Charting a Course to 2040

SOUTH CAROLINA | MULTIMODAL TRANSPORTATION PLAN

Regional Transit & Coordination Plan

APPALACHIAN REGION

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1. INTRODUCTION

1.1 Overview

Transportation plays a key role in determining the environmental conditions and the quality of life in any community. This is particularly true in South Carolina, both due to the sensitivity of the unique mountain areas of the state, along with the Atlantic Ocean shoreline. These factors contribute to the high level of travel demand by the popularity of the area as both a tourist destination, as well as a desirable residential area.

The 2040 South Carolina Multimodal Transportation Plan (2040 MTP) planning process includes several major components that encompass public transportation, including:

- **10 Regional Transit and Coordination Plan Updates** – transit plans developed for each of the 10 Council of Government regions
- **Statewide Public Transportation Plan Update** – overall public transportation plan for the state of South Carolina, summarizing existing services, needs and future funding programs
- **Multimodal Transportation Plan** – overall plan inclusive of all modes of transportation

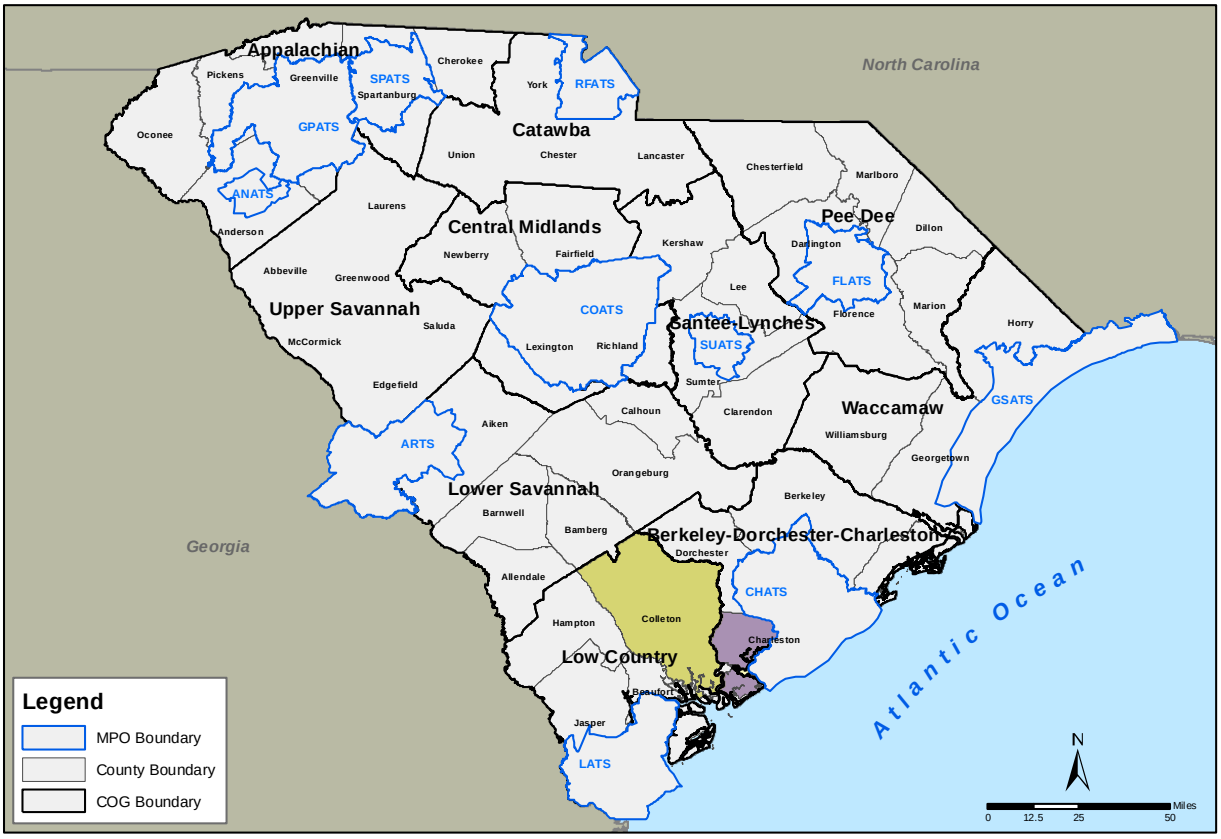
This Appalachian Regional Transit Plan Update was prepared in coordination with the development of the 2040 MTP. The initial Appalachian Regional Transit Plan was completed in 2008 and the following pages provide an update representing changes within the region and across the state for public transportation. The purpose of this Appalachian Regional Transit Plan Update is to identify existing public transportation services, needs, and strategies for the next 20 years. This plan differs from the 2008 plan in that it incorporates an overview of human services transportation in the region, in addition to the needs and strategies for increased coordination in the future.

A key transportation strategy for the South Carolina Department of Transportation is to develop multimodal options for residents and visitors in all areas of the state, including public transportation. Many regions in the state have adopted policies that focus on addressing both existing transportation deficiencies, as well as growth in demand through expansion in transportation alternatives. In addition, the South Carolina Department of Transportation adopted a complete streets policy in support of alternative modes of transportation.

1.2 Community Summary

The Appalachian Regional Transit Plan includes the counties located within in the Appalachian Council of Governments boundaries: Anderson, Cherokee, Greenville, Oconee, Pickens, Spartanburg. **Figure 1-1** illustrates the 10 Council of Government areas across the state of South Carolina.

Figure 1-1: South Carolina MPOs and COGs



The urbanized communities in this region are Anderson, Greenville and Spartanburg which are also commercial and industrial centers for the region. The Appalachian Region is located in the northwest corner of South Carolina, and also referred to as the Upstate area. Interstate 85 bisects the region, providing access to many markets in the southeast United States. Interstate 85 also provides easy access to Charlotte and Atlanta. The Appalachian Region is one of the fastest growing regions in the United States.

A brief review of demographic and economic characteristics of the study area is presented below as a basis for evaluating the Appalachian Region's future transit needs.

1.2.1 Population Trends

Statewide Population Trends

Between 2000 and 2010, the population of South Carolina increased by 15 percent, from 4.012 million to 4.625 million. Compared to the U.S. growth during the same period of 9 percent, South Carolina's growth was almost 70 percent greater than the nation's, but comparable to nearby states. Population totals and growth rates in the past two decades are shown in **Table 1-1** for South Carolina, nearby states, and the country as a whole.

Table 1-1: Population Trends: 1990, 2000, and 2010

State	Population			Annual Growth Rate	
	1990	2000	2010	1990-2000	2000-2010
South Carolina	3,486,703	4,012,012	4,625,364	1.51%	1.53%
North Carolina	6,628,637	8,049,313	9,535,483	2.14%	1.85%
Tennessee	4,877,185	5,689,283	6,346,105	1.67%	1.15%
Georgia	6,478,216	8,186,453	9,687,653	2.64%	1.83%
Alabama	4,040,587	4,447,100	4,779,736	1.01%	0.75%
United States	**248,709,873**	**281,421,906**	**308,745,538**	**1.32%**	**0.97%**

Source: U.S. Census Bureau

The future population of South Carolina is projected to increase over the next two decades, but at a slower rate than adjacent states and slower than the United States, as shown in **Table 1-2** and **Figure 1-2**. This projection reverses the trend seen from 1990 to 2010, as South Carolina population increased at a rate greater than that of the U.S. and at a pace equal to neighboring states.

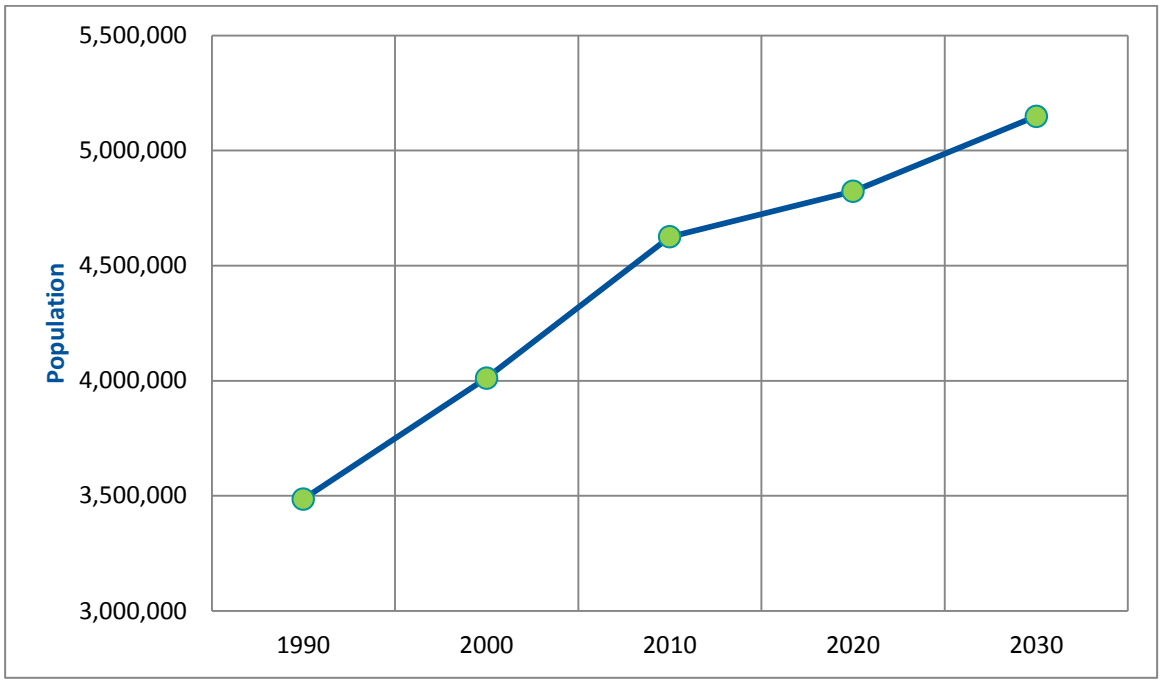
Table 1-2: Population Projections, 2010 – 2030

State	Population[(1)]	
	2020	2030
South Carolina	4,822,577	5,148,569
North Carolina	10,709,289	12,227,739
Tennessee	6,780,670	7,380,634
Georgia	10,843,753	12,017,838
Alabama	4,728,915	4,874,243
United States	**341,387,000**	**373,504,000**

State	Annual Percentage Growth		Total Percent Growth
	2010-2020	2020-2030	2010-2030
South Carolina	0.4%	0.7%	11.1%
North Carolina	1.2%	1.4%	26.5%
Tennessee	0.7%	0.9%	15.7%
Georgia	1.2%	1.1%	22.7%
Alabama	-0.1%	0.3%	2.0%
United States	**1.1%**	**0.9%**	**20.0%**

Note: (1) 1990, 2000 and 2010 populations from Census. 2020, 2030 populations are US Census Bureau projections from 2008.

Figure 1-2: South Carolina Population: 1990 to 2030



Regional Population Trends

The population growth in South Carolina over the last 20 years has not been evenly distributed throughout the state. The growth in the Appalachian Region and the nine other regions is shown in **Table 1-3**. All Councils of Government (COG) regions experienced growth from 1990 to 2010, with the Appalachian Region experiencing a 1.58 percent growth from 1990 to 2000. The following decade growth was slightly lower at 1.39 percent. Population projections by county are shown in **Table 1-4**.

Table 1-3: Population Growth by Council of Government

Council of Government Areas	Population			Annual Growth	
	1990	2000	2010	90-00	00-10
SC Appalachian COG	**887,993**	**1,028,656**	**1,171,497**	**1.58%**	**1.39%**
Berkeley-Charleston-Dorchester COG	506,875	549,033	664,607	0.83%	2.11%
Catawba RPC	248,520	289,914	364,826	1.67%	2.58%
Central Midlands COG	508,798	596,253	708,359	1.72%	1.88%
Lowcountry COG	154,480	201,265	246,992	3.03%	2.27%
Lower Savannah COG	300,666	309,615	313,335	0.30%	0.12%
Pee Dee Regional COG	307,146	330,929	346,257	0.77%	0.46%
Santee-Lynches Regional COG	193,123	209,914	223,344	0.87%	0.64%
Upper Savannah COG	185,230	215,739	218,708	1.65%	0.14%
Waccamaw Regional PDC	227,170	289,643	363,872	2.75%	2.56%
South Carolina	**3,486,703**	**4,012,012**	**4,625,364**	**1.51%**	**1.53%**

Source: U.S. Census Bureau

Table 1-4: Appalachian Region Population Growth by County

SC Appalachian COG	Population			
	2000	2010	2030	2040
Anderson	165,740	187,126	218,500	241,500
Cherokee	52,537	55,342	57,300	63,800
Greenville	379,616	451,225	542,300	596,500
Oconee	66,215	74,273	89,100	98,700
Pickens	110,757	119,224	132,900	146,700
Spartanburg	253,791	284,307	331,200	365,200
Total	**1,028,656**	**1,171,497**	**1,371,300**	**1,512,400**

Source: U.S. Bureau of the Census, Department of Health and Environmental Control, Office of Research and Statistics

As shown in the above tables, the Appalachian Region reported approximately 1.2 million persons in 2010, with the most populated counties of Greenville with 39 percent and Spartanburg with 24 percent. The remaining counties tend to be rural in nature with the exception of Anderson. Quality of life is an important factor in the Appalachian Region. From the urban core of Greenville and Spartanburg, to the region's mountains and lakes, the cultural and recreational amenities are abundant. These amenities along with affordable housing, shopping centers, healthcare, and educational facilities draw people to the region.

The growth of Greenville County and Spartanburg County will continue to draw development between these two large municipal centers. As these urban areas continue to expand in each county, there will be less separation between the communities and more partnerships needed between local governments for effective planning.

Oconee and Pickens Counties will have growth focused around Lakes Hartwell and Keowee, including the areas immediately around Clemson, Central, Seneca, and Walhalla. The growth of second homes and retirement communities around the lakes will be an important factor in planning for growth in this region. Cherokee County is also expected to experience healthy growth along I-85 in the vicinity of Gaffney, the largest city and county seat, and to the southeast towards Cherokee Falls and the Broad River.[1]

1.2.2 Economic Summary

Prior to the 1900s, the Appalachian Region had a strong history of agriculture, until the cotton and rapidly growing textile industry characterized the region's economy. In the Appalachian Region, the focus of textile production shifted to synthetic fiber production, with regional manufacturers such as *Milliken and Company* leading the way.[2] Over the past 25 years, the regional economy has grown and diversified tremendously, though while advances in technology have helped the textile industry to also remain a significant presence. Other primary investments from companies such as *BMW Manufacturing Corporation*, which established its North American headquarters in Spartanburg County

[1] http://www.oconeescedc.com/Portals/0/pdf/Oconee%20CEDS%20Final.pdf
[2] www.UpcountrySC.com

in 1992, and from *Michelin North America Inc.*,[3] which named its Greenville County location as its North American headquarters in 1988, propelled the region into becoming a serious international contender for business expansion and location.

Examples of companies such as these coming to the region has shifted jobs away from textiles to a more diverse and balanced manufacturing base. In addition to manufacturing, corporate headquarters, services, and tourism now play a major role in the region's economic viability.[4] In 2005, manufacturing represented the largest employment sector with 22 percent of the workforce.[5] Annual employment projections from SC Works online website indicated a 1.3 percent growth in employment for the state, which is projected through 2020. **Table 1-5** presents regional employers with over 3,000 staff.

Table 1-5: Appalachian Regional Employers with over 3,000 Staff

S.C. Appalachian COG	Approximate Jobs	Product/Service	County
Greenville Hospital System	10,200	Health Services	Greenville
Greenville County Schools	8,847	Public Education	Greenville
Michelin North American Inc.	7,930	Headquarters/ Manufacturing	Greenville HQ, statewide employment
BMW Manufacturing Corp	7,000	Automobile Manufacturing	Spartanburg
Bi-Lo	5,127	Corporate Headquarters	Greenville
Spartanburg School District	5,020	Public Education	Spartanburg
Spartanburg Regional Health Services	5,000	Health Services	Spartanburg
Clemson University	3,788	Educational Services	Pickens
Milliken & Company	3,700	Textile Manufacturing.	Spartanburg Headquarters, statewide employment
Bon Secours St. Francis Health System	3,500	Health Services	Greenville
AnMed Health	3,462	Health Services	Anderson
GE Energy	3,300	Engineering/Turbines/ Jet Engine Parts	Greenville
MAU Workforce Solutions	3,042	Employment Services	Greenville

Source: Upstate SC Alliance (compiled from GSA Business, Hoovers, Infomentum, and GADC). Job numbers fluctuate monthly and are not intended to be exact. Some of these job numbers include the employer's staff counts in more than one county.

[3] Michelin located plants throughout South Carolina during the 1970's, including in Anderson, Greenville and Spartanburg Counties. The company decided to convert its Greenville location into its North American HQ in 1988. The company remains a major employer of nearly 8,000 South Carolinians throughout the state with its strongest presence in the SC Appalachian Region.

[4] http://www.oconeescedc.com/Portals/0/pdf/Oconee%20CEDS%20Final.pdf

[5] Stet.

1.2.3 Income

The Appalachian Region has experienced positive economic momentum over the last several decades; however, the state itself still faces significant challenges with poverty and lagging educational achievement. The Appalachian Region is not immune from these problems—with more disparities found in its rural areas. The U.S. Census Bureau reports the median household income at $42,889 and the per capita income at $23,220.[6]

Unemployment throughout the region varies from county to county, with the highest rate (as of June 2012) being found in rural Cherokee County (12.6%) and the lowest rate being found in the more urban Greenville County (8.2%). The region's overall unemployment rate (9.4%) is significantly higher than the national unemployment rate of (8.2%).[7]

[6] Source: U.S. Census Bureau, Census 2010 Data.
[7] Source: SC Department of Employment and Workforce and U.S. Bureau of Labor Statistics.

2. EXISTING TRANSIT IN THE APPALACHIAN REGION

2.1 Overview

This chapter describes existing transit services in the Appalachian Region and notes trends in transit use, service, expenditures, and efficiency. The existing operations statistics included in this report are for fiscal year (FY) 2009, FY 2010, and FY 2011 from the SCDOT OPSTATS reports, which are comprised of data submitted by individual transit agencies. Although FY 2012 had ended when the work on this Regional Transit Plan was underway, it was not available in time to include in this report. A brief review of the recently released FY 2012 operations statistics in comparison to previous fiscal years is presented in Section 2.4.

Fixed route service is available in the urban cores of Anderson, Greenville, Clemson and Spartanburg. Clemson Area Transit (CAT) system serves Clemson University, Clemson, and Seneca with connections to Pendleton, Central, and the Electric City Transit system in Anderson. Spartanburg County operates an extensive demand response system.

Since the previous Appalachian Regional Transit Plan was completed in 2008, the number of peak vehicles, passenger trips, revenue vehicle hours, revenue vehicle miles, operating costs, and the cost per passenger has increased, while passengers per revenue vehicle mile and passengers per revenue vehicle hour have decreased. Over the last three years, operations have remained steady with some notable increase in demand responsive services. The continuing increase in cost per passenger is noteworthy.

