for early review and comment. Later, these environmental screening documents will be incorporated into SCDOT's APPR (Advanced Project Planning Report) documents that accompany the project as it progresses through the development phase.



Freight Transportation Component

4.1 Lowcountry Freight Transportation Component Goals

To prepare for the expected growth and change, and the attendant challenges, a number of activities to meet identifiable goals need to be undertaken as soon as possible.

The goals are very general at this time. As basic planning is undertaken and completed, the goals will be developed into more detailed objectives.

1. *Include freight transportation planning as an integral part of all transportation planning in the Lowcountry.*
2. *Balance the demands placed on the Regional transportation infrastructure by the needs of freight and passenger traffic.*
3. *Enhance connections among the freight transportation modes located in or available to the Lowcountry Region.*
4. *Recommend short-term and long-term improvements to upgrade the options available to Lowcountry freight users (carriers and shipping and receiving businesses).*

4.3 General Planning Recommendations

1. Coordinate freight transportation planning efforts with Economic Development planning in the Lowcountry and in the Savannah and Charleston areas to ensure that future internal and externally-generated demands for transportation networks and facilities are identified and taken into account. The “Lowcountry Economic Diversification Strategy” which emphasizes the important role freight transportation will play in attracting specific industry clusters to the Region. This is largely because of the significance of efficient supply chain management to successful American businesses. Transportation planning should incorporate the impact of implementing the strategy.
2. Include freight transportation projects in the project listing, evaluation and prioritization process that is a key part of this Long-Term Transportation Planning initiative.
3. Develop a freight data collection program. At the present time only the general data gathered by SCDOT is available (see page 36). More detailed data, including detailed information on types of freight movements (e.g., shipping for local businesses vs. through traffic between Savannah and Charleston), new traffic to be generated by new and expanding operations (including ports) within and outside the Lowcountry and existing bottlenecks and conflicts (including loading and unloading times and locations that



interfere with passenger traffic, etc.). Origin-Destination information, gathered at key freight transportation generators, should also be included.

4. Evaluate the economic impact of the freight industry on the Lowcountry now and in the future. Both costs and benefits should be assessed.
5. Develop or utilize an existing intermodal freight modeling program to forecast (and update) future demand and utilization of infrastructure.
6. Establish an ongoing Freight Planning Advisory Committee that will include representatives of all major carriers and freight generators in the Region.

4.4 Infrastructure Planning Recommendations

1. Plan highway and other improvement projects that will improve the flow of freight into, out of and within the Region. Trucks are the predominant form of freight transportation in the Lowcountry (as well as the entire US) and are expected to remain so. Both their needs (e.g., turning radii at intersections) and the conflicts they can create (e.g., turning movements off busy highways that do not have turning lanes) should be taken into account.
2. Consider truck-only corridors or lanes when planning new highways or widening/improving existing thoroughfares. Origin-destination data is essential for this task.
3. Focus port development activities on providing or enhancing intermodal connections. This applies to both the potential new port in Jasper County as well as the existing and expanding ports at Savannah and Charleston. Since the Lowcountry is expected to benefit more from the existing ports (in the form of distribution centers, for instance along I95 in the Region) it will call for interstate cooperation for the Port of Savannah and coordination with the South Carolina State Port Authority for the Port of Charleston.
4. Plan a specialized truck rest and service area along I95 in the Lowcountry, for safety reasons, to provide a business opportunity and to make a statement about the Region's "freight-friendliness." At the present time there is not such a facility in the area; truck drivers now utilize tourist rest areas and private parking lots (including LCOG's) to take their required sleep breaks.
5. Identify existing and potential freight movement "bottlenecks" and determine how to mitigate them.



4.5 Operations Planning Recommendations

Most of these are either no cost or relatively low cost measures that can reduce congestion and/or conflicts between passenger and freight traffic.

1. Develop a program to encourage off-peak road usage by freight carriers. By shifting traffic away from peak a.m. and p.m. commuting peak periods, congestion can be at least partially mitigated on such highways as US 278. Incentives to accomplish this should be assessed.
2. Develop strategies to improve loading/unloading zones at existing businesses, health care facilities and other operations that regularly ship and/or receive large volumes of goods. Ensure that new freight-oriented and other operations are designed and constructed with adequate access for expected freight movements. Lowcountry county and municipal zoning ordinances should be reviewed, revised and enforced to ensure that the requirements are met.
3. Utilize Information Technology Systems (ITS) to develop strategies to improve freight movements in to, out of and within the Lowcountry.
4. Provide improved information regarding Regional traffic conditions, alternative routes and port access (for the proposed Jasper port as well as Savannah and Charleston) by means of ITS and additional signage.