2.2 Existing Transit Services

2.2.1 City of Anderson (Electric City Transit)

Operated by the City of Anderson, Electric City Transit provides fixed route service in and around the City of Anderson, as shown in **Figure 2-1**. Service is provided 6:30 am to 6:30 pm, Monday through Friday with 60 minute headways. At the northern terminus of the Electric City routes, there is a connection to the Clemson Area Transit "4-U" route which provides service to Clemson University, Tri-County Technical College, and Southern Wesleyan University in Central. FY 2011 ridership was 327,415 with 12,496 revenue vehicle hours over 190,033 revenue vehicle miles. This system has four peak vehicles and serves the urbanized area.

Photo by Nathan Gray

Figure 2-1: Electric City Transit Fixed Routes

2.2.2 Clemson Area Transit

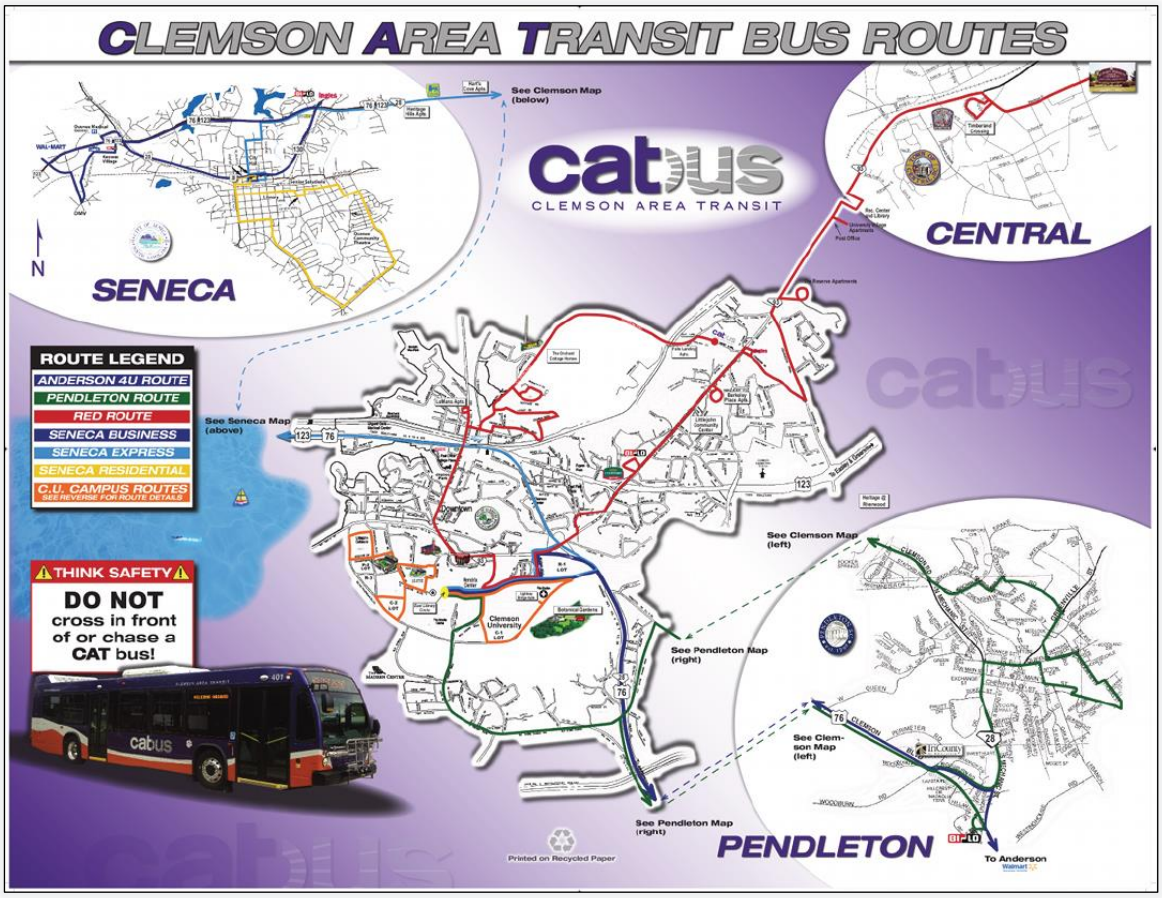
Operated by the City of Clemson, CAT serves the Clemson University Campus and the City of Clemson. Routes also extend to Pendleton (Tri-County Technical College) and Central (Southern Wesleyan University) and to Anderson via the "4-U" route (where Electric City Transit routes connect to Anderson University). Service is generally every 60 minutes although

Clemson campus service is generally every 30 minutes during weekday mornings. CAT operates seven days a week from 7:00 am to 3:00 am. FY 2011 ridership was 1,383,893 with 43,684 revenue vehicle hours, and over 493,006 revenue vehicle miles. The system has 20 peak vehicles.

All CAT buses are equipped to accommodate individuals with disabilities. Individuals with disabilities needing other than regular route service must be certified with present verification for disability. For disability certification information, residents call Clemson University Disability Services. For all other Americans with Disabilities Act (ADA) paratransit service information, residents call CAT services.

An interesting feature of the CAT system is that the majority of its local match is provided by Clemson University through a transit fee charged to students, allowing CAT to be a fare-free system. In FY 2011, CAT served a non-urbanized area, but the 2010 Census results brought CAT into the Greenville urbanized area where it will operate as an urban system in the future. **Figure 2-2** presents the CAT systemwide map.

Figure 2-2: CAT Systemwide Routes



2.2.3 Greenville Transit Authority (GTA)

GTA operates transit service within the City of Greenville and in other urbanized portions of Greenville County, as shown in **Figure 2-3**. The system operates between 6:30 am and 6:30 pm, Monday through Friday and between 8:30 am and 6:30 pm on Saturdays. GTA has hourly service and operates 11 peak vehicles. Full fare is $1.50 with a transfer fee of $0.50. The system is branded as Greenlink and is operated by the City of Greenville, under contract with GTA.

Figure 2-3: Greenlink Routes

GAP is an ADA paratransit service provided for individuals who, because of their disability, are unable to use Greenlink's fixed route bus service. This does not include disabilities that only make the use of accessible transit service difficult or inconvenient. GAP provides comparable service to the regular fixed route bus in terms of shared rides, curb-to-curb pickup, service area, and hours and days of service. GAP provides rides for people who are certified as eligible for paratransit service under the rules of the ADA. Eligibility includes, but is not limited to:

- Persons unable to navigate the fixed route system.
- Persons who require a lift-equipped bus when the fixed route service does not provide accessibility.

- Persons whose disability makes it impossible for them to travel to or from the nearest bus stop.

Buses are equipped with free Wi-Fi and bike racks. In FY 2011, GTA provided 702,364 passenger trips with 44,798 revenue vehicle hours and approximately 593,064 revenue vehicle miles (totals for fixed route and demand response). In October, 2012, GTA began providing service for Mauldin and Simpsonville via one route with two peak vehicles. Annual statistics are not yet available for that service.

2.2.4 Spartanburg Area Regional Transit Authority (SPARTA)

SPARTA operates within the City of Spartanburg and other urbanized areas of Spartanburg County. The service is managed by the City of Spartanburg and operates between 6:00 am and 6:00 pm, Monday through Friday, and between 10:00 am and 6:00 pm on Saturdays. SPARTA provides 60 minute service with 8 peak vehicles. Full base fare is $1.25 and transfers are $0.30.

SPARTA provides door-to-door paratransit van service to help meet the needs of mobility impaired residents. Designed in compliance with the requirements of the Americans with Disabilities Act, the paratransit vans can accommodate wheelchairs up to 30" X 48" measured at 2" above the ground and weighing no more than 600 pounds when occupied. Each van is equipped with a restraint system for

securing wheelchairs. Residents wanting to the use the paratransit service must complete an application to determine eligibility. SPARTA contacts a medical professional to determine the nature of the mobility impairment. Once qualified, a photo ID is issued to the rider.

In FY 2011, SPARTA provided 513,526 passenger trips with 22,491 revenue vehicle hours, and approximately 278,747 revenue vehicle miles in the urbanized area.

2.2.5 Spartanburg County Transportation

Spartanburg County contracts with the Spartanburg regional hospital system to provide transportation services in Spartanburg County. The Spartanburg County system provides demand responsive service for disabled riders, but also provides the service to jobs and job-training sites outside the SPARTA coverage area. The system operates between 4:30 am and 9:00 pm, Monday through Friday and between 5:30 am and 6:00 pm on Saturdays, with 30 peak vehicles. In FY 2011, Spartanburg County provided 189,655 passenger trips with 75,106 revenue vehicle hours, and approximately 1,347,797 revenue vehicle miles. In FY 2011, Spartanburg County Transportation also provided 78,699 passenger trips for Medicaid transportation.

2.2.6 City of Seneca

Operated under contract by Clemson Area Transit (CAT), the City of Seneca transportation system provides fixed routes in and around the City of Seneca as shown in the above CAT systemwide map (Figure 2-2). The system operates between 6:30 am and 6:30 pm Monday through Friday, with hourly service that includes an express route from the Clemson University campus where transfers can be made to the Clemson routes, including the “4-U” route with service to Pendleton, Central, and Anderson. The system is fare free and operates three peak vehicles. In FY 2011, the City of Seneca transportation system provided 238,605 passenger trips with 10,437 vehicle revenue hours, and approximately 183,368 vehicle miles.

In 2012, the City of Seneca received a Federal Transit Administration TIGGER grant for approximately $4.1 million. The grant was awarded to initiate the first community in the nation to have a fully electric bus fleet. The grant will replace the existing 35-foot diesel buses with fast-charge battery electric buses built locally by Proterra in Greenville.

2.3 Regional Trends and Summary

2.3.1 Vehicle Trends

Table 2-1 presents the total number of vehicles in the fleet for each system and peak number of vehicles. In 2011, the Appalachian Region had a total 2011 fleet of 122 vehicles for public transportation of 122 vehicles, with an additional 14 vehicles used for Medicaid service. During the peak hours, 94 of the 122 vehicles are in operation across the region (**Figure 2-4**). **Appendix A** provides detailed information for peak vehicles, broken out by urban verses rural areas.

As noted in the above text, the majority of transit agencies in the Appalachian Region provide fixed route service. The one exception is Spartanburg County which operations demand response service. Therefore, audiences should keep that in mind when reviewing agency to agency comparisons throughout Section 2.3.

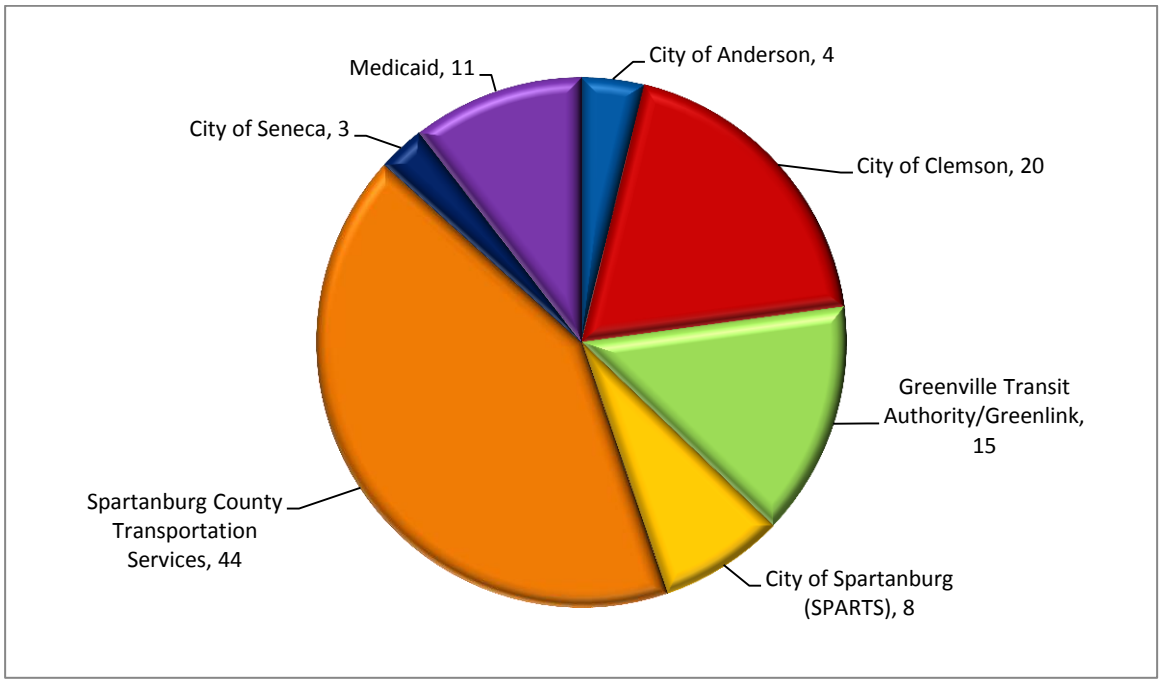
Table 2-1: Appalachian Region Vehicles, FY 2009 to FY 2011

Agency	Service	2009		2010		2011	
		Peak	Total	Peak	Total	Peak	Total
City of Anderson	Fixed Route	3	5	4	6	4	7
	Demand Response	0	0	0	0	0	0
	Total	**3**	**5**	**4**	**6**	**4**	**7**
City of Clemson	Fixed Route	23	23	20	23	20	23
	Demand Response	0	0	0	0	0	0
	Total	**23**	**23**	**20**	**23**	**20**	**23**
Greenville Transit Authority / Greenlink	Fixed Route	11	19	11	22	10	21
	Demand Response	3	4	3	4	5	5
	Total	**14**	**23**	**14**	**26**	**15**	**26**
City of Spartanburg (SPARTA)	Fixed Route	8	11	8	11	8	11
	Demand Response	0	0	0	0	0	0
	Total	**8**	**11**	**8**	**11**	**8**	**11**
Spartanburg County Transportation Services	Fixed Route	0	0	0	0	0	0
	Demand Response	37	45	42	61	44	52
	Total	**37**	**45**	**42**	**61**	**44**	**52**
	Other - Medicaid	10	20	10	14	11	14
City of Seneca	Fixed Route	3	3	3	3	3	3
	Demand Response	0	0	0	0	0	0
	Total	**3**	**3**	**3**	**3**	**3**	**3**
Total Appalachian Region	**Fixed Route**	**48**	**61**	**46**	**65**	**45**	**65**
	Demand Response	**40**	**49**	**45**	**65**	**49**	**57**
	Total	**88**	**110**	**91**	**130**	**94**	**122**
	Other - Medicaid	**10**	**20**	**10**	**14**	**11**	**14**

(1) The City of Clemson service was rural in FY 2011 but went into the Greenville urbanized area in FY 2013 based on 2010 census data.

(2) Does not include the Mauldin-Simpsonville route which started in October, 2012

Figure 2-4: Appalachian Region Peak Vehicles



2.3.2 Ridership and Service Trends

Table 2-2 and **Figures 2-5** and **2-6** present the annual passenger trips by transit agency and a summary for the Appalachian Region. In the past three years, ridership has slightly increased for fixed route service but has increased at a higher rate for demand responsive service. Detailed information for the breakout of urban verses rural data is shown in Appendix A. Urban system ridership has increased slightly more than rural ridership. Rural ridership exceeds urban ridership, but this phenomenon is driven by the high ridership of the Clemson system, which will be an urban system in the future. Since the last statewide plan completed in 2008, overall ridership has increased.

Table 2-2: Appalachian Region Ridership by Agency, FY 2009 to FY 2011

Agency	Service	2009	2010	2011
City of Anderson	Fixed Route	313,025	267,256	327,415
	Demand Response	0	0	0
	Total	**313,025**	**267,256**	**327,415**
City of Clemson	Fixed Route	1,403,523	1,369,916	1,383,893
	Demand Response	0	0	0
	Total	**1,403,523**	**1,369,916**	**1,383,893**
Greenville Transit Authority / Greenlink	Fixed Route	668,156	742,100	695,959
	Demand Response	7,261	7,666	6,405
	Total	**675,417**	**749,766**	**702,364**
City of Spartanburg (SPARTA)	Fixed Route	534,599	519,084	513,526
	Demand Response	0	0	0
	Total	**534,599**	**519,084**	**513,526**
Spartanburg County Transportation Services	Fixed Route	0	0	0
	Demand Response	154,115	159,329	189,655
	Total	**154,115**	**159,329**	**189,655**
	Other - Medicaid	78,879	86,248	78,699
City of Seneca	Fixed Route	209,880	239,433	238,605
	Demand Response	0	0	0
	Total	**209,880**	**239,433**	**238,605**
Total Appalachian Region	**Fixed Route**	**3,129,183**	**3,137,789**	**3,159,398**
	Demand Response	**161,376**	**166,995**	**196,060**
	Total	**3,290,559**	**3,304,784**	**3,355,458**
	Other - Medicaid	**78,879**	**86,248**	**78,699**

Figure 2-5: Appalachian Region Ridership Trends

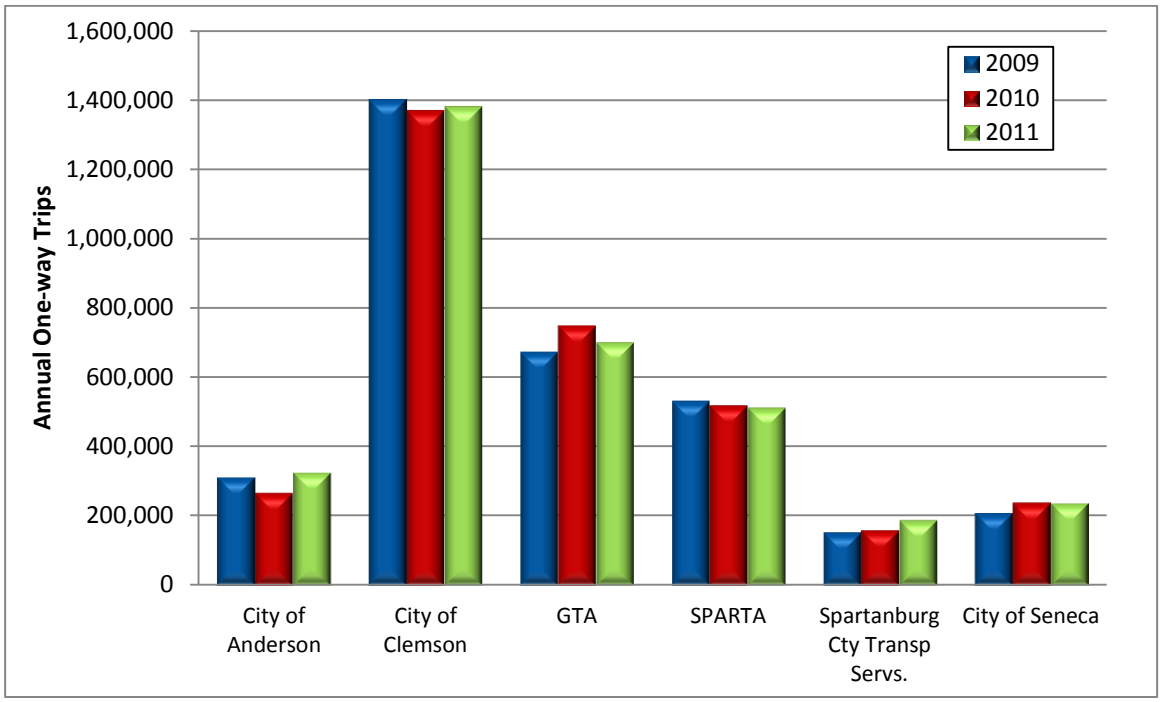


Figure 2-6: Appalachian Region Public Transportation Ridership

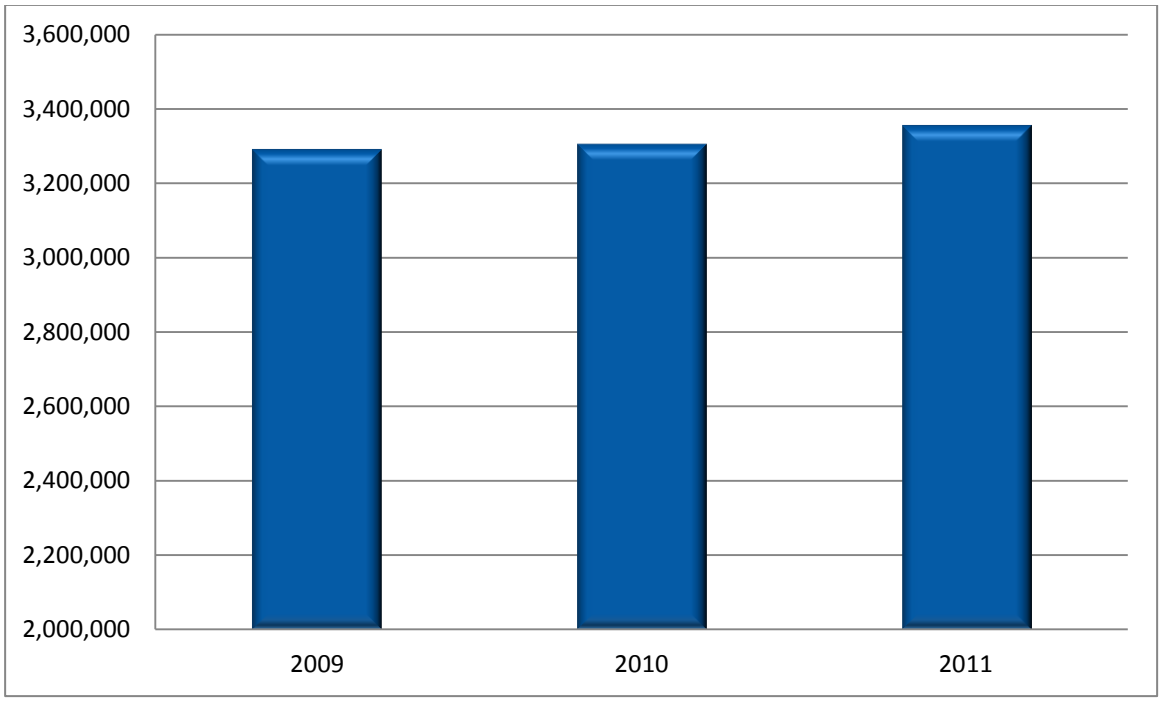


Table 2-3, Figure 2-7, and **Figure 2-8** present the annual vehicle revenue miles and annual vehicle revenue hours. The amount of service provided has increased, although recently there has been a drop in annual vehicle revenue miles of fixed route service recently. The increase in vehicle revenue miles for demand responsive service is also notable. Vehicle revenue miles and hours have generally increased since the completion of the 2008 statewide plan, most notably for demand responsive service. (**Table 2-4**, **Figure 2-9**, and **Figure 2-10**)

Table 2-3: Appalachian Region Annual Vehicle Revenue Miles by Agency, FY 2009 to FY 2011

Agency	Service	2009	2010	2011
City of Anderson	Fixed Route	142,458	178,156	190,033
	Demand Response	0	0	0
	Total	**142,458**	**178,156**	**190,033**
City of Clemson	Fixed Route	541,467	539,211	493,006
	Demand Response	0	0	0
	Total	**541,467**	**539,211**	**493,006**
Greenville Transit Authority / Greenlink	Fixed Route	535,801	538,296	532,192
	Demand Response	55,907	66,954	60,872
	Total	**591,708**	**605,250**	**593,064**
City of Spartanburg (SPARTA)	Fixed Route	272,805	275,826	278,747
	Demand Response	0	0	0
	Total	**272,805**	**275,826**	**278,747**
Spartanburg County Transportation Services	Fixed Route	0	0	0
	Demand Response	1,075,081	1,098,074	1,347,797
	Total	**1,075,081**	**1,098,074**	**1,347,797**
	Other - Medicaid	571,020	628,498	820,800
City of Seneca	Fixed Route	186,479	186,276	1,576,96
	Demand Response	0	0	0
	Total	**186,479**	**186,276**	**157,696**
Total Appalachian Region	**Fixed Route**	**1,679,010**	**1,717,765**	**1,651,674**
	Demand Response	**1,130,988**	**1,165,028**	**1,408,669**
	Total	**2,809,998**	**2,882,793**	**3,060,343**
	Other - Medicaid	**571,020**	**628,498**	**820,800**

NOTES:

(1) The City of Clemson service was rural in FY 2011, but was changed to the Greenville urbanized area in FY 2013 based on 2010 census data.

(2) Does not include the Mauldin-Simpsonville route which started in October, 2012

(3) Only revenue miles were reported

Figure 2-7: Appalachian Region Annual Vehicle Revenue Miles

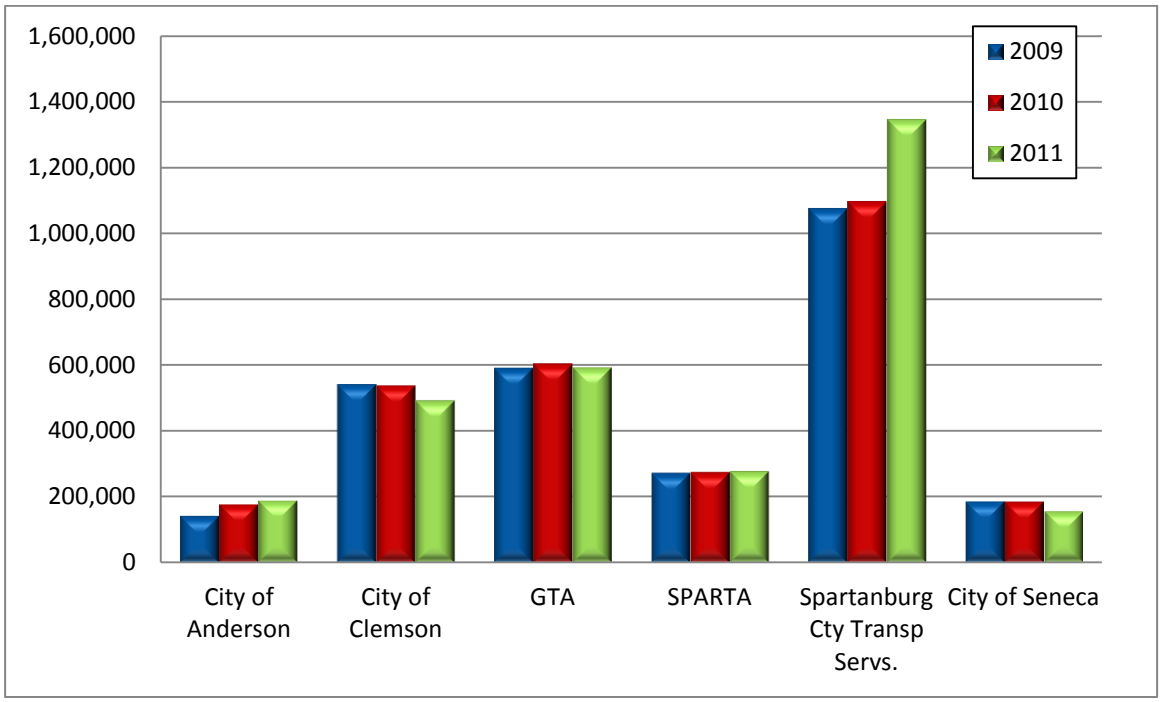


Figure 2-8: Appalachian Region Annual Vehicle Revenue Miles Trends

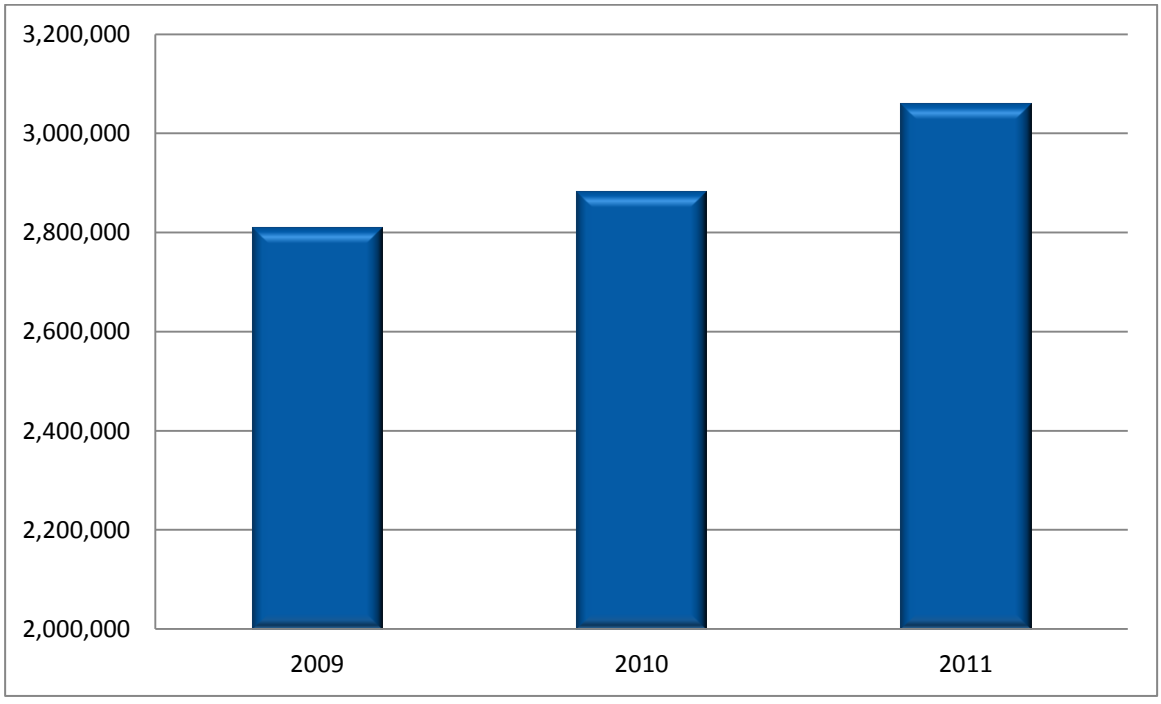


Table 2-4: Appalachian Region Annual Revenue Vehicle Hours by Agency, FY 2009 to FY 2011

Agency	Service	2009	2010	2011
City of Anderson	Fixed Route	9,372	11,024	12,496
	Demand Response	0	0	0
	Total	**9,372**	**11,024**	**12,496**
City of Clemson	Fixed Route	45,086	464,81	43,684
	Demand Response	0	0	0
	Total	45,086	46,481	43,684
Greenville Transit Authority / Greenlink	Fixed Route	38,861	37,774	39,738
	Demand Response	5,302	5,614	5,060
	Total	**44,163**	**43,388**	**44,798**
City of Spartanburg (SPARTA)	Fixed Route	21,254	21,388	22,491
	Demand Response	0	0	0
	Total	21,254	213,88	22,491
Spartanburg County Transportation Services	Fixed Route	0	0	0
	Demand Response	62,791	65,865	75,106
	Total	**62,791**	**65,865**	**75,106**
	Other - Medicaid	30,835	33,918	44,350
City of Seneca	Fixed Route	11,261	10,639	9,036
	Demand Response	0	0	0
	Total	**11,261**	**10,639**	**9,036**
Total Appalachian Region	**Fixed Route**	**125,834**	**127,306**	**127,445**
	Demand Response	**68,093**	**71,479**	**80,166**
	Total	**193,927**	**198,785**	**207,611**
	Other - Medicaid	**30,835**	**33,918**	**44,350**

Figure 2-9: Appalachian Region Annual Vehicle Revenue Hours

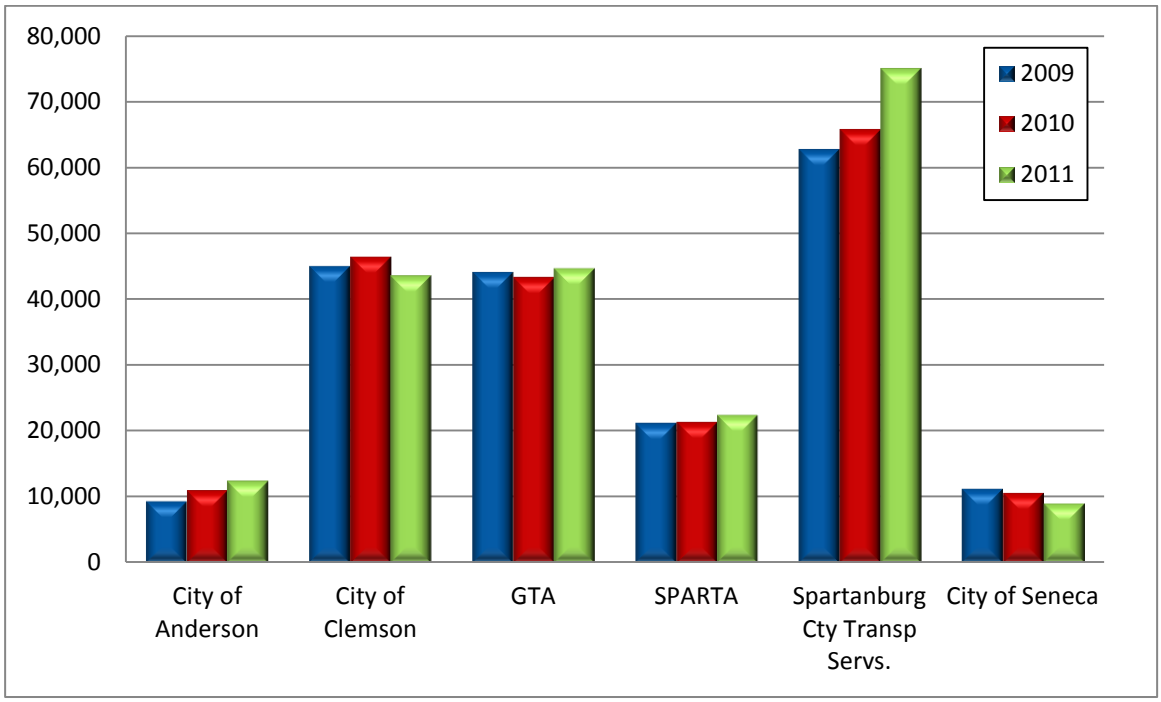
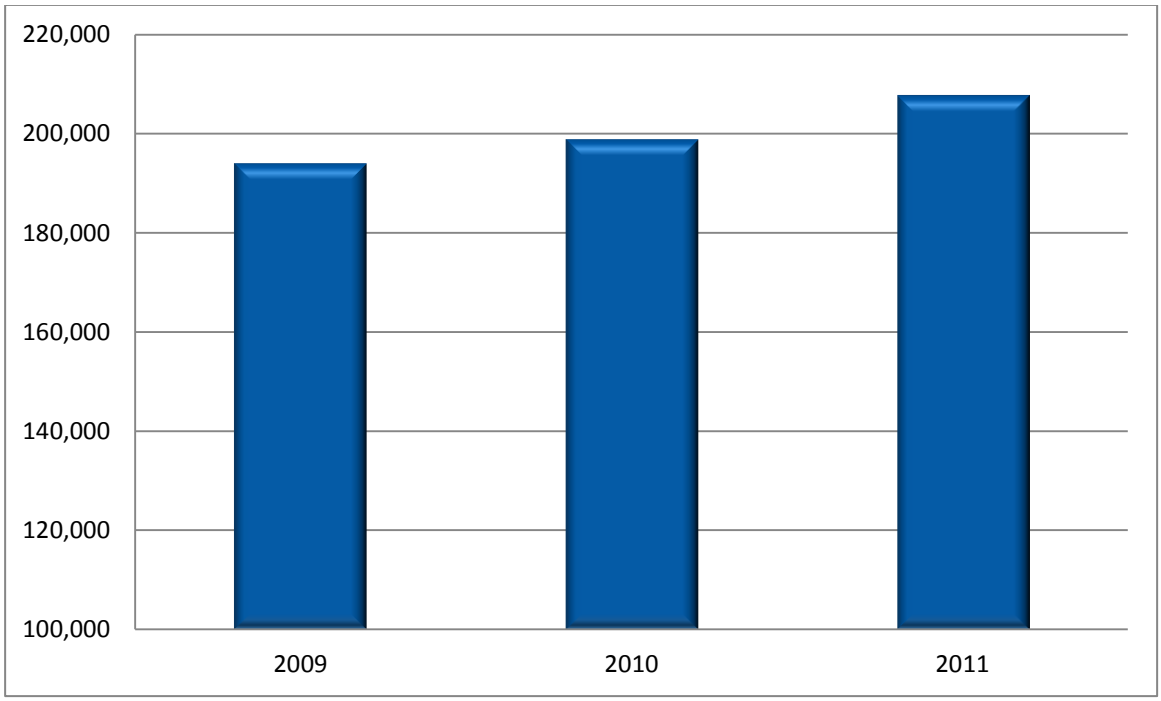


Figure 2-10: Appalachian Region Annual Vehicle Revenue Hours Trends



2.3.3 Trends In Expenditures, Efficiency, and Effectiveness

Table 2-5 and **Figures 2-11** and **2-12** present the operating/administration expenditures for each transit agency and for the Appalachian region. Costs have generally increased, particularly with the fixed route service, with the majority due to the increase in service for the City of Clemson. Since the 2008 regional plan, there has been a notable increase in total costs.