Public Transportation Component

5.1 Public Transit Goals

The goals of the Public Transit Component are to:

- *Provide services for as many segments of the Lowcountry population as possible.*
- *Relieve traffic congestion on the Region's roadways.*
- *Improve upon the perception of public transit in the Lowcountry.*
- *Provide public transit users with safe and sheltered bus stops.*
- *Provide residents with additional transit options.*
- *Increase and improve upon intermodal connectivity.*
- *Provide commuting options for employees in the Lowcountry Region and to provide transportation for those who cannot drive, including the elderly, youth, disabled, and low income groups.*
- *Accommodate a broader range of travel needs: origins and destinations served, time of travel and trip purpose.*
- *Develop services that are more efficient and tailored to projected, as well as existing, ridership patterns.*
- *Ensure that cost considerations are addressed and funding strategies are identified.*
- *Maximize the coordination of services among the various providers to reduce duplication and increase the use of the services.*
- *Facilitate the development of public-private partnerships in the service delivery.*
- *Include the needs of tourists and other visitors to the Lowcountry in planning public transportation services.*

5.2 Public Transit Background

LCOG initiated a study in 2002, with the assistance of SCDOT, to assess transit needs and opportunities in the Region and how current services are addressing identified needs and to identify opportunities to improve existing or add new services. To accomplish this, more detailed objectives included:

- Determination of the relationship between economic development and the provision of coordinated public transit services in the area;
- Identification of coordination possibilities, including improved and/or expanded services, and
- Formulation of an action plan for implementation which responds to coordination needs and provides additional services.

The study commenced in the Fall of 2002, with the final report completed in May 2003. Study activities were undertaken jointly by LCOG planning staff and Day Wilburn Associates, Inc., in association with SR Concepts, the consultant team retained to provide assistance on the study.



Participation from local government agencies, area businesses, social service agencies, employers and transportation providers was provided throughout the study to ensure that the strategies reflect local needs and objectives. In addition, coordination with an Ad Hoc Transportation task force occurred at key milestones during the course of the study to obtain input on key issues, including needs, potential markets and alternatives.

The study revealed that there is a significant population in the Region that either needs transit or appears likely to use it if new or enhanced services were available. The potential market segments include groups traditionally identified as needing transit – low income, minorities, and people 65 years and older, as well as tourists, students and staff at post-secondary education institutions, the military, residents of large residential developments, as well as residents and visitors with out of Region destinations or origins.

Lowcountry Regional Transportation Authority (LRTA), and its predecessor the Beaufort-Jasper Regional Transportation Authority, have operated public transit service in the area since the 1970's. Most of LRTA's service is centered on Beaufort County, the home of 60% of the Region's population, the most densely populated county, and the location of major tourism and employment facilities, as well as medical, institutional, educational and government services. Service to the other three counties is limited to the rush hour commuter service linking several towns and areas with southern Beaufort County. Both Amtrak and Greyhound provide limited service in the area.

Feedback from human service agencies, local planning officials, and businesses emphasized the important role that LRTA is playing in providing transportation to a number of Region's residents to enable them to access employment, human and medical services, and shopping. However, the representatives indicated that there are many unmet transportation needs in the Region because of the limited service operated by LRTA and the predominant pattern of the service – one-way commuter service to southern Beaufort County.

Although a number of human services agencies are providing some transportation to clients, it is oriented to providing them with access to specific programs and services. Most of the social service agency representatives reported that a large number of their clients need transportation for a variety of trip purposes which individual agencies are unable to serve. Low-income residents, in particular, were identified as having a great need for transportation services.

There does appear to be some duplication of transportation service in the Region, as LRTA, Greyhound, human services transportation agencies and the Medicaid transportation provider are often traveling over the same roads and transporting people to the same destinations. At present, this service duplication is not being addressed as one agency does not have overall responsibility for reviewing public and human and medical service needs in the Region and determining the most effective way to respond to the needs.

An expanded role for transit in the Region's transportation system is supported by a diverse group of stakeholders and emerged as a key study recommendation. The benefits



associated with increased transit in the Region are diverse, and would include economic, social, environmental and quality of life improvements.

5.3 Recommendations

The recommended future transit concept includes a wide array of service types to serve the broad range of users as well as be appropriate for the diverse Region – the rural, low density areas as well as the more intensive development in Southern Beaufort County.

1. Regularly Scheduled Fixed Route Service

To ensure feasibility, and potential ridership, of such service routes should be planned where there are clusters of employment and residents that are large enough to support bus service on at least an hourly basis; more frequent service is preferable in order to make the service viable for a wide variety of residents and visitors.

LCOG and LRTA, working together and assisted by consultants, completed concept-level planning for such a service along US 278, from I95 in Jasper County to Coligny Circle on Hilton Head in mid-2006. At the current time the two organizations are continuing their joint efforts to launch this service by mid-2007. A map of the proposed route is on the following page; a table with the proposed stops and the residential, commercial, tourism and institutional developments they will serve is also included.

Other routes to be considered in the foreseeable future include SC 170 (from US 21 to US 278) and loop service in Bluffton and on Port Royal Island (Beaufort and Port Royal). As the keystone of a wider Regional system:

- The routes should be planned as an interconnecting system.
- “Park-and-Ride” lots should be included to ensure that riders from other parts of the Region have convenient access to the new routes.