Table 2-5: Appalachian Region Operating/Administrative Costs, FY 2009 to FY 2011

Agency	Service	2009	2010	2011
City of Anderson	Fixed Route	$649,559	$675,990	$727,731
	Demand Response	$0	$0	$0
	Total	**$649,559**	**$675,990**	**$727,731**
City of Clemson	Fixed Route	$1,749,620	$2,408,806	$2,271,969
	Demand Response	$0	$0	$0
	Total	$1,749,620	$2,408,806	$2,271,969
Greenville Transit Authority / Greenlink	Fixed Route	$1,823,044	$1,809,552	$1,970,510
	Demand Response	$284,734	$223,639	$225,322
	Total	**$2,107,778**	**$2,033,191**	**$2,195,832**
City of Spartanburg (SPARTA)	Fixed Route	$1,276,177	$1,226,738	$1,195,306
	Demand Response	$0	$0	$0
	Total	**$1,276,177**	**$1,226,738**	**$1,195,306**
Spartanburg County Transportation Services	Fixed Route	$0	$0	$0
	Demand Response	$2,313,793	$2,393,176	$2,510,870
	Total	**$2,313,793**	**$2,393,176**	**$2,510,870**
	Other - Medicaid	$958,951	$1,383,717	$1,110,729
City of Seneca	Fixed Route	$529,084	$542,664	$595,588
	Demand Response	$0	$0	$0
	Total	**$529,084**	**$542,664**	**$595,588**
Total Appalachian Region	**Fixed Route**	**$6,027,484**	**$6,663,750**	**$6,761,104**
	Demand Response	**$2,598,527**	**$2,616,815**	**$2,736,192**
	Total	**$8,626,011**	**$9,280,565**	**$9,497,296**
	Other - Medicaid	**$958,951**	**$1,383,717**	**$1,110,729**

Figure 2-11: Appalachian Region Annual Operating/Administrative Costs

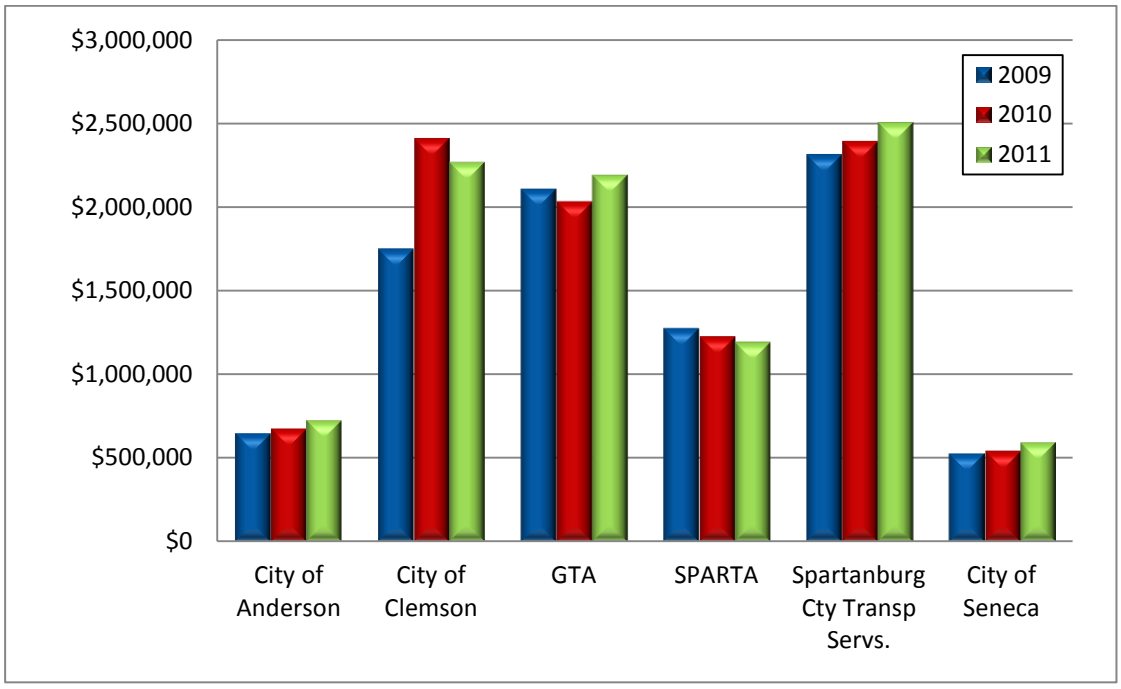
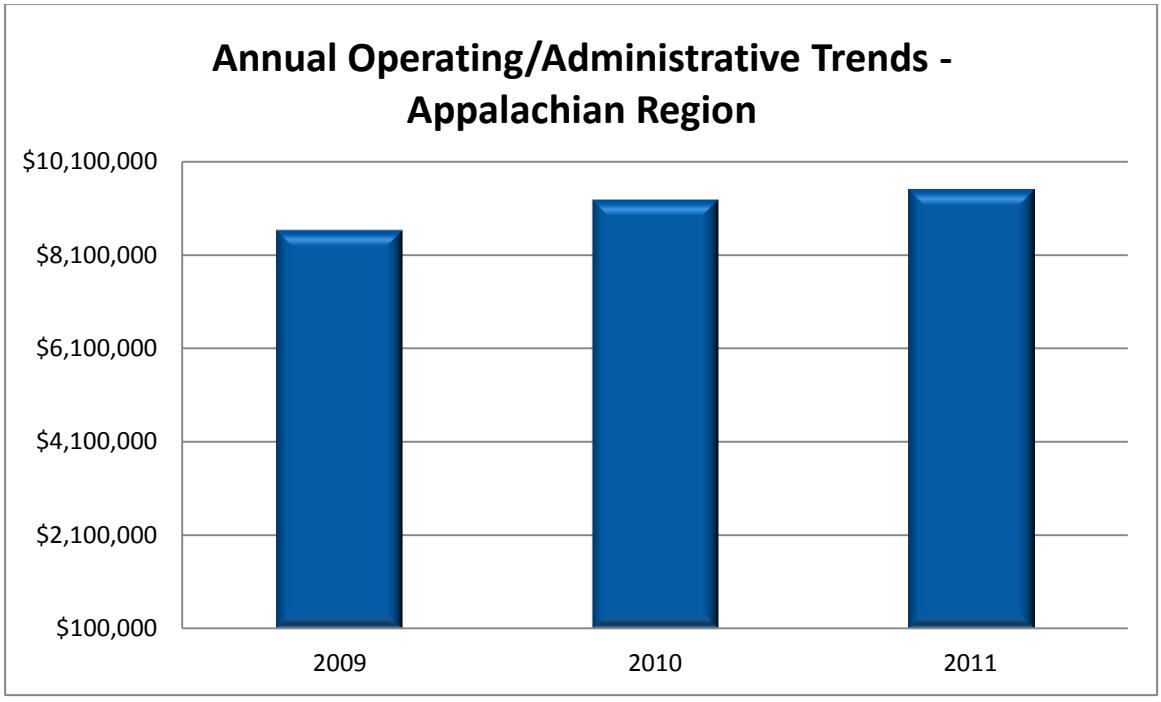


Figure 2-12: Appalachian Annual Operating/Administrative Trends



As shown in **Table 2-6** and **Figures 2-13** and **2-14**, passengers per vehicle mile have increased slightly for fixed route service, while remaining constant for demand response. Since the 2008 plan, ridership per vehicle mile has increased for fixed route, but decreased for demand response.

Table 2-6: Appalachian Region Passengers per Revenue Vehicle Mile, FY 2009 to FY 2011

Agency	Service	2009	2010	2011
City of Anderson	Fixed Route	2.20	1.50	1.72
	Demand Response			
	Total	**2.20**	**1.50**	**1.72**
City of Clemson	Fixed Route	2.59	2.54	2.81
	Demand Response			
	Total	2.59	2.54	2.81
Greenville Transit Authority / Greenlink	Fixed Route	1.25	1.38	1.31
	Demand Response	0.13	0.11	0.11
	Total	**1.14**	**1.24**	**1.18**
City of Spartanburg (SPARTA)	Fixed Route	1.96	1.88	1.84
	Demand Response			
	Total	**1.96**	**1.88**	**1.84**
Spartanburg County Transportation Services	Fixed Route			
	Demand Response	0.14	0.15	0.14
	Total	**0.14**	**0.15**	**0.14**
	Other - Medicaid	0.14	0.14	0.10
City of Seneca	Fixed Route	1.13	1.29	1.51
	Demand Response			
	Total	**1.13**	**1.29**	**1.51**
Total Appalachian Region	**Fixed Route**	**1.86**	**1.83**	**1.91**
	Demand Response	**0.14**	**0.14**	**0.14**
	Total	**1.17**	**1.15**	**1.10**
	Other - Medicaid	**0.14**	**0.14**	**0.10**

Figure 2-13: Appalachian Region Annual Passenger/Revenue Mile

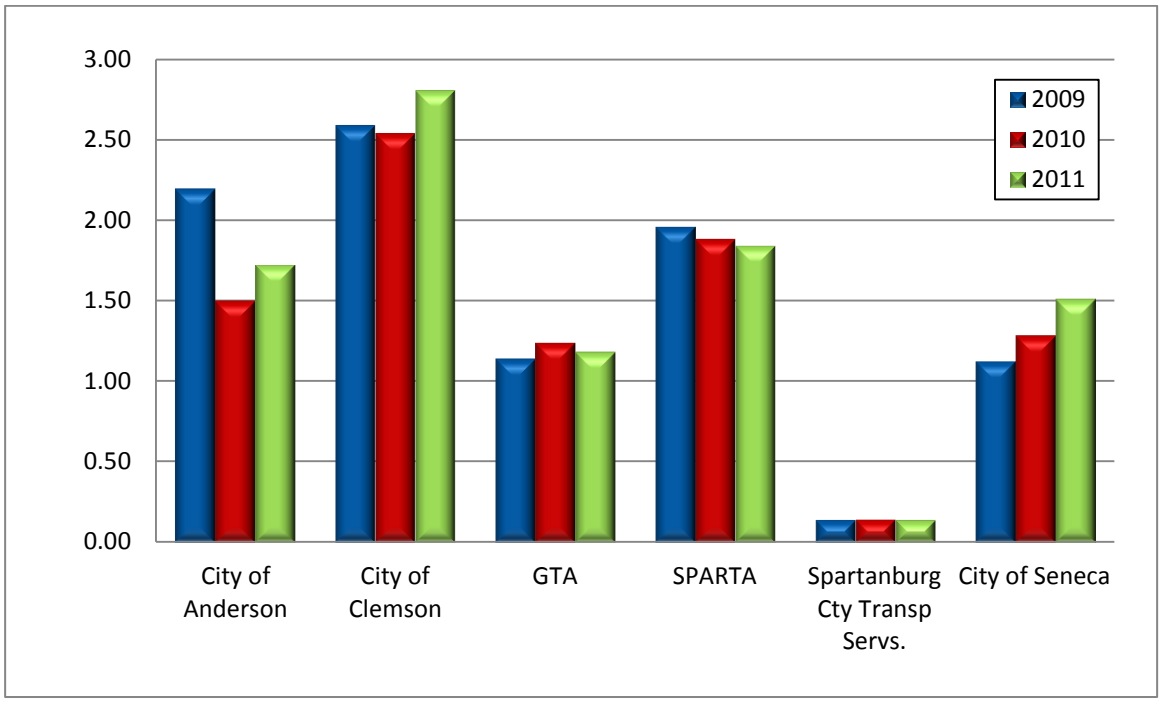


Figure 2-14: Appalachian Region Average Annual Passenger/Rev Mile

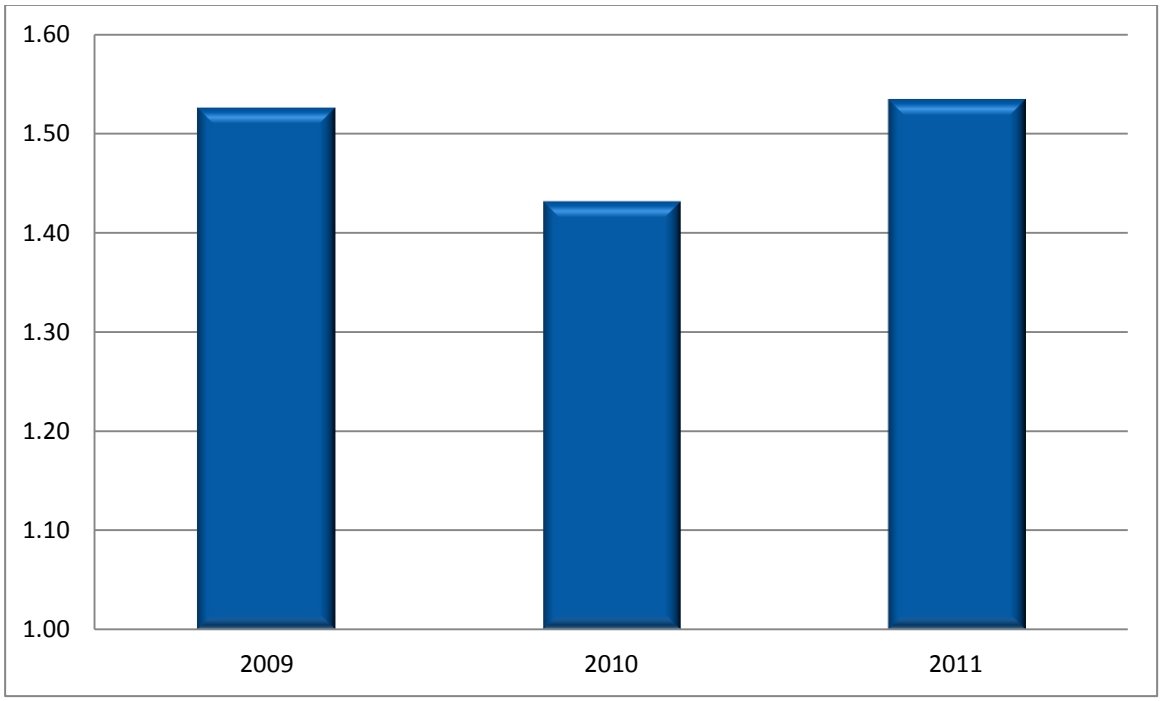


Table 2-7 and **Figures 2-15** and **2-16** show passengers per revenue vehicle hour for 2009, 2010, and 2011, which has remained stable for fixed route services, but has increased for demand response. Since the 2008 statewide plan, passengers per revenue vehicle hour has increased for fixed route and stayed about the same for demand response.

Table 2-7: Appalachian Region Passengers per Revenue Vehicle Hour, FY 2009 to FY 2011

Agency	Service	2009	2010	2011
City of Anderson	Fixed Route	33.40	24.24	26.20
	Demand Response			
	Total	33.40	24.24	26.20
City of Clemson	Fixed Route	31.13	29.47	31.68
	Demand Response			
	Total	31.13	29.47	31.68
Greenville Transit Authority / Greenlink	Fixed Route	17.19	19.65	17.51
	Demand Response	1.37	1.37	1.27
	Total	15.29	17.28	15.68
City of Spartanburg (SPARTA)	Fixed Route	25.15	24.27	22.83
	Demand Response			
	Total	25.15	24.27	22.83
Spartanburg County Transportation Services	Fixed Route			
	Demand Response	2.45	2.42	2.53
	Total	2.45	2.42	2.53
	Other - Medicaid	2.56	2.54	1.77
City of Seneca	Fixed Route	18.64	22.51	26.41
	Demand Response			
	Total	18.64	22.51	26.41
Total Appalachian Region	**Fixed Route**	**24.87**	**24.65**	**24.79**
	Demand Response	**2.37**	**2.34**	**2.45**
	Total	**16.97**	**16.62**	**16.16**
	Other - Medicaid	**2.56**	**2.54**	**1.77**

(1) The City of Clemson service was rural in FY 2011 but went into the Greenville urbanized area in FY 2013 based on 2010 census data.
(2) Does not include the Mauldin-Simpsonville route which started in October, 2012
(3) Only revenue hours were reported.

Figure 2-15: Appalachian Region Annual Passenger/Revenue Hour

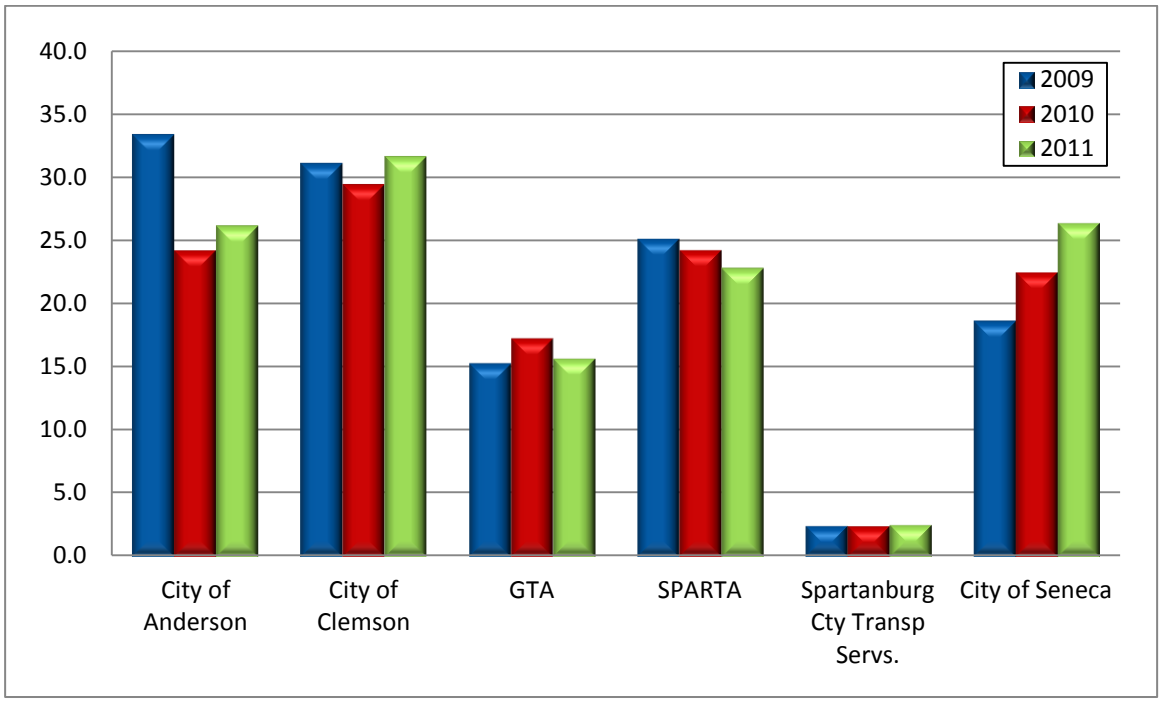


Figure 2-16: Appalachian Region Average Annual Passenger/Revenue Hour

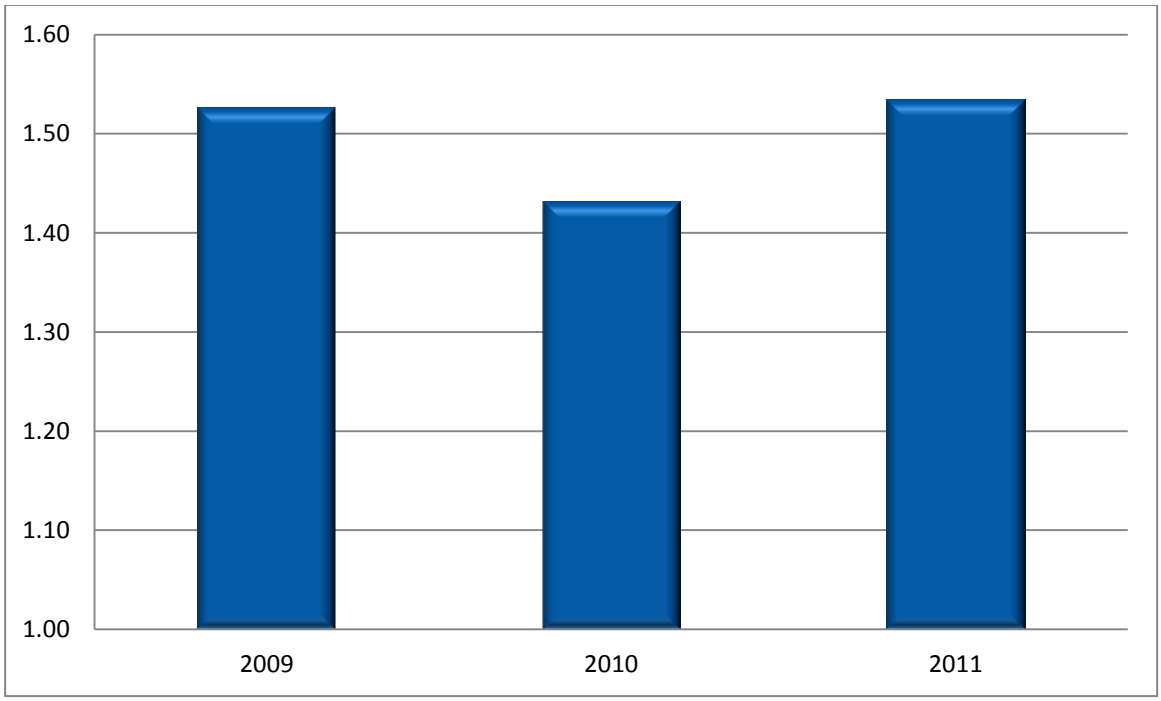


Table 2-8 and **Figures 2-17** and **2-18** present the cost per passenger trip data for 2009, 2010, and 2011. The cost per passenger trip increased slightly for fixed route service, but has decreased for demand response. The overall cost per passenger trip for the Appalachian Region has increased since the 2008 statewide plan.

Table 2-8: Appalachian Region Cost per Passenger Trip by Agency, FY 2009 to FY 2011

Agency	Service	2009	2010	2011
City of Anderson	Fixed Route	$2.08	$2.53	$2.22
	Demand Response			
	Total	**$2.08**	**$2.53**	**$2.22**
City of Clemson	Fixed Route	$1.25	$1.76	$1.64
	Demand Response			
	Total	**$1.25**	**$1.76**	**$1.64**
Greenville Transit Authority / Greenlink	Fixed Route	$2.73	$2.44	$2.83
	Demand Response	$39.21	$29.17	$35.18
	Total	**$3.12**	**$2.71**	**$3.13**
City of Spartanburg (Sparta)	Fixed Route	$2.39	$2.36	$2.33
	Demand Response			
	Total	**$2.39**	**$2.36**	**$2.33**
Spartanburg County Transportation Services	Fixed Route			
	Demand Response	$15.01	$15.02	$13.24
	Total	**$15.01**	**$15.02**	**$13.24**
	Other - Medicaid	$12.16	$16.04	$14.11
City of Seneca	Fixed Route	$2.52	$2.27	$2.50
	Demand Response			
	Total	**$2.52**	**$2.27**	**$2.50**
Total Appalachian Region	**Fixed Route**	**$1.93**	**$2.12**	**$2.14**
	Demand Response	**$16.10**	**$15.67**	**$13.96**
	Total	**$2.62**	**$2.81**	**$2.83**
	Other - Medicaid	**$12.16**	**$16.04**	**$14.11**

Figure 2-17: Appalachian Region Annual Cost/Passenger Trip

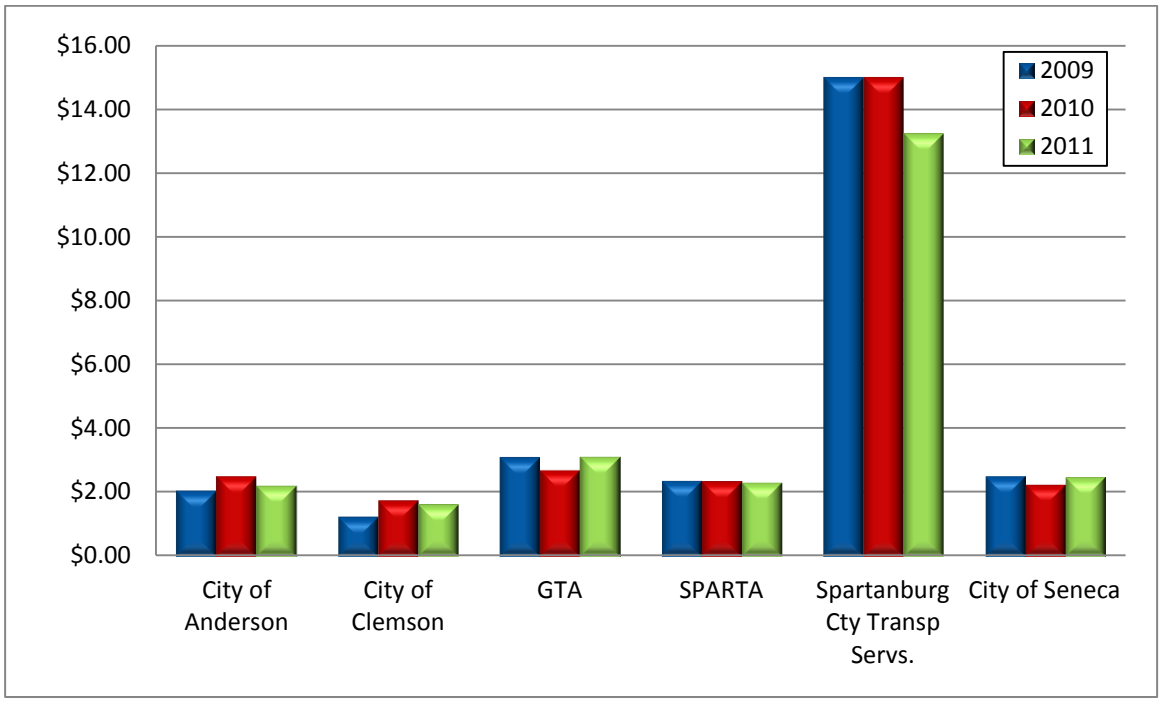
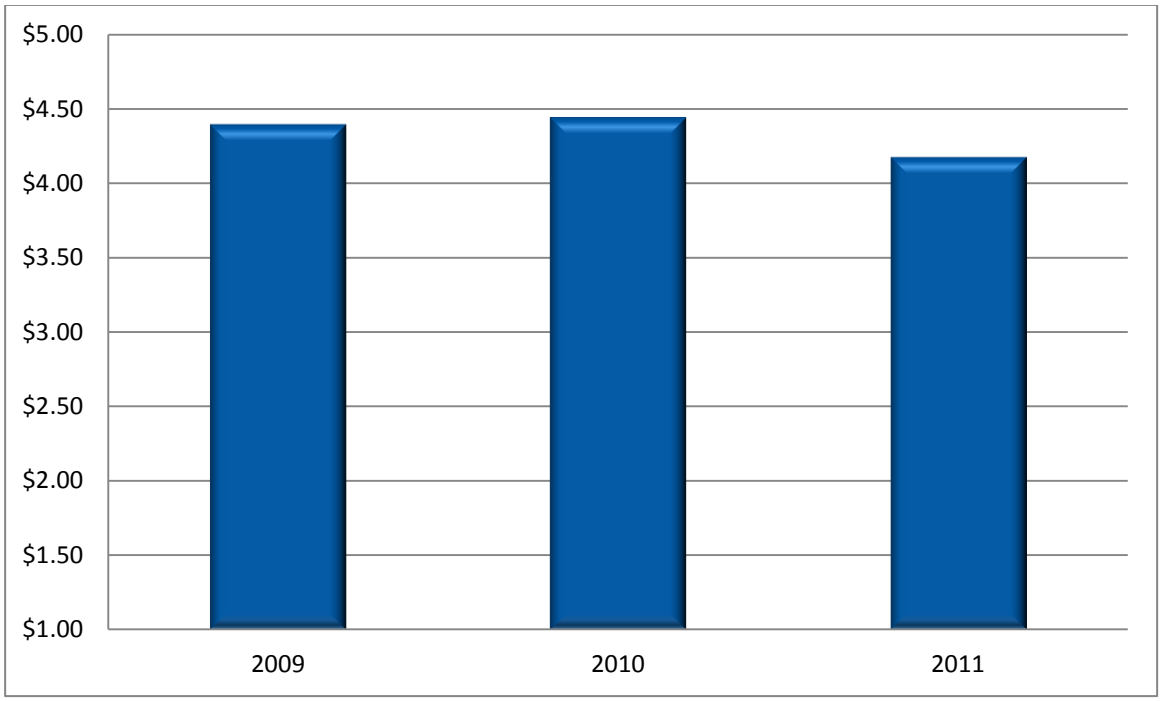


Figure 2-18: Appalachian Region Annual Cost/Passenger Trip



2.4 FY 2012 Discussion

As discussed at the beginning of this chapter, the baseline data for this report is FY 2011. Although FY 2012 had ended when the work on this public transportation plan was underway, it was not available in time to include in this report. A review of the FY 2012 operations statistics indicates that most transit statistics are within approximately 10 percent of the FY 2011 statistics. However, there are some exceptions in the Appalachian Region, which are noted below:

- City of Anderson (Electric City Transit)
  - Revenue vehicle hours – FY 2011 = 12,496; FY 2012 = 11,056
  - Cost per passenger trip – FY 2011 = $2.22; FY 2012 = $2.57
  - Operating expenses – FY 2011 = $727,731; FY 2012 = $837,468
  - Passengers per revenue vehicle hour – FY 2011 = 26.20; FY 2012 = 29.51
- City of Clemson (Clemson Area Transit System)
  - Operating expenses – FY 2011 = $2,271,969; FY 2012 = $2,569,594
- City of Seneca
  - Revenue vehicle miles – FY 2011 = 157,696; FY 2012 = 187,409
- City of Spartanburg (SPARTA)
  - Operating expenses – FY 2011 = $1,195,306; FY 2012 = $1,367,003
  - Cost per passenger – FY 2011 = $2.33; FY 2012 = $2.61
- Greenville Transit Authority (Greenlink)
  - Vehicles – FY 2011 = 26; FY 2012 = 31
  - Passengers – FY 2011 = 702,364; FY 2012 = 779,477
  - Revenue vehicle miles – FY 2011 = 593,064; FY 2012 – 523,899
  - Cost per passenger – FY 2011 = $3.13; FY 2012 = $2.55
  - Passengers per revenue vehicle mile – FY 2011 = 1.18; FY 2012 = 1.49
  - Passengers per revenue vehicle hour – FY 2011 = 15.68; FY 2012 = 18.94
- Spartanburg County Transportation Services
  - Passengers – FY 2011 = 268,354; FY 2012 = 197,322
  - Revenue vehicle miles – FY 2011 = 2,168,597; FY 2012 = 1,546,882
  - Revenue vehicle hours – FY 2011 = 119,456; FY 2012 = 92,205
  - Cost per passenger trip – FY 2011 = $13.50; FY 2012 = $17.46

2.5 Major Transfer Points, Transit Centers, Park-and-Rides

Multi-modal transit centers are located in downtown Greenville and downtown Spartanburg. Transfer points between systems are made in Clemson, between the City of Seneca system and CAT. A second transfer point is located on the north end of the City of Anderson where routes from Electric City Transit and CAT provide transfer opportunities between systems. The addition of bike racks on GTA vehicles has encouraged transit ridership among those using bicycles for transportation.

2.6 Agency Coordination

Over the past few years, significant coordination occurred to operate and promote CAT's "4-U" route and the Seneca express route. These coordination efforts have resulted in the ability for a bus rider traveling from Seneca to Anderson on to use public transit. Most recently, CAT and GTA are currently discussing the allocation of Federal urban formula funds and how the allocation will be distributed between two systems in the same urbanized area.

2.7 Intercity Services

For residents and visitors who have limited travel options, intercity bus continues to provide an important mobility service. However, for intercity bus service to have an increased role in transportation in South Carolina, the service must be provided in a way to attract more people who could otherwise fly or drive. It is difficult for intercity bus to be time-competitive with air travel or driving directly, but budget-conscious travelers may be more receptive to bus service if it is provided at a deeply-discounted fare. The "no frills" business model being used by Megabus.com and other similar providers is attempting to use low fares to attract customers who would otherwise fly or drive, but the long-term sustainability of this operation remains unproven.

As part of the focus group sessions conducted for the 2008 planning process, several community leaders and members of the general public made comments regarding the need for more public transportation options between cities or across state lines. Although the need for improved intercity transportation was recognized in the focus group sessions, there was a greater emphasis on local and regional (commute-oriented) transit needs.

Intercity rail transportation, particularly high speed rail service, has a greater potential than intercity bus to significantly impact how South Carolina residents and visitors travel between cities in the future, due to the reduced travel times, level of comfort, and direct service. As part of the 2040 MTP, a separate rail plan is being developed addressing passenger rail options.

3. HUMAN SERVICES COORDINATION

In 2007, the Appalachian Region completed the Human Services Transportation Coordination Plan. That planning effort included extensive public outreach within the region and feedback from local stakeholders. The plan included:

- An inventory of services and needs for the region.
- Strategies and actions to meet the needs.

This section of the Regional Transit Plan & Coordination provides a summary update to the 2007 planning effort by updating the state of coordination within the region, identifying needs and barriers, and identifying strategies to meet those needs. Additionally, the inclusion of social service transportation alongside public transportation provides an opportunity to see various needs and available resources across the region.

3.1 Federal Requirements

3.1.1 Background

In 2005, President Bush signed into law the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). The SAFETEA-LU legislation authorized the provision of $286.4 billion in funding for federal surface transportation programs over six years through FY 2009, including $52.6 billion for federal transit programs. SAFETEA-LU was extended multiple times in anticipation of a new surface transportation act. Both the Intermodal Surface Transportation Efficiency Act (ISTEA) and Transportation Equity Act for the 21st Century (TEA-21) predate SAFETEA-LU. SAFETEA-LU was the most recent surface transportation act authorizing federal spending on highway, transit, and transportation-related projects, until the passage of Moving Ahead for the 21st Century (MAP-21) was signed into law in June 2012.

Projects funded through three programs under SAFETEA-LU, including the Elderly Individuals and Individuals with Disabilities Program (Section 5310), Job Access and Reverse Commute Program [(JARC) Section 5316], and New Freedom Program (Section 5317), were required to be derived from a locally developed, coordinated public transit-human services transportation plan. The 2007 Human Services Transportation Plans for the Appalachian region met all federal requirements by focusing on the transportation needs of disadvantaged persons.

3.1.2 Today

In June 2012, Congress enacted a new two-year federal surface transportation authorization, MAP-21, which retained many but not all of the coordinated planning provisions of SAFETEA-LU. Under MAP-21, JARC and New Freedom are eliminated as stand-alone programs, and the Section 5310 and New Freedom Programs are consolidated under Section 5310 into a single program, Formula Grants for the Enhanced Mobility of Seniors and Individuals with Disabilities, which provides for a mix of capital and

operating funding for projects. This is the only funding program with coordinated planning requirements under MAP-21.

MAP-21 Planning Requirements: Mobility of Seniors and Individuals with Disabilities Program (Section 5310)

This section describes the revised Mobility of Seniors and Individuals with Disabilities Program (Section 5310), the only funding program with coordinated planning requirements under MAP-21, beginning with FY 2013 and currently authorized through FY 2014.

At the time this Plan update began, FTA had yet to update its guidance concerning administration of the new consolidated Section 5310 Program, but the legislation itself provides three requirements for recipients. These requirements apply to the distribution of any Section 5310 funds and require:

1. That projects selected are "included in a locally developed, coordinated public transit-human services transportation plan";
2. That the coordinated plan "was developed and approved through a process that included participation by seniors, individuals with disabilities, representatives of public, private, and nonprofit transportation and human service providers, and other members of the public"; and
3. That "to the maximum extent feasible, the services funded … will be coordinated with transportation services assisted by other Federal departments and agencies," including recipients of grants from the Department of Health and Human Services.

Under MAP-21, only Section 5310 funds are subject to the coordinated-planning requirement. Sixty percent of funds for this program are allocated by a population-based formula to large urbanized areas with a population of 200,000 or more, with the remaining 40 percent each going to State's share of seniors and individuals with disabilities in small-urbanized areas (20 percent) and rural areas (20 percent).

Recipients are authorized to make grants to subrecipients including a State or local governmental authority, a private nonprofit organization, or an operator of public transportation for:

- Public transportation projects planned, designed, and carried out to meet the special needs of seniors and individuals with disabilities when public transportation is insufficient, inappropriate, or unavailable;
- Public transportation projects that exceed the requirements of the Americans with Disabilities Act;
- Public transportation projects that improve access to fixed route services and decrease reliance by individuals with disabilities on complementary paratransit; and
- Alternatives to public transportation that assist seniors and individuals with disabilities with transportation.

Section 5310 funds will pay for up to 50 percent of operating costs and 80 percent for capital costs. The remaining funds are required to be provided through local match sources. A minimum of 55 percent of funds apportioned to recipients are required to be used for capital projects. Pending updated guidance from FTA on specific activities eligible for Section 5310 funding under MAP-21, potential applicants may consider the eligible activities described in the existing guidance for Section 5310 and New Freedom programs authorized under SAFETEA-LU as generally applicable to the new 5310 program under MAP-21.

This section of the report (Chapter 3) identifies the state of coordination within each region and a range of strategies intended to promote and advance local coordination efforts to improve transportation for persons with disabilities, older adults, and persons with low incomes.

3.2 Goals for Coordinated Transportation

The 2007 Appalachian Human Services Transportation Coordination Plan did not include specific coordination goals within the report. In order to evaluate the needs and strategies identified below, the following coordinated transportation goals are presented below. These goals also support the overall SCMTP goals, which are presented in Chapter 4.

The goals are:

- Provide an accessible public transportation network in the region that offers frequency and span of service to support spontaneous use for a wide range of needs; this may include direct commute service, as well as frequent local service focused within higher density areas.
- Maximize the farebox recovery rate and ensure that operation of the transit system is fiscally responsible;
- Offer accessible public and social service transportation services that are productive, coordinated, convenient, and appropriate for the markets being served; The services should be reliable and offer competitive travel times to major destinations; support economic development;
- Enhance the mobility choices of the transportation disadvantaged by improving coordination and developing alternative modes of transportation.