2. Increased Transit Coordination

This is a public transportation priority of the Federal Transit Administration (FTA) and SCDOT and will likely take the form of expanded service areas for service similar to LRTA's "Allendale Scooter." Transit Coordination Planning is now underway, officially under the SCDOT-mandated aegis of LCOG but in close cooperation with LRTA. It will include the development of coordinated service agreements among the Region's human service agencies to improve the efficiency of the services, and reduce costs for service administration, operations, and vehicles. There will also be provisions to include general public passengers as a means of accommodating public trips in parts of the Region where there is insufficient demand to warrant the implementation of exclusive public transit service.



US Highway 278 Corridor Transit Study

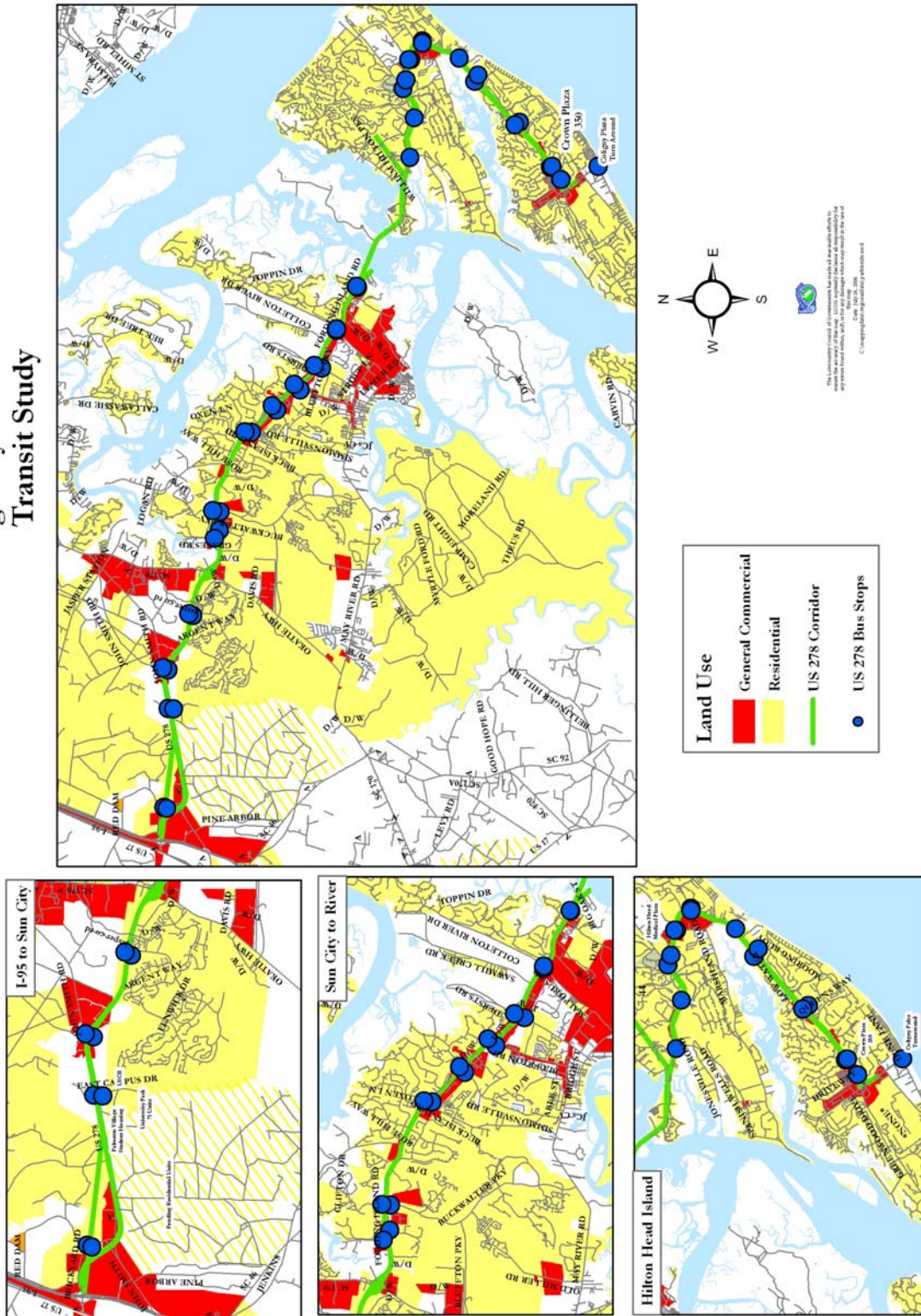


Figure 2.1 Proposed US 278 Bus Service



Proposed Bus Stop Locations Along US 278 Corridor

Stop Location	Employment Centers Served	Residential Centers Served	Employment & Residential Centers Served Indirectly
Coligny Plaza	Coligny Plaza Beach Market Holiday Inn	Forest Beach Residential Area	Circle Center Marriott Grande Ocean Resort Crown Plaza Resort
McDonald's (off island only)	McDonald's		Sea Pines Hilton Head Plaza Park Plaza Island Crossing Fountain Center Orleans Plaza
Hilton Head Town Hall	Hilton Head Town Hall Village at Wexford	Wexford Shipyard Long Cove	Fresh Market Shoppes
The Mall at Shelter Cove	The Mall at Shelter Cove Plaza at Shelter Cove Chamber of Commerce Arts Center of Coastal Carolina		Hilton Hotel Marriott Resort Disney Resort Palmetto Dunes Shelter Cove
Hilton Head Resort		Hilton Head Resort Singleton Beach	Marriott Vacation Club at Surfwatch Burke's Beach
Port Royal Plantation		Port Royal Plantation	Westin Resort at Port Royal
North Matthews Drive	Pineland Station Port Royal Plaza Northridge	Woodlake Villas The Oaks Hilton Head Gardens Southwood Park	Old Woodlands Tabby Walk Palmetto Hall Palmetto Headlands Business Park
Beach City Rd	Hilton Head Medical Center		Hilton Head Christian Academy
Museum Street	Main Street Shopping Village Festival Center	Otter Hole	Hilton Head Plantation Indigo Run HH Schools Campus Jarvis Park
Spanish Wells Road	Fairfield Square	Stoney	Seagrass Landing Wild Horse Summerfield
Windmill Harbor		Blue Heron Point Mariner's Cay	Outdoor Resorts of America Hilton Head Marina
Salt Marsh Lane	Bridge Center Moss Creek Shopping Center		Moss Creek Plantation
Malphrus Drive	Tanger II		Colleton River Plantation
Tanger Shops I/Sawmill Creek	Tanger I		Colleton River Plantation



Proposed Bus Stop Locations Along US 278 Corridor

Stop Location	Employment Centers Served	Residential Centers Served	Employment & Residential Centers Served Indirectly
Simmonsville Road	The Plaza		
Buck Island Road	Hargray Publix	Westbury Park	Rose Hill Plantation