3.3 Coordination Plan Update - Outreach Process

Because of the extensive outreach conducted in the region during the original 2007 Human Services Coordinated Plan, and ongoing coordination meetings within the region since then, the SCDOT approached outreach specific to the update of this Regional Transit & Coordination Plan in a streamlined fashion, working primarily with the COGs, MPOs, and transit agencies who are knowledgeable of, and serve, the target populations in their communities. The outreach effort was based upon the following principles:

- Build on existing knowledge and outreach efforts, including outreach conducted for 2007 Human Services Coordinated Plan, locally adopted transit plans, the Long Range Planning efforts within the region, and other relevant studies completed since 2007.
- Leverage existing technical committees/groups and relationships to bring in new perspectives and recent changes via their networks.

Some of the specific tools for outreach included local and regional meeting presentations, in-person feedback, webpage for submitting comments, etc. The COGs contacted local agencies in their region to provide feedback and input into the existing state of coordination in the Appalachian Region, the gaps and needs in the region, and strategies to meet future needs.

3.4 State of Coordination in the Appalachian Region

As part of this plan update process, local and regional plans completed since 2007 were reviewed. In the initial 2007 Appalachian Human Services Coordination Plan, several coordinated efforts were in place then, and are still occurring in the region today.[8] Some of the activities are sponsored by the COG and other efforts are completed informally among the agencies.

- Limited purchasing of services from cousin agencies.
- Some agencies sharing of drivers.
- Occasional joint training of personnel at Charles Lea.
- Degree of informal coordination taking place.

3.5 Barriers and Needs in the Appalachian Region

An important step in completing this updated plan was to identify transportation service needs, barriers and gaps. The needs assessment provides the basis for recognizing where—and how—service for transit dependent persons can be improved. The plan provides an opportunity for a diverse range of stakeholders with a common interest in human service transportation to convene and collaborate on how best to provide transportation services for transit dependent populations. Through outreach described above through the COG, data were collected regarding transportation gaps and barriers faced in the region today. The results of the needs assessment are summarized in **Table 3-1.**

[8] Appalachian Human Services Transportation Coordination Plan, 2007.

Table 3-1: Needs Assessment Summary

Rural areas – lack of coordinated/scheduled services and coverage presents challenge for residents.
Need for more options for Veterans.
Liability and cost of providing transportation.
Price people are willing to pay for transportation services limits expansion of services.
Loss in funding for rides through Medicaid.
Limited scheduled public transit routes outside of the cities of Anderson, Clemson, Greenville and Spartanburg.
Access needed to wider range of transit options for persons seeking training at technical colleges/job training venues and employment services.
Increase in fuel costs have increased need for transit services and raised the costs of transit providers.
Increase in low income households that seek transit services due to down economy.
Overcoming the protectionist attitude of agencies that hinders working together and promoting coordination.
Human Service agencies having trouble maintaining existing services due to decline in funding from federal, state, and local funding sources.
Needs for services to serve 2nd and 3rd shift workers through public transportation.
Identifying new/supplemental funding opportunities as federal resources have declined.
Reductions in funding have led to reduction in staff and services with many providers.
Not enough funds to satisfy the transportation need.
Increase in aging population is increases demand for service.
Increasing competition for grant funds as services expand to meet increasing demand.
Aging fleets and increased repair costs create barrier to adding vehicles to expand services.
Lack of coordinated transportation services across agencies and geographic areas.
Lack of understanding of the transportation needs in the region by elected officials.

3.6 Coordination Strategies and Actions

In addition to considering which projects or actions could directly address the needs listed above, it is important to consider how best to coordinate services so that existing resources can be used as efficiently as possible. The following strategies outline a more comprehensive approach to service delivery with implications beyond the immediate funding of local projects. Examination of these coordination strategies is intended to result in consideration of policy revisions, infrastructure improvements, and coordinated advocacy and planning efforts that, in the long run, can have more profound results to address service deficiencies.

A range of potential coordination strategies was identified primarily through collaboration with the COG with direct outreach to key stakeholders in the region involved in providing service and planning of human service transportation. These stakeholders were asked to review and update the strategies identified in the 2007 Regional Human Services Transportation Plan and identify other successful

coordination efforts that are needed today. The updated strategies for the Appalachian Region show in **Table 3-2**:

Table 3-2: Updated Strategies

Establishing reliable, coordinated information resources (i.e. call center, website, information and resource referral service)
Developing a coordinated mobility management center for the region.
Referring potential riders to public transit and or other providers of transportation services.
Promote the need for and benefits of public transit and to residents and public officials to gain support for funding services.
Utilizing software applications to assist with trip scheduling and system planning.
GIS mapping (routes / customers / type of needs, etc.)
Seek additional funding sources from local officials and community organizations to supplement current funding.
Develop Volunteer Assisted Rides programs to assist persons who don't have access to or ability to pay for existing services.
Identify opportunities for pooling costs for fuel, insurance, and other common expenses.
Develop transportation voucher program that can be used across agencies to allow riders more flexibility in finding services.
Sharing of staff, facilities, and administrative services (i.e. vehicle repair, driver training, trip scheduling, vehicle storage etc.)
Sharing of rides for customers across human service/community organizations
Develop employment shuttles from fixed transit route services to outlying employment centers. Accommodate 2nd and 3rd shift workers needs for transit as part of this program.
Seek new funding sources for facility and equipment upgrades (i.e. local fees, sales tax, statewide fees).

In addition to the strategies described above, stakeholders also identified future planning efforts for the region that are a priority.

- Develop a region-wide Transit Coordination Committee to examine challenges and identify opportunities to improve coordination, increase funding and expand transportation options in the region.
- Build relationships between human service agency services and Metropolitan Planning Organizations that have expanded their boundaries and now must work together.
- Continue to work on policies that promote joint use of vehicles, staff, facilities, and equipment.
- Develop a larger regional assessment of public transit routes and services to assess opportunities for more efficient provision of services.
- Work with all providers on a coordinated campaign designed to raise awareness for the need of transportation services.

The above coordination information summarizes the gaps, barriers, and proposed strategies in the region. As recognized throughout this planning effort, successful implementation will require the joint cooperation and participation of multiple stakeholders to maximize coordination among providers in the region and across the state.

The strategies identified above should be used to develop and prioritize specific transportation projects that focus on serving individuals with disabilities, older adults, and people with limited incomes. Proposals for these specific projects would be used to apply for funding through the newly defined MAP-21 federal programs. The outreach process identified the need for the coordination of transportation planning and services. Due to the population distribution throughout the state, it appears that coordination of planning and services would best be carried out on a regional basis. One example is holding regular coordination meetings in each region (annual or bi-annual) to engage providers throughout the state.

4. VISION AND OUTREACH

4.1 MTP Vision and Goals

The Appalachian Regional Transit Plan is intended to function as a stand-alone supplement to the South Carolina Statewide 2040 MTP. The development of the 2040 MTP began with a comprehensive vision process, inclusive of workshops and meetings with SCDOT executive leadership, which was the foundation for developing the 2040 MTP goals, objectives and performance measures. SCDOT coordinated the vision development with the Department of Commerce, the Federal Highway Administration and the South Carolina State Ports Authority. The following text reflects and references elements of the 2040 MTP, as well as the Statewide Interstate Plan, Statewide Strategic Corridor Plan, the Statewide Public Transportation Plan, and the Statewide Rail Plan.

The vision statement of the 2040 MTP is as follows:

Safe, reliable surface transportation and infrastructure that effectively supports a healthy economy for South Carolina.

In addition to this vision statement, a series of goals were identified to further develop the statewide 2040 MTP. For each of these goals, an additional series of itemized metrics were developed as performance measures to implement throughout the statewide plan.

- **Mobility and System Reliability Goal:** Provide surface transportation infrastructure and services that will advance the efficient and reliable movement of people and goods throughout the state.
- **Safety Goal:** Improve the safety and security of the transportation system by implementing transportation improvements that reduce fatalities and serious injuries as well as enabling effective emergency management operations.
- **Infrastructure Condition Goal:** Maintain surface transportation infrastructure assets in a state of good repair.
- **Economic and Community Vitality Goal:** Provide an efficient and effective interconnected transportation system that is coordinated with the state and local planning efforts to support thriving communities and South Carolina's economic competitiveness in global markets.
- **Environmental Goal:** Partner to sustain South Carolina's natural and cultural resources by minimizing and mitigating the impacts of state transportation improvements.

4.2 2040 MTP Performance Measures

The above goals for all modes of transportation have suggested performance measures to be applied to the overall 2040 MTP. The Statewide Public Transportation Plan includes those performance measures, which are shown in the following tables. As indicated, the measures where public transportation has an impact for the state is indicated by a 'X' in the 'T' column under Plan Coordination.

4.2.1 Mobility and System Reliability Goal

Provide surface transportation infrastructure and services that will advance the efficient and reliable movement of people and goods throughout the state.

Background: Improved mobility and reliable travel times on South Carolina's transportation system are vital to the state's economic competitiveness and quality of life. National legislation, Moving Ahead for Progress in the 21st Century Act (MAP-21), makes highway system performance a national goal and requires states to report on their performance. SCDOT uses a combination of capital improvements and operations strategies to accommodate demand for travel. Data on congestion is rapidly becoming more sophisticated, but estimating needs based on this data and linking investment strategies to congestion outcomes remains a challenge.

Proposed Objective	Plan Coordination[1]						Potential Measures
	MTP	I	SC	F	T	R	
Plan Level							
Reduce the number of system miles at unacceptable congestion levels	X	X	X	X			Miles of NHS and state Strategic Corridor system above acceptable congestion levels (INRIX density, LOS, etc.)
Utilize the existing transportation system to facilitate enhanced modal options for a growing and diverse population and economy					X		% of transit needs met
Implementation Level							
Improve the average speed on congested corridors	X	X	X	X			Number of targeted interstate and strategic corridor miles with average peak hour speeds more than 10 MPH below posted speeds
Improve travel time reliability (on priority corridors or congested corridors)	X	X	X	X	X		Average or weighted buffer index or travel time on priority corridors
Reduce the time it takes to clear incident traffic		X	X				Average time to clear traffic incidents in urban areas
Utilize the existing transportation system to facilitate enhanced modal options for a growing and diverse population and economy				X	X		% increase in transit ridership Commuter travel time index on urban interstates[2] Truck travel time index on the freight corridor network
Potential Guiding Principles							
Encourage availability of both rail and truck modes to major freight hubs (for example ports, airports and intermodal facilities)	X	X	X	X		X	

[1] *MTP – Multimodal Transportation Plan; I – Interstate; SC – Strategic Corridors; F – Freight; T – Transit; R – Rail*
[2] *Measure identified by SCDOT in Strategic Plan. Is there data available to calculate this measure?*

Specific public transportation measures as shown above include:

- Percent of transit needs met
  - Measured by operating and capital budgets against the needs identified

- Improve travel time reliability
  - Measured by on-time performance
- Percent increase in transit ridership
  - Measured by annual ridership

4.2.2 Safety Goal

Improve the safety and security of the transportation system by implementing transportation improvements that reduce fatalities and serious injuries as well as enabling effective emergency management operations.

Background: Safe travel conditions are vital to South Carolina's health, quality of life and economic prosperity. SCDOT partners with other agencies with safety responsibilities on the state's transportation system. SCDOT maintains extensive data on safety; however, even state-of-the-art planning practices often cannot connect investment scenarios with safety outcomes.

Proposed Objective	Plan Coordination[1]						Potential Measures
	OP	I	SC	F	T	R	
Plan Level							
Improve substandard roadway.	X	X	X				% of substandard roadway improved
Implementation Level							
Reduce highway fatalities and serious injuries.	X	X	X				Number or rate of fatalities and serious injuries
Reduce bicycle and pedestrian fatalities and serious injuries.	X		X				Number or rate of bike/pedestrian fatalities and injuries
Reduce roadway departures.	X	X	X				Number of roadway departure crashes involving fatality or injury
Reduce head-on and across median crashes.	X	X	X				Number of head on and cross median
Reduce preventable transit accidents.					X		Number of accidents per 100,000 service vehicle miles
Reduce rail grade crossing accidents.						X	Number of rail grade crossing accidents
Potential Guiding Principles							
Better integrate safety and emergency management considerations into project selection and decision making.	X						
Better integrate safety improvements for bicycle, pedestrian, and other non-vehicular modes in preservation programs by identifying opportunities to accommodate vulnerable users when improvements are included in an adopted local or state plan.	X		X		X		
Work with partners to encourage safe driving behavior.	X				X		

[1] *MTP – Multimodal Transportation Plan; I – Interstate; SC – Strategic Corridors; F – Freight; T – Transit; R – Rail*

Specific public transportation measures as shown above include:

- Annual preventable accidents per 100,000 service miles
  - Measured by tracking of accidents at transit agency/NTD
- Integrate safety improvements – guiding principle that all public transportation projects in the region should continue to include multimodal aspects that integrate safety measures. One example of safety measures from transit agencies in the BCD region includes mandatory safety meetings and daily announcements to operators.

- Partnerships for safe driving behaviors - guiding principle that supports continued partnerships among public transportation agencies and human service agencies including coordinated passenger and driver training. Regional transit agencies track the number of accidents and do preventable accident driver training to decrease this number each year. Another example of proactive partnerships is agency participation at the statewide Roadeo held each year. Operators across the state are invited to attend for staff training and driver competitions.

4.2.3 Infrastructure Condition Goal

Maintain surface transportation infrastructure assets in a state of good repair.

Background: Preserving South Carolina's transportation infrastructure is a primary element of SCDOT's mission. This goal promotes public sector fiscal health by minimizing life-cycle infrastructure costs, while helping keep users' direct transportation costs low. Maintaining highway assets in a state of good repair is one of the national MAP-21 goals and requires states and transit agencies to report on asset conditions. SCDOT maintains fairly extensive data and analytical capabilities associated with monitoring and predicting infrastructure conditions.

Proposed Objective	Plan Coordination[1]						Potential Measures
	OP	I	SC	F	T	R	
Plan and Implementation Level							
Maintain or improve the current state of good repair for the NHS.	X	X	X				Number of miles of interstate and NHS system rated at "good" or higher condition[2]
Reduce the percentage of remaining state highway miles (non-interstate/strategic corridors) moving from a "fair" to a "very poor" rating while maintaining or increasing the % of miles rated as "good."	X	X	X				% of miles moving from "fair" to "very poor" condition % of miles rate "good" condition
Improve the condition of the state highway system bridges	X	X	X	X			Percent of deficient bridge deck area
Improve the state transit infrastructure in a state of good repair.					X		# and % of active duty transit vehicles past designated useful life
Potential Guiding Principles							
Recognize the importance of infrastructure condition in attracting new jobs to South Carolina by considering economic development when determining improvement priorities.	X	X	X	X			
Encourage availability of both rail and truck modes to major freight hubs (for example ports, airports and intermodal facilities).	X	X	X	X		X	
Coordinate with the SC Public Railways to consider road improvements needed to support the efficient movement of freight between the Inland Port and the Port of Charleston.			X	X		X	
Comply with Federal requirements for risk-based asset management planning while ensuring that State asset management priorities are also addressed.	X	X	X				

[1] *MTP – Multimodal Transportation Plan; I – Interstate; SC – Strategic Corridors; F – Freight; T – Transit; R – Rail*

[2] *The modal plan draft splits the Strategic Plan pavement condition objective into two tiers --- one for the NHS and one for all other roads. In keeping with MAP-21 the objective for the NHS system reflects maintaining or improving current condition while the objective for the remainder of the system is consistent with the Strategic Plan approach of "managing deterioration".*

Specific public transportation measures as shown above include:

- State of public transportation infrastructure
  - Percent of active duty vehicles past designated useful life

4.2.4 Economic and Community Vitality Goal

Provide an efficient and effective interconnected transportation system that is coordinated with state and local planning efforts to support thriving communities and South Carolina's economic competitiveness in global markets.

Background: Transportation infrastructure is vital to the economic prosperity of South Carolina. Good road, rail, transit, and air connections across the state help businesses get goods and services to markets and workers get to jobs. Communities often cite desire for economic growth as a reason for seeking additional transportation improvements, and public officials frequently justify transportation spending on its economic merits. State-of-the-art planning practices, however, offer limited potential for connecting investment scenarios with travel choices outcomes.

Proposed Objective	Plan Coordination[1]						Potential Measures
	OP	I	SC	F	T	R	
Plan Level							
Improve access and interconnectivity of the state highway system to major freight hubs (road, rail, marine and air).	X		X	X			% of freight bottlenecks addressed
Implementation Level							
Utilize the existing transportation system to facilitate enhanced freight movement to support a growing economy.	X	X		X			Truck travel time index on the freight corridor network
Maintain current truck travel speed and/ or travel time reliability performance.	X	X		X			Average truck speed on freight corridors
Potential Guiding Principles							
Work with economic development partners to identify transportation investments that will improve South Carolina's economic competitiveness.	X	X	X	X	X	X	
Work with partners to create a project development and permitting process that will streamline implementation of SCDOT investments associated with state-identified economic development opportunities.	X						
Partner with state and local agencies to coordinate planning.	X						
Encourage local governments and/or MPOs to develop and adopt bicycle and pedestrian plans.	X						
Partner with public and private sectors to identify and implement transportation projects and services that facilitate bicycle and pedestrian movement consistent with adopted bike/pedestrian plans.	X						
Encourage coordination of transit service within and among local jurisdictions.					X		
Work with partners to create a project development and permitting process that will streamline implementation of SCDOT investments associated with state identified economic development opportunities.	X						
Partner with public and private sectors to identify and implement transportation projects and services that facilitate freight movement.	X	X	X	X		X	
Encourage rail improvements that will improve connectivity and reliability of freight movement to global markets.				X		X	
Encourage availability of both rail and truck modes to major freight hubs (for example ports, airports and intermodal facilities).	X	X	X	X		X	

[1] *MTP – Multimodal Transportation Plan; I – Interstate; SC – Strategic Corridors; F – Freight; T – Transit; R – Rail*

Specific public transportation measures as shown above include:

- Identify transportation investments supporting economic development
  - Measured by identifying transit routes within a ½-mile of re-development or new property development.
- Identify local and regional coordination efforts
  - Measured by number of coordination meetings held annually including all public transportation and human services agencies
  - Measured by annual or ongoing coordination projects among public transportation and human services agencies

4.2.5 Environmental Goal

Partner to sustain South Carolina's natural and cultural resources by minimizing and mitigating the impacts of state transportation improvements.

Background: The goal is consistent with SCDOT's current environmental policies and procedures. MAP-21 includes an Environmental Sustainability goal, which requires states "to enhance the performance of the transportation system while protecting and enhancing the environment." Other than air quality, quantitative measures for impacts to the environment are difficult to calculate at the plan level. For the most part the environmental goal will be measured as projects are selected, designed, constructed and maintained over time.

Proposed Objectives	Plan Coordination[1]						Potential Measures
	OP	I	SC	F	T	R	
Plan Level							
None							
Implementation Level							
Plan, design, construct and maintain projects to avoid, minimize and mitigate impact on the state's natural and cultural resources.							Transportation-related greenhouse gas emissions (model is run by DHEC) Wetland/habitat acreage created/restored/impacted
Proposed Guiding Principles							
Partner with public and private sectors to identify and implement transportation projects and services that facilitate bicycle and pedestrian movement consistent with adopted bike/pedestrian plans.	X						
Partner to be more proactive and collaborative in avoiding vs. mitigating environmental impacts.	X	X	X	X			
Encourage modal partners to be proactive in considering and addressing environmental impacts of their transportation infrastructure investments.					X	X	
Work with environmental resource agency partners to explore the development of programmatic mitigation in South Carolina.	X	X	X	X			
Partner with permitting agencies to identify and implement improvements to environmental permitting as a part of the department's overall efforts to streamline project delivery.							

[1]*MTP – Multimodal Transportation Plan; I – Interstate; SC – Strategic Corridors; F – Freight; T – Transit; R – Rail*

Specific public transportation measures as shown above include:

- Identify impacts of transportation infrastructure improvements
  - Measured by identifying annual infrastructure projects
- If applicable, identify:
  - number of projects assisting in reduction of Vehicle Miles Traveled
  - number of projects with sustainable resources embedded into the project – such as solar panels, automatic flush toilets, recycling, recycled products, etc.

4.2.6 Equity Goal

Manage a transportation system that recognizes the diversity of the state and strives to accommodate the mobility needs of all of South Carolina's citizens.

Background: Transportation is essential to support individual and community quality of life. As a public agency SCDOT has a public stewardship responsibility that requires it to evaluate needs and priorities in a way that recognizes the diversity of the state's geographic regions and traveling public. There are no quantitative measures identified to evaluate the Equity goal.

Proposed Objectives	Plan Coordination[1]						Potential Measures
	OP	I	SC	F	T	R	
Plan Level							
None							
Potential Guiding Principles							
Ensure planning and project selection processes adequately consider rural accessibility and the unique mobility needs of specific groups.	X	X	X	X	X		
Partner with local and state agencies to encourage the provision of an appropriate level of public transit in all 46 South Carolina counties.					X		
Ensure broad-based public participation is incorporated into all planning and project development processes.	X	X	X	X	X	X	

[1] *MTP – Multimodal Transportation Plan; I – Interstate; SC – Strategic Corridors; F – Freight; T – Transit; R – Rail*

Specific public transportation measures as shown above include:

- Identify partnerships among local, regional, state officials to discuss statewide existing and future public transportation services
  - Measured by agencies attending the statewide public transportation association conference
  - Measured by SCDOT staff attendance at regional public transportation technical meetings or similar

4.3 Public Transportation Vision/Goals

An extensive and comprehensive visioning and public involvement program was completed in the 2008 regional transit planning process. The purpose was to develop a vision, goals, and a framework for public transportation in South Carolina. Input was captured from a broad range of stakeholders through several outreach methods, including focus groups, community and telephone surveys,

newsletters, public meetings, and presentations. As discussed earlier in this report, the 2040 MTP planning process builds from the momentum of the 2008 Statewide Plan and provides updated information, including public outreach and the vision for the future. The following text provides a summary of the 2008 efforts and updated information gathered since that time.

The vision for South Carolina's public transportation[9] was developed in 2008 with accompanying goals to support that vision. This vision continues to support the 2040 MTP and public transportation efforts within each region of the state. The vision statement[10] and goals were developed for purposes of guiding future decisions for public transportation in the future.

4.3.1 South Carolina Public Transportation Vision:

> *Public Transit –*
> *Connecting Our Communities*
>
> *Public transit, connecting people and places through multiple-passenger, land or water-based means, will contribute to the state's continued economic growth through a dedicated and sound investment approach as a viable mobility option accessible to all South Carolina residents and visitors.*

4.3.2 South Carolina Public Transportation Goals

The following statewide goals support the above vision and are relevant for all 10 regions across the state. As part of the 2008 statewide plan, the regional differences in goals and visions were acknowledged, but emphasis was placed on the visions common to all regions in South Carolina. In addition, "statewide" goals were identified that are not related to specific regions.

Economic Growth

- Recognize and promote public transit as a key component of economic development initiatives, such as linking workers to jobs, supporting tourism, and accommodating the growth of South Carolina as a retirement destination through public/private partnerships.
- Enhance the image of public transit through a comprehensive and continuing marketing/education program that illustrates the benefits of quality transit services.

Sound Investment Approach

- Ensure stewardship of public transit investments through a defined oversight program.
- Increase dedicated state public transit funding by $35 million by 2030.

[9] Berkeley-Charleston-Dorchester Regional Transit Plan, May 2008.
[10] Appalachian Regional Transit Plan, May 2008.

- Make public transit reasonable and affordable by encouraging more local investment and promoting coordinated land use / transportation planning at the local level.
- Utilize an incremental approach to new public transit investments that recognizes funding constraints and the need to maintain existing services.

Viability of Transit

- Provide quality, affordable public transit services using safe, clean, comfortable, reliable, and well-maintained vehicles.
- Increase statewide public transit ridership by 5 percent annually through 2030.
- Utilize different modes of public transit including bus, rail, vanpool / carpool, ferry, and other appropriate technologies, corresponding to the level of demand.

Accessibility to All

- Provide an appropriate level of public transit in all 46 South Carolina counties by 2020 that supports intermodal connectivity.
- Develop and implement a coordinated interagency human services transportation delivery network.

4.4 Public Outreach

As discussed in the previous section, the public outreach for the 2008 statewide plan was extensive. The 2040 MTP planning process continues to build from the momentum of those previous efforts to improve the overall statewide transportation network. The following section summarizes public input received for the previous plan and for the recent 2040 MTP efforts that began in July 2012.

4.4.1 Stakeholder Input

2008 Statewide Public Transportation Plan - Public Outreach

During development of the 2008 statewide public transportation plan, extensive outreach was conducted. Personal and telephone interviews were conducted with community leaders, transit system directors, and transportation planners. The general findings of that outreach were:

- Public transportation is considered a social service with taxpayers reluctantly assisting in providing funding, but the perception of transit has improved in many instances.
- Increasing traffic congestion and gas prices, the aging population, and an influx of residents from areas where transit is widely available were cited as reasons/opportunities for more transit service.

- Geographic gaps were noted in suburban areas outside of Greenville, including Easley, Greer, Simpsonville, and Mauldin. (Updated Note: GTA's Mauldin-Simpsonville route began in 2012 between the 2008 statewide plan and this update.) The need for transit connections between Greenville and Spartanburg was noted, as was the need for a transit connection from the small towns south of Anderson to the City of Anderson.
- More evening and night service to enable second and third shift workers to get to their jobs was also noted as a need.
- Education is needed so that citizens understand the availability and advantages of transit.
- Partnerships and coordination between systems are needed to provide connections.
- More local funding is needed.
- More state funding, training, and technical assistance is needed, along with streamlined procedures. Operating assistance for urban systems with population over 200,000 is needed for small systems. (Updated Note: In 2012, MAP-21 recently allowed operating assistance flexibility through the FTA 5307 Program for the first time to urban systems in areas over 200,000 persons.)

July 2012 MTP Kickoff Meeting - Transit, Bicycle, Pedestrian Session

The 2040 MTP kickoff meeting was conducted on July 31, 2012; 138 stakeholders attended representing all transportation interests from around the state. Introductory remarks on the importance of the plan and this multi-agency cooperative effort were provided by SCDOT Secretary Robert J. St. Onge Jr., Department of Commerce Secretary Bobby Hitt, South Carolina State Ports Authority Vice President Jack Ellenberg, and FHWA South Carolina Division Administrator Bob Lee. After an overview presentation describing the Multimodal Transportation Plan process and primary products, the stakeholders participated in the following three modal break-out sessions to provide input on the transportation system needs and SCDOT priorities:

- Transit and Bicycle and Pedestrian
- Interstate and Strategic Corridors
- Freight and Rail

The discussions at each session provided valuable stakeholder expectations and perspectives on the goals that should be considered in the 2040 MTP. Appendix B provides a summary of discussion questions and responses from the transit, bicycle, and pedestrian session.

Strategic Partnerships among SCDOT, Local Agencies, and Council of Governments

A key component in the development of the 10 Regional Transit Plan updates includes partnerships among SCDOT and local staff. Within South Carolina, transportation planning at the urban and regional levels is conducted by 10 Metropolitan Planning Organizations (MPOs) and 10 Councils of Governments (COGs), as listed below. This strategic partnership creates a strong foundation to identify multimodal transportation needs and joint solutions to improve the movement of people and goods throughout the entire state.

Metropolitan Planning Organizations
▪ ANATS – Anderson Area Transportation Study ▪ ARTS – Augusta/Aiken Area Transportation Study ▪ CHATS – Charleston Area Transportation Study ▪ COATS – Columbia Area Transportation Study ▪ FLATS – Florence Area Transportation Study ▪ GPATS – Greenville-Pickens Area Transportation Study ▪ GSATS – Myrtle Beach Area Transportation Study ▪ RFATS – Rock Hill Area Transportation Study ▪ SPATS – Spartanburg Area Transportation Study ▪ SUATS – Sumter Area Transportation Study

Councils of Government
▪ Appalachian Council of Governments (Anderson, Cherokee, Greenville, Oconee, Pickens, Spartanburg) ▪ Berkeley-Charleston-Dorchester Council of Governments (Berkeley, Charleston, Dorchester) ▪ Catawba Regional Planning Council (Chester, Lancaster, Union, York) ▪ Central Midlands Council of Governments (Fairfield, Lexington, Newberry, Richland) ▪ Lowcountry Council of Governments (Beaufort, Colleton, Hampton, Jasper) ▪ Lower Savannah Council of Governments (Aiken, Allendale, Bamberg, B arnwell, Calhoun, Orangeburg) ▪ Pee Dee Regional Council of Governments (Chesterfield, Darlington, Dillon, Florence, Marion, Marlboro) ▪ Santee-Lynches Regional Council of Governments (Clarendon, Kershaw, Lee, Sumter) ▪ Upper Savannah Council of Governments (Abbeville, Edgefield, Greenwood, Laurens, McCormick, Saluda) ▪ Waccamaw Regional Planning and Development Council (Georgetown, Horry, Williamsburg)

Existing transit service data, future needs, and strategies are presented in the following chapters. These data were collected from various collaboration opportunities between the study team and local agencies, including the transit agencies, COGs, and MPOs. Data, comments and input from the local agencies and the community-at-large were carefully considered in the development of this regional transit plan. The 2040 MTP planning process includes scheduled public meetings during the late summer and fall 2013. In addition, the project website, http://www.dot.state.sc.us/Multimodal/default.aspx, provides up-to-date information and an opportunity for all residents and visitors to learn about the 2040 MTP and a forum to leave comments and suggestions for the project team.

Public Transportation Statewide Opinion Survey

A public transportation opinion survey was available from February 18, 2013 through March 13, 2013 to gain input on public transportation services in the state of South Carolina. The survey asked for responses on use of public transportation, availability of transit service, mode of transportation to/from work, rating the service in your community and across the state, should public transportation be a priority for the SCDOT, what would encourage you to begin using public transportation, age, gender, number of people in the household, etc. The survey was provided through Survey Monkey, with a link available on the project website. Emails were also sent by each of the COGs to local stakeholders, grass roots committees, transit agencies, human service agencies, etc. In addition, the SCDOT completed a press release with survey link information in Spanish and English. Over the course of the survey period, 2,459 surveys were completed.

Figures 4-1, 4-**2** and 4-**3** provide an overall summary from the statewide survey. Ninety-two percent of the survey respondents use a personal vehicle for travel. The question was posed regarding what would encourage the survey respondents to ride public transit. The top three responses were rail or Bus Rapid Transit (BRT) available for trips, transit stops located close to their homes, and more frequent transit buses.

Figure 4-1: Survey Summary, Need

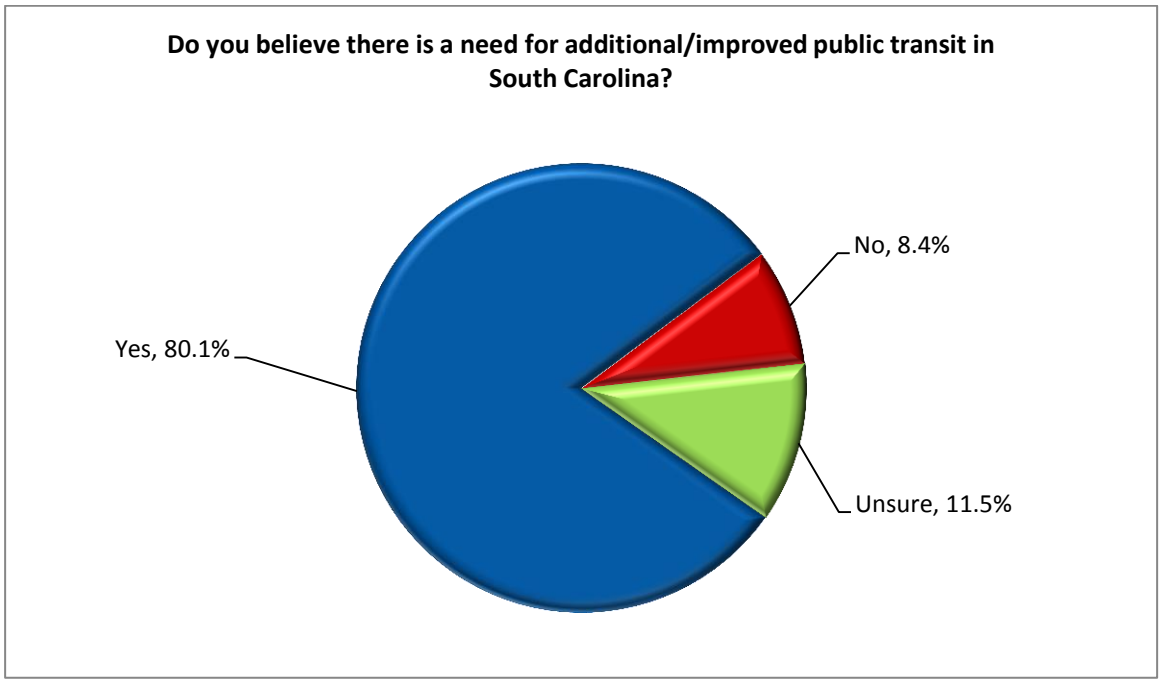


Figure 4-2: Survey Summary, Importance

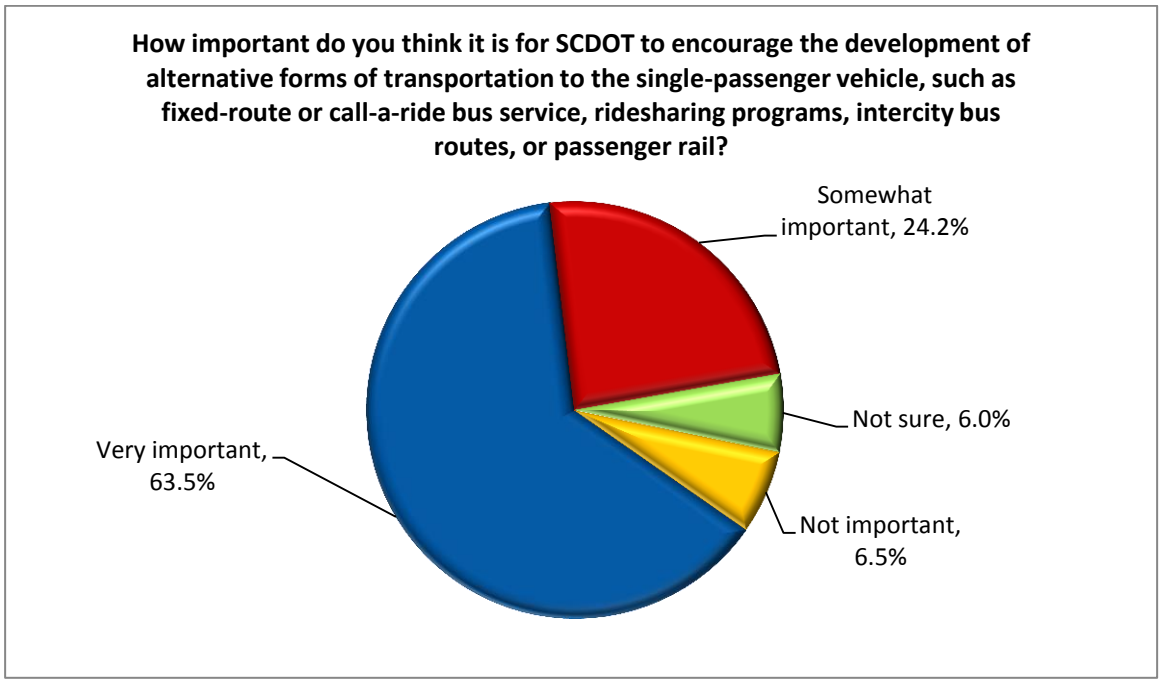
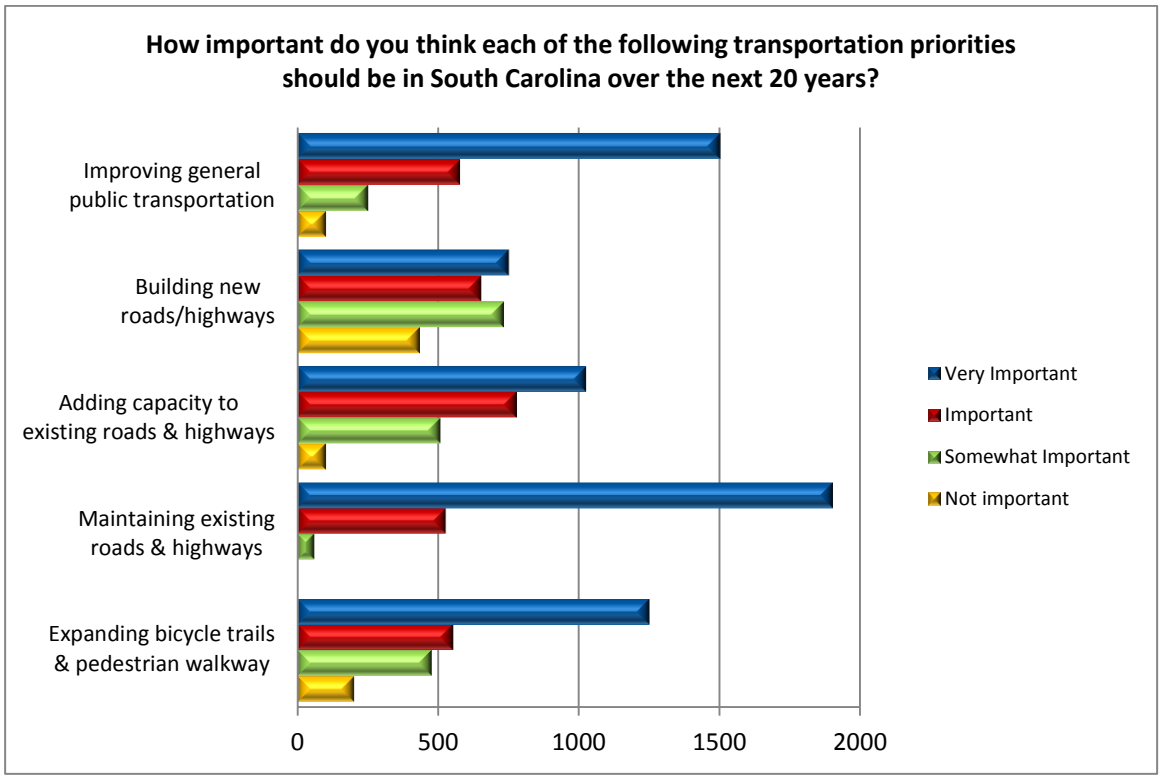


Figure 4-3: Survey Summary, Priorities



4.5 Regional Vision Summary

The major public transportation systems in the Appalachian Region include Anderson, Clemson, Greenville, and Spartanburg. Future transit plans for the region include several communities with progressive plans that include an increase in service. Those areas include:

- The Greenville Transit Authority (GTA) completed a Transit Vision and Master Plan in July 2010 to establish the future direction for GTA, including the long-term vision, operational recommendations, and identification of partners for a sustainable system in the future. In addition, the Greenville-Pickens Area has developed conceptual transitway plans as part of its Long Range Transportation Plan (LRTP). Two regional bus rapid transit (BRT) lines would converge on a dedicated bus-only roadway between downtown Greenville and the International Center for Automotive Research (ICAR). The east-west BRT line would serve the communities of Clemson, Liberty, Easley, and Verdae, as well as the ICAR and the Greenville-Spartanburg International Airport. The north-south BRT lines would connect Fountain Inn, Simpsonville, Mauldin, the ICAR campus, Verdae, Greenville, Furman University and Travelers Rest. The BRT would be supported by regional feeder bus routes and a timed transfer network in the City of Greenville. The LRTP also developed a concept plan for light rail transit in the north-south corridor as well as commuter rail in the east-west corridor. Stable funding sources have not been secured for transit improvements in these corridors.
- The Appalachian Aging and Disability Resource Center (Area Agency on Aging – AAA) identified in their FY 2010-2013 Plan that transportation is fundamental to assuring elders are able to meet their basic needs and age in place in their communities. In order to address this need, the AAA will continue to work with the Office on Aging's efforts to develop and implement the coordinated statewide transportation plan. Strategies identified in the mobility system as being developed in the Lower Savannah region will be monitored as opportunities to implement in the Appalachian region. Resource allocation will need to seek creative options (i.e., voucher systems) that expand consumer options and better leverage limited Title III-B dollars. Where feasible, resources should be allocated to contractors that demonstrate coordination of transportation funding sources. Communities must assess their existing public transportation systems to see if they are available, accessible, affordable or adaptable to the needs of a mobility-impaired aging population. In 2007, the region completed a study of regional transit coordination strategies, in response to the Federal Transit Administration's emphasis on increased coordination of transit services.