Buckwalter Parkway Towne Drive	Sea Turtle Cinema and Shops Belfair Towne Village		Island West The Farm Woodbridge Shell Hall Buckwalter Business Park Berkely Hall Island West
Sun City Boulevard			Sun City TCL
Argent Boulevard (SC 141 formerly John Smith)	New River Center Walmart New River Auto Mall		USCB Palmetto Electric
East Campus Drive			Argent Tract University Park
Brickyard Road at I-95	Coastal Carolina Medical Center		

3. Bus Pull-Outs

Provide bus pullouts at strategic locations as part of the implementation of most of the public transit recommendations to provide maximum safety/operational benefits. Bus pull outs are recommended on congested road segments to prevent from traffic backup during peak hours. Signage should also warn motorists to use caution as buses pull out from pull-outs and bus stops. Necessary bus pull outs will be determined by the following criteria:

- 1) Lack of turn lanes
- 2) Curbs
- 3) High vehicle speed areas
- 4) Critical segments of road (high traffic demand)
- 5) High passenger use
- 6) Through lane
- 7) Highway vs. side street
- 8) AADT
- 9) Future development potential
- 10) Land use

The criteria was be used to identify the top 11 potential bus pull-outs:



PROPOSED LRTA Bus Stop Pull-over Areas & Shelters

Bluffton

1. Ashley Plantation – lg for about 60 people
2. RSI, Buck Island
3. Moss Creek @ bridge memorial
4. LRTA Office – Large shelter to hold 200 people (standing)
5. Possible Park & Ride Lot/Transfer Center in Hardeeville off of 278

Hilton Head Island

1. Latin American Council – 278 & Spanish Wells

Beaufort

1. TCL
2. USCB, Beaufort & Sun City
3. Beaufort Memorial Hospital

Jasper

1. Hardeeville Town Center

Hampton

1. Hampton Regions Bank

4. Park and Ride Lots

Safe and secure park and ride lots are recommended for the Lowcountry Region in strategic locations to ensure increased public transit ridership and less automobile traffic on the roads. The first locations should be at existing nodes (ridership-generation centers) identified in the US 278 planning work (see following map).

5. Transfer Facility for Public Transit in Bluffton or other appropriate location.

A new sheltered transfer station is recommended for LRTA transit in Bluffton, or further west, along US 278. Passengers are currently transferred in a maintenance building at LRTA headquarters, several miles off US 278, in Bluffton.

Specifics for the facility include:

- Open air shelter
- Separated from bus maintenance
- Restrooms
- 100' from gas pumps
- Capacity: 15 vehicles
- Seating for 300 to 400

6. Bus Stop Shelters

Shelters will benefit the perception of public transit and increase awareness of LRTA.

- LRTA is in the process of identifying the most important locations for bus stops.



- Shelters could be built at the same locations as new bus pull-outs (see list under recommendation one).

7. Spot Geometric Improvements to Facilitate Operation of Public Transit Vehicles

- Identify areas where buses have difficulty navigating safely
- Turn Lanes
- Intersection Widening

8. FAITH Continuing and Expanded Operations

FAITH (Focused Alternative Interfaith Transportation for Health) is an on demand, volunteer medical transportation service to the general public. Additional support for the FAITH program should be provided and the program should received additional funding.

9. Additional bike racks on public transit

Retrofit all existing transit vehicles with bicycle racks - LRTA or other.

10. Vanpool Pilot Project

Take to next level of implementation as part of overall increased public transportation in the Lowcountry.

Undertaken August to December, 2005. The consultants' general conclusions were:

- The potential and future opportunity for vanpool services and growth in the Lowcountry "appear very promising."
- Excellent media support was instrumental in selling the vanpool program to area employers. The press articles generated free publicity and inbound calls early in the sales process.
- Marketing and direct sales were essential to the project's success.
- Nine vanpools (including groups from Savannah and Charleston) were identified and organized; two became fully operational in the short time frame available.

11. New buses for LRTA. Continue to increase the number of vehicles available to order to serve existing and future markets effectively.

12. Varnville Town Center/Transfer Facility - Infrastructure improvements including bus turnout relocation

13. Road Widening. Widen Burnt Church Road between US 278 and Bluffton Parkway in Beaufort County to improve LRTA service.

14. RTMA Establishment. An RTMA is recommended to provide a framework for the transportation coordination initiative in the Lowcountry. A Regional Transportation Management Association (RTMA) will be needed to plan and implement the new coordination services. The organizational focus of the RTMA is to ensure that public transit is an important component of the Region's multimodal transportation system. RTMA membership would include LRTA, LCOG, county and local governments, private transportation providers, human



service agencies, major employers and State agencies.

It will be a cooperative undertaking by LCOG and LRTA, with each agency fulfilling specific roles recommended and/or mandated by the FTA and SCDOT.

15. Mainline/Connector/Distribution Service Planning.

This would be for bus service along US 278 and SC 170.

- Develop a series of performance measures to guide the planning of the services.
- Conduct outreach with local governments, communities, businesses, and transportation providers to obtain input on transportation needs and considerations that need to be reflected in the service design.
- Prepare an operations plan:
 - Description of service – alignments, transfer points, operating hours, frequency;
 - Vehicle requirement;
 - Service provider;
 - Service costs and funding mechanisms;
 - Support requirements, including promotion, outreach, bus stops, customer information, ADA provisions.

16. Connector service in main travel corridors linking to the US 278 main line service;

- Distributor service into key areas, such as City of Beaufort, Bluffton, and Hilton Head Island;
- Coordinated demand response service throughout the Region;
- Out of Region service to Charleston and Savannah, Georgia;
- Passenger ferry service, and
- Transportation facilities: park and ride lots, transportation center and transfer hubs.

5.4 Project Prioritization

The following will be the criteria for public transit project prioritization:

1. Cost/Benefit Analysis
2. Ridership Nodes (residential, commercial and institutional clusters)
3. Interconnectivity with other existing and planned services
4. Safety
5. Need/Demand
6. Geography
7. Deficiencies
8. Integrations with Comprehensive Plans
9. Areas of focus for public transit efforts:
 - US 278 in Southern Beaufort County
 - William Hilton Parkway on Hilton Head Island
 - SC 170
 - Greater Bluffton
 - Beaufort Area



- Walterboro Area
- Ridgeland/Hardeeville
- Yemassee/Hampton/Varnville



Roadways Component

6.1 Roadways Component Goal

The goal of the Roadways Component is the following (unless superseded by County or Municipal ordinance):

The adopted level-of-service (LOS) standard for state roadways shall be “C” based on SCDOT adopted capacities.

At this time, Beaufort County and the Town of Bluffton have adopted a LOS “D” standard for average annual daily traffic (AADT) volumes and the Town of Hilton Head Island has adopted a LOS “D” standard for the 45th highest day traffic volumes.

The LOS standard should be utilized when evaluating proposed transportation improvement needs and as a measure of effectiveness (MOE) for evaluating potential improvement plans.

6.2 Recommendations

1. Transportation Model Utilization

Transportation improvement needs should be identified through utilization and analysis of the Lowcountry transportation model and any available sub-area models (Beaufort County, Jasper County, Town of Hilton Head Island). Future analysis periods (10 year and 20 year) should identify constrained roadways and intersections within network. These models should also be a primary tool in evaluating proposed transportation improvement projects to be included in the STIP.

2. Accident Analysis

Available accident data should continue to be collected and reviewed to determine high accident rate roadways. Accident rates should be compared to statewide averages to determine the level of significance. Accident rates should be utilized as a tool in determining improvement needs and in evaluating the potential effectiveness of proposed improvement plans. The most recent three years of available accident data should be sufficient in terms of evaluating improvement needs.