5. REGIONAL TRANSIT NEEDS

Section 4 provides the public transportation needs and deficiencies for the Appalachian Region. The analysis includes general public transit needs based on existing services and future needs identified by public input, feedback from individual transit agencies, needs identified in existing plans, and feedback from the local COG, transit agencies, and SCDOT staff.

5.1 Future Needs

Future needs for public transportation in the Appalachian Region were prepared and aggregated by transit agency and summarized for the region. The following section provides information used to calculate the overall regional needs to maintain existing public transportation services and to enhance public transit services in the future for the transportation categories.

5.1.1 Baseline Data

The primary source of documents used to establish the baseline and existing public transportation information was data reported to SCDOT annually from each individual transportation agency. These data were summarized in Section 2 of this report. The following list includes the primary sources of data.

- SCDOT Transit Trends Report, FY 2007-2011
- SCDOT Operational Statistics
- SCDOT FTA Section 5310, 5311, 5316, 5317 TEAM grant applications
- SCDOT Statewide Intercity and Regional Bus Network Plan, Final Report, May 2012.
- South Carolina Interagency Transportation Coordination Council, Building the Fully Coordinated System, Self-Assessment Tool for States, June 2010.
- SCDOT Provider Needs Survey, December 2012.
- SCDOT Regional Transit Plans, 10 Regions, 2008.

The next steps in the development of the regional plan included calculating the public transportation future needs. The needs were summarized into two scenarios:

1. Maintain existing services; and
2. Enhanced services.

5.2 Maintain Existing Services

The long-range transit operating and capital costs to maintain existing services were prepared as follows:

- **Operating Costs**: To calculate the long-term needs for maintaining existing services, a 2011 constant dollar for operating expenses was applied to each of the Appalachian Region transit agencies for the life of this plan, which extends to 2040.
- **Capital Costs**: To calculate the capital costs for maintaining existing services, two separate categories were used:
  - Cost for replacing the existing vehicle fleet, and
  - Non-fleet capital cost.

Fleet data and non-fleet capital data are reported to SCDOT annually. The non-fleet capital costs may include facility maintenance, bus stop improvements, stations, administration buildings, fare equipment, computer hardware, etc. A four-year average from FY 2008-2011 data reported by each agency was used to calculate the fleet and non-fleet capital costs for maintaining existing services for the next 29 years. Other data used for the estimation of enhancement of services (as described in the next section) included the approximate value and year of each vehicle upon arrival to the transit agency. These values were used to estimate the average cost to replace the agency fleet.

Table 5-1 summarizes the operating, administration, and capital costs to maintain the existing services to 2040. Annual costs and total cost are also presented.

Table 5-1: Appalachian Region, Maintain Existing Services Cost Summary

Agency	Maintain Services Annual	Maintain 2040 Total (29 yrs)	Maintain Services Annual	Maintain 2040 Total (29 yrs)	Maintain 2040 Total (29 yrs)
	Oper/Admin	Oper/Admin	Capital	Capital	Oper/Admin/Cap
City of Anderson	$728,000	$20,376,000	$34,000	$941,000	$21,317,000
City of Clemson	$2,272,000	$63,615,000	$4,840,000	23,518,000	$87,133,000
GTA	$2,196,000	$61,483,000	$1,926,000	$53,937,000	$115,420,000
City of Spartanburg (SPARTA)	$1,195,000	$33,469,000	$277,000	$7,767,000	$41,236,000
Spartanburg County Transportation Services	$3,622,000	$101,405,000	$1,041,000	$29,138,000	$130,543,000
City of Seneca	$596,000	$16,676,000	$100,000	$2,800,000	$19,476,000
Total Appalachian Region	**$10,608,000**	**$297,025,000**	**$4,218,000**	**$118,102,000**	**$415,126,000**

5.3 Enhanced Services

The second scenario for estimating future public transportation needs is Enhanced Services, which simply implies a higher level of service or more service alternatives for residents in the Appalachian Region than exists today. The data sources for obtaining future transit needs were obtained from:

- SCDOT Transit Trends Report, FY 2011;
- SCDOT Operational Statistics;
- SCDOT FTA Section 5310, 5311, 5316, 5317 TEAM grant applications;
- SCDOT Statewide Intercity and Regional Bus Network Plan, Final Report, May 2012;
- SCDOT Provider Needs Survey, December 2012;

- SCDOT Regional Transit Plans, 10 Regions, 2008;
- MPO Long Range Transportation Plans;
- Transit Development Plans, where applicable; and
- 2040 MTP public comments from website, statewide public transportation survey, and other public outreach.

The aforementioned planning documents were the primary resources used to identify future transit needs for the Appalachian Region. For some areas, more detailed future cost and project information were available. In other areas, projects were identified and shown as needed, but the plans did not include cost estimates for the service or project. In these cases, the average transit performance measures were used to determine a cost for the project or recent estimates for similar projects completed by the consultant team. Many needs for expanded rural and urban services were identified from recent public outreach efforts, within the above adopted plans, and also in the 2008 Human Services Coordination Plans. The needs included more frequent service, evening, weekend, employment services, and rural transit connections to major activity locations.

Table 5-2 shows a summary of the operating, administration, and capital costs for enhanced transit services through 2040. **Appendix C** provides the detailed information for each agency.

Table 5-2: Appalachian Region Enhanced Services Cost Summary

Agency	Enhance Services		2040 TOTAL (29 yrs) Enhance Service
	Oper/Admin	Capital	Oper/Admin/Cap
City of Anderson	$9,470,000	$6,475,000	$15,945,000
City of Clemson	$28,600,000	$5,800,000	$34,400,000
GTA	$102,102,000	$40,875,000	$142,977,000
City of Spartanburg (SPARTA)	$5,134,000	$8,090,000	$13,224,000
Spartanburg County Transportation Services	$12,936,000	$9,270,000	$22,206,000
City of Seneca	$780,000	$2,500,000	$3,280,000
Total Appalachian Region	**$159,022,000**	**$73,010,000**	**$232,032,000**

5.4 Needs Summary

To summarize, the total public transportation needs to maintain existing transit services and for enhanced transit services for the Appalachian Region are shown in **Table 5-3**. The public transit services in the region consist of a wide variety of services. Both general public transit services and specialized transportation for the elderly and disabled are important components of the overall network.

Table 5-3: Appalachian Region Public Transportation Needs

Agency	Maintain Services Annual	Maintain 2040 Total (29 yrs)	Maintain Services Annual	Maintain 2040 Total (29 yrs)	Maintain 2040 Total (29 yrs)	Enhance Services		2040 TOTAL (29 yrs) Enhance Service	2040 TOTAL (29 yrs) Maintain + Enhance Service
	Oper/Admin	Oper/Admin	Capital	Capital	Oper/Admin/Cap	Oper/Admin	Capital	Oper/Admin/Cap	Oper/Admin/Cap
City of Anderson	$728,000	$20,376,000	$34,000	$941,000	$21,317,079	$9,470,000	$6,475,000	$15,945,000	$37,262,000
City of Clemson	$2,272,000	$63,615,000	$840,000	$23,518,0	$87,133,000	$28,600,000	$5,800,000	$34,400,000	$121,533,000
GTA	$2,196,000	$61,483,000	$1,926,000	$53,937,000	$115,420,000	$102,102,000	$40,875,000	$142,977,000	$258,397,000
City of Spartanburg (SPARTA)	$1,195,000	$33,469,000	$277,000	$7,767,000	$41,236,000	$5,134,000	$8,090,000	$13,224,000	$54,460,000
Spartanburg County Transportation Services	$3,622,000	$101,405,000	$1,041,000	$29,138,000	$130,543,000	$12,936,000	$9,270,000	$22,206,000	$152,749,000
City of Seneca	$596,000	$16,676,000	$100,000	$2,800,000	$19,476,000	$780,000	$2,500,000	$3,280,000	$22,756,000
Total Appalachian Region	**$10,608,000**	**$297,025,000**	**$4,218,000**	**$118,102,000**	**$415,126,000**	**$159,022,000**	**$73,010,000**	**$232,032,000**	**$647,158,000**

5.5 Transit Demand vs. Need

The above sections (Section 4.2 and 4.3) of this report identify the local service needs from the individual transit systems in the Appalachian Region. Feedback from the transit agencies, the general public and the local project teams identified many needs including the expansion of daily hours of service, extending the geographic reach of service, broadening coordination activities within the family of service providers, and finding better ways of addressing commuter needs. The major urban areas, through their detailed service planning efforts, also continue to identify additional fixed-route and paratransit service expansion needs including more frequent service, greater overall capacity, expanding beyond the current borders of the service areas, and better handling of commuter needs.

As discussed earlier in the report, this study is an update to the 2008 plan that included an analysis of transit demand. Below is updated information that uses data from the 2010 U.S. Census. Gauging the need for transit is different from estimating demand for transit services. Needs will always exist whether or not public transit is available. The 2008 planning effort included quantifying the transit demand by using two different methodologies:

- **Arkansas Public Transportation Needs Assessment (APTNA) Method:** The APTNA method represents the proportional demand for transit service by applying trip rates to three population groups: the elderly, the disabled, and individuals living in poverty. The trip rates from the method are applied to population levels in a given community.
- **Mobility Gap Method:** The Mobility Gap method measures the mobility difference between households with a vehicle(s) and households without a vehicle. The concept assumes that the difference in travel between the two groups is the demand for transit among households without a vehicle.

5.5.1 Arkansas Public Transportation Needs Assessment (APTNA) Method

The APTNA method[11] represents the proportional transit demand of an area by applying trip rates to three key markets: individuals greater than 65 years old, individuals with disabilities above the poverty level under age 65, and individuals living in poverty under age 65. **Table 5-4** shows the population groups.

[11] *Arkansas Public Transportation Needs Assessment and Action Plan*, prepared for the Arkansas State Highway and Transportation Department by SG Associates, 1992. Appalachian Regional Transit Plan, 2008.

Table 5-4: Appalachian Region Population Groups

	Elderly (Over 65)				Disabled (Under 65)				Poverty (Under 65)			
	2010	2020	2030	2040	2010	2020	2030	2040	2010	2020	2030	2040
Anderson County	15,694	16,732	18,326	20,255	9,384	10,005	10,957	12,111	13,505	14,398	15,769	17,429
Cherokee County	4,156	4,265	4,303	4,791	4,798	4,924	4,968	5,531	6,341	6,508	6,565	7,310
Greenville County	22,038	24,196	26,486	29,134	9,744	10,698	11,711	12,881	18,679	20,508	22,449	24,693
Oconee County	10,829	11,503	12,991	14,390	5,543	5,888	6,650	7,366	8,025	8,525	9,627	10,664
Pickens County	8,327	8,647	9,283	10,247	5,475	5,685	6,103	6,736	7,453	7,739	8,308	9,171
Spartanburg County	24,774	26,647	28,860	31,823	14,008	15,067	16,318	17,993	20,146	21,669	23,469	25,878
Rural	***85,819***	***91,991***	***100,249***	***110,640***	***48,951***	***52,267***	***56,706***	***62,619***	***74,149***	***79,347***	***86,188***	***95,145***
Anderson County	11,308	12,056	13,204	14,594	3,473	3,703	4,055	4,482	12,200	13,007	14,245	15,745
Cherokee County	3,027	3,107	3,134	3,490	0	0	0	0	3,476	3,568	3,599	4,007
Greenville County	32,516	35,700	39,079	42,985	13,040	14,316	15,672	17,238	36,432	39,999	43,785	48,162
Oconee County	2,390	2,539	2,868	3,177	0	0	0	0	2,770	2,943	3,323	3,681
Pickens County	6,872	7,135	7,660	8,455	2,786	2,893	3,106	3,429	9,507	9,872	10,598	11,698
Spartanburg County	11,666	12,548	13,590	14,985	4,347	4,676	5,064	5,584	16,119	17,338	18,778	20,705
Urban	***67,779***	***73,085***	***79,535***	***87,686***	***23,647***	***25,588***	***27,897***	***30,733***	***80,504***	***86,725***	***94,328***	***103,998***
Appalachian COG	**153,599**	**165,076**	**179,784**	**198,325**	**72,598**	**77,855**	**84,604**	**93,352**	**154,653**	**166,072**	**180,516**	**199,143**

In the APTNA method, trip generation rates represent the resulting ridership if a high quality of service is provided in the service area. The trip rates for the APTNA method were calculated using the 2001 National Household Travel Survey (NHTS). The trip rates came from the South Region (Alabama, Arkansas, Delaware, Georgia, Louisiana, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Virginia and West Virginia excluding Florida, Kentucky, Maryland and Texas). The NHTS reported the following trip rates:[12]

- 5.8 (rural) and 6.2 (urban) for the population above 65 years of age
- 12.3 (rural) and 12.2 (urban) for people from 5 to 65 with disabilities above the poverty level, and
- 13.8 (rural) and 11.8 (urban) for people below the poverty level.

To derive transit demand, the following equations are used:

$$D_{(Rural)} = 5.8(P_{65+}) + 12.3(P_{DIS<65}) + 13.8(P_{POV})$$

$$D_{(Urban)} = 6.2(P_{65+}) + 12.2(P_{DIS<65}) + 11.8(P_{POV})$$

Where, D is demand for one-way passenger trips per year,

P_{65+} *= population of individuals 65 years old and older,*

$P_{DIS<65}$ *= population of individuals with disabilities under age 65, and*

P_{POV} *= population of individuals under age 65 living in poverty.*

Table 5-5 shows the daily and annual ridership projections for the Appalachian Region. The daily transit trips are 10,361 for the year 2010 and 13,344 for 2040. The annual transit trips for the region are projected to be approximately 4.9 million for 2040. About 56 percent of the projected daily ridership is attributed to rural areas and the remaining 44 percent to urban areas.

[12] Appalachian Regional Transit Plan, 2008, NHTS.

Table 5-5: Appalachian Region Ridership Projections using APTNA Method

	Annual Transit Demand				Daily Trip Demand			
	2010	2020	2030	2040	2010	2020	2030	2040
Anderson County	392,820	418,795	458,681	506,963	1,076	1,147	1,257	1,389
Cherokee County	170,626	175,121	176,663	196,703	467	480	484	539
Greenville County	505,445	554,929	607,464	668,177	1,385	1,520	1,664	1,831
Oconee County	241,731	256,791	289,988	321,232	662	704	794	880
Pickens County	218,488	226,874	243,551	268,840	599	622	667	737
Spartanburg County	594,000	638,905	691,973	763,009	1,627	1,750	1,896	2,090
Rural	***2,123,111***	***2,271,415***	***2,468,319***	***2,724,925***	**5,817**	**6,223**	**6,763**	**7,466**
Anderson County	256,441	273,399	299,437	330,957	703	749	820	907
Cherokee County	59,784	61,359	61,899	68,921	164	168	170	189
Greenville County	790,585	867,983	950,156	1,045,119	2,166	2,378	2,603	2,863
Oconee County	47,507	50,466	56,990	63,131	130	138	156	173
Pickens County	188,781	196,027	210,436	232,287	517	537	577	636
Spartanburg County	315,569	339,425	367,618	405,356	865	930	1,007	1,111
Urban	**1,658,667**	**1,788,660**	**1,946,537**	**2,145,771**	**4,544**	**4,900**	**5,333**	**5,879**
Appalachian COG	**3,781,778**	**4,060,075**	**4,414,856**	**4,870,696**	**10,361**	**11,123**	**12,095**	**13,344**

5.5.2 Mobility Gap Methodology[13]

The Mobility Gap method measures the difference in the household trip rate between households with vehicles available and households without vehicles available. Because households with vehicles travel more than households without vehicles, the difference in trip rates is the mobility gap. This method shows total demand for zero-vehicle household trips by a variety of modes including transit.

This method uses data that is easily obtainable, yet is stratified to address different groups of users: the elderly, the young, and those with and without vehicles. The data can be analyzed at the county level and based upon the stratified user-groups; the method produces results applicable to the state and at a realistic level of detail.

The primary strength of this method is that it is based upon data that is easily available: household data and trip rate data for households with and without vehicles. Updated population and household data were obtained from the 2010 U.S. Census. **Table 5-6** shows the rural and urban households (by age group) in the Appalachian Region without vehicles, based upon 2010 Census information. Rural