3. Transportation Model Projections

Utilizing the LCOG’s transportation model for the existing plus committed roadway network (E+C), the overall transportation plan should be evaluated for 10 year and 20 year growth scenarios with a fiscally constrained roadway plan and fiscally unconstrained roadway plan.



4. Roadway Improvements

The following roadway projects have been identified through the comprehensive planning process or other identified plans. At this time, however, these and other projects that may be identified and that meet the stated criteria cannot be funded utilizing existing financial sources. However, as funding does become available they should be rated as “high priority” improvements.

Beaufort County (See Appendix E for a more comprehensive list of projects and potential funding sources for Beaufort County: included is a list of the ten transportation projects included in the November 7 referendum).

1. Beaufort ByPass (SC 170 to US 21 Port Royal Island, US 21 to SC 802 Lady’s Island, SC 802 to US 21 St. Helena Island)
2. US 21/SC 802 Bypass (Lady’s Island)
3. US 17 Widening (Gardens Corner to Colleton County Line)
4. Robert Small Parkway Access Management Plan (Beaufort)
5. SC 170 Access Management Plan (Okatie)
6. SC 170 Widening (SC 46 to US 278)
7. SC 46 Widening (Bluffton Town Limit to US 278)
8. S 163 Widening (Bluffton Parkway to US 278)
9. US 278 Widening (S 474 to Jasper County line)
10. S 474 Widening (Bluffton Parkway to US 278)
11. Bluffton Parkway (S 474 to Jasper County line)
12. Bluffton Parkway (S 163 to US 278)

Colleton County

1. US17 Widening (Beaufort County line to SC 64, Jacksonboro)
2. SC 64 Widening (US 17 to I 95)
3. Walterboro By-pass

NOTE: On January 2, 2007, Colleton County Council passed a resolution that places the SC 64 widening as the number one priority, but also that US 17 will remain the number one priority **provided that state and/or federal monies become available for the highway widening and not for right-of-way acquisition.** The by-pass will remain number three among Colleton County Council’s priorities.

Hampton County

1. S54/SC 363 Intersection Improvements
2. SC 68 widening (I 95 to Varnville; contracts for constructing a segment have been let)



Jasper County

1. US 278 Widening (Beaufort County line to I 95)
2. Bluffton Parkway (Beaufort County line to I 95)
3. US 17 Widening (Georgia State line to SC 170)
4. SC 141 Widening (Argent Blvd. from US 278 to SC 170)
5. I-95 Widening (Georgia State line to US 278)

6.3 Prioritization

Planned roadway improvement projects should be prioritized based on the following matrix:

1. Existing and Projected Volumes
2. Roadway Capacity and LOS
3. Accident Rate
4. Benefit/Cost Analysis
5. Alternative Financial Sources (e.g., Federal earmarks, local impact fees, local option sales tax)
6. Results of Other Traffic and Transportation Studies (e.g., Jasper County's peak-hour transportation model for the southern portion of the county to be followed by the traffic model for the northern portion of the county).



Part 3: Preliminary Multi-Modal Transportation Project (STIP) List

Introduction

The intent when preparing this list of projects was to ensure that they are financially feasible within the limits of the STIP funding that is expected to be available to the Lowcountry in the foreseeable future. As such it constitutes the *Preliminary STIP List*. If additional funds become available, this list will be revised accordingly, with highway projects prioritized by the Transportation Advisory Committee, utilizing the following decision-making matrix, which may be amended over time. The Committee's recommendations will then be forwarded to the LCOG Board of Directors.

Lowcountry Highway Project Decision-Making Matrix					
		Project 1	Project 2	Project 3	Project 4
Criteria	Weight (points)				
<i>V/C Ratio greater than 1</i>					
Present	40				
Projected	25				
<i>Accidents (using current data)</i>					
More than 5	25				
1 or more fatalities	30				
3 or more injuries	20				
<i>Hurricane Evacuation</i>					
Improves efficiency and safety of hurricane evacuation					
<i>Multi-Modal System Contributions</i>					
Provides continuity among highway segments	20				
Provides opportunities for public transit	25				
Provides bicycle-pedestrian opportunities	15				
<i>Economic Development</i>					
Supports regional freight movement	25				
Provides opportunities for targeted business sectors	15				
<i>Environmental Impacts</i>					
Limited negative impact on natural resources	25				
Limited negative impact on historic and cultural resources	25				
<i>County Population Change</i>					
Growth of 2% or more annually	15				
Growth of less than 2% annually	5				
Decrease in population	-5				
TOTAL					



At the present time the projects listed do not include every possible improvement needed to the transportation system in the four-county Lowcountry Region during the next approximately five to twenty years. Therefore, it does not meet every goal or implement every recommendation in the preceding sections of this report. On the other hand, it recognizes the enhanced role and major contribution that increased public transportation could play in the Lowcountry.

The roster does not include the lengthy list of improvements that comprise Beaufort County's Transportation Capital Improvement Projects (CIP) to be paid for by impact fees, tax referendum proceeds, etc. nor does it include projects already included on existing STIP lists.

The list was developed:

- To meet the objectives and include the highest priority projects prepared by the several sub-committees of the Transportation Advisory Committee.
- To be inclusive of all modes of transportation, not solely roads and highways.
- To underscore the importance of providing public transportation to the residents of and visitors to the Lowcountry
- To emphasize safety issues.
- To include Hurricane Evacuation as a significant priority.
- To utilize existing transportation and demographic data.
- To be realistic about what is possible with less than \$3,000,000 of STIP money available annually during the next six fiscal years.
- To take into consideration the type and scale of projects suggested by SCDOT Planning.

Hurricane Evacuation

This is very important to the Lowcountry. Although the majority of the evacuees are either residents of or visitors to Beaufort County, the state-mandated evacuation routes take them through Hampton and Jasper counties. The recommended projects are in those two counties, to relieve bottlenecks, are (see map on following page):

1. Extend US 278 (in Jasper County) as 4 lanes approximately 1.1 mile directly/diagonally across to US 321.
2. Widen US 321 to 4 lanes for approximately one mile to the Hardeeville city limits.
3. Improve the SC 68/US 278 intersection in Hampton County.
4. Widen US 278 in Hampton County to 4 lanes from the SC 68 intersection to west of the Town of Varnville. **[Note:** The widening of the section of SC 68 between I95 and



Varnville is a recommendation in previous STIPS. However, due to rapidly escalating construction and land acquisition costs, not all of that section is currently funded.]

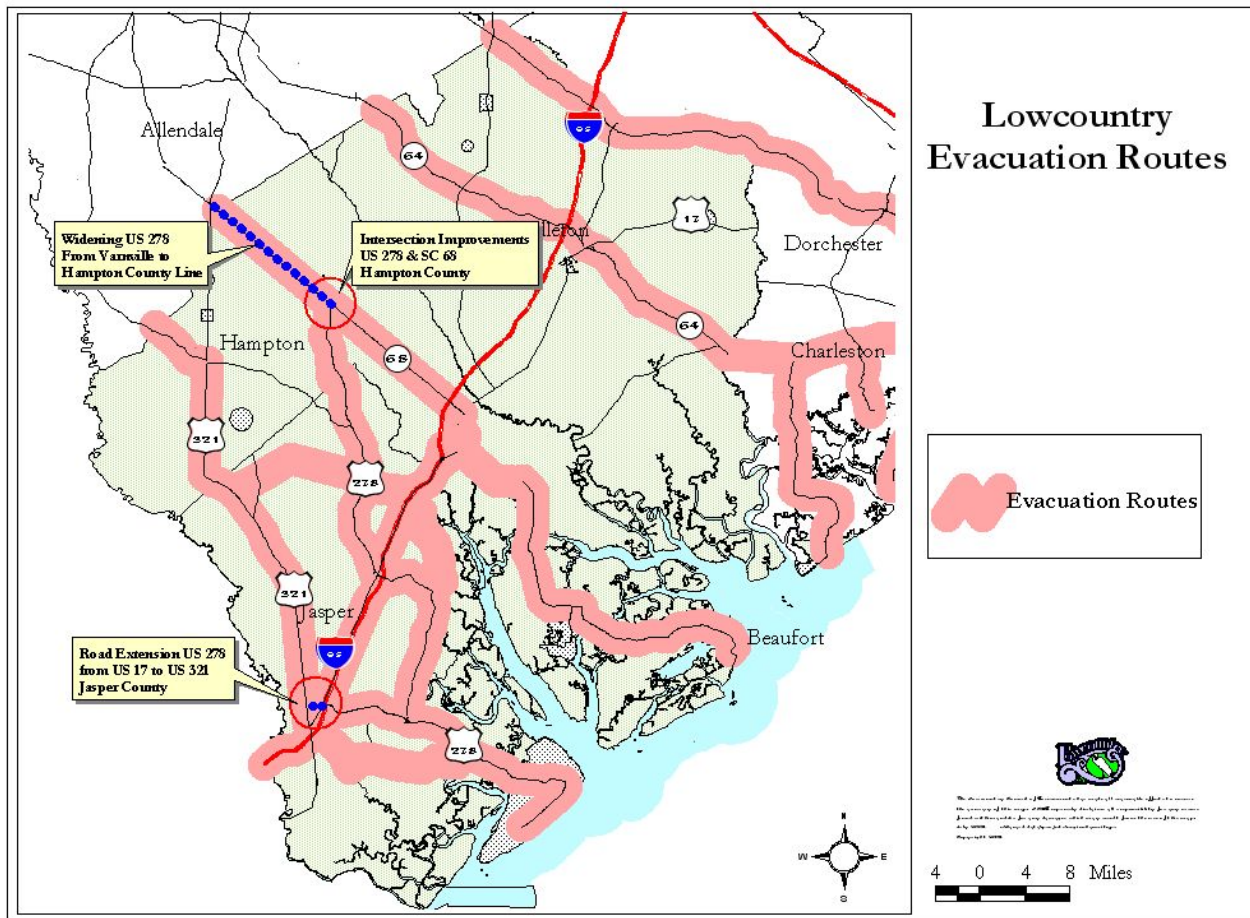


Figure 3.1 Lowcountry Evacuation Routes

Public Transportation

1. New equipment (buses, vans and information/communications technology) as identified by LRTA to implement US 278 Bus System (including feeder loops).
2. Park and Ride Lots
Safe and secure park and ride lot for the Lowcountry Region in strategic locations to ensure increased public transit ridership and less automobile traffic on the roads.
 - SC 170 and SC 802 at Broad River Bridge in Beaufort County
 - US 278 between SC 170 and I 95 (one or more)
3. Curb Cuts to permit bus stops
 - US 278 from I95 (Jasper County) to Shelter Cove/Palmetto Dunes (Hilton Head Island). Approximately 24 (12 on each side of the highway).



- SC 170 from Broad River Bridge to US 278. Number to be determined.

Freight Transportation

1. Specialized truck rest and service area along I95 in the Lowcountry, for safety reasons, to provide a business opportunity and to make a statement about the Region’s “freight-friendliness.” At the present time there is not such a facility in the area; truck drivers now utilize tourist rest areas and private parking lots (including LCOG’s!) to take their required sleep breaks.

Intersection Improvements

Because of the high accident rates and the likelihood of more in the future, intersection redesign can benefit the following areas (based on 2004 data—highest for each county; Hampton County had no High Collision Intersections):

Table 3.1 High Accident Intersections

Route Category/Number 1	Route Category/Number 2	Total	Killed	Injured
Beaufort County				
US PRIMARY 0021	SC PRIMARY 0802	14	0	3
SC PRIMARY 0046	SC PRIMARY 0170	11	0	5
Colleton County				
US PRIMARY 0015	SC PRIMARY 0064	7	0	12
Jasper County				
US PRIMARY 0017	SC PRIMARY 0336	5	0	4

Because of economic development taking place there, the interchange at exit 21 on I-95 should also be redesigned and rebuilt. It is already handling more automobile and freight traffic than it was planned for, and the volumes of both types will be increasing even more dramatically in the immediate future.

In addition, the following intersections should be redesigned and rebuilt, per SCDOT’s “TIP Intersection Improvements.” The list has been provided by SCDOT and is in alphabetical order by county and not by priority.



Table 3.2 Intersections Needing Improvements

County	Location	Recommended Improvement	Est. Cost
Beaufort	SC 802/S-23	Redesign Intersection	\$750,000
Colleton	US 17 ALT/SC 64	Redesign Intersection	\$1,100,000
Colleton	US 15/SC 61	Redesign Intersection	\$350,000
Colleton	SC 64/S-41	Redesign Intersection	\$500,000
Hampton	US 321/S-35	Redesign Intersection	\$1,000,000
Hampton	US 363/S-54	Redesign Intersection	\$500,000
Jasper	US 321/SC 46 & S-35	Redesign Intersection	\$1,000,000
Jasper	SC 170 alt/S-34	Redesign Intersection	\$700,000
TOTAL			\$5,900,000



4. Concluding Comments and Public Participation

General

Preparing the Long-Range Transportation Plan for the four-county Lowcountry Region has been a positive challenge for all participants. Limited available funding for transportation improvements and projects in the area has served as an impetus for developing a more wide-ranging and multi-modal strategy than might otherwise have been possible. At the same time, a very real opportunity exists now to implement multi-modal transportation recommendations in the Lowcountry; higher gasoline prices, increasing congestion, a changing/aging population and growth pressures have encouraged not only the members of the Transportation Advisory Committee (TAC) but a growing percentage of the Region's residents and visitors to think about alternatives to the single-passenger vehicle.

Public Participation

Effective public participation has evolved over the past 30 years to include a wide variety of activities. At the same time, generic public meetings have been found to produce increasingly less effective results; they may attract few attendees or those that attend likely have already made their opinions well known through other means. Consequently, in preparing and reviewing and revising this plan, LCOG did not have a public meeting. Instead it utilized the members of the Transportation Advisory Committee and the subcommittees to provide local, county-wide and regional-level input. Together they formed a large group of stakeholder representatives, which included four elected officials who are members of the LCOG Board of directors, county and municipal administrators and technical and planning staff members, private sector representatives, representatives of the key bicycle/pedestrian proponent organization and the executive director of the regional public transportation authority.

As well, since LCOG planners are involved in many other projects throughout the Lowcountry, they utilized their other contacts and meetings to gather opinions and information about area transportation needs and opinions. Regular reading of all of the local newspapers, including their on-line "blogs," has provided a further perspective on public opinion.



Following the approval of the draft plan by the LCOG Board of Directors in February 2007, a request for public input was publicized in all local newspapers; copies of the draft were also sent out to all of the jurisdictions in the Lowcountry for review and comments. During a period of more than a month that followed, only one set of comments were received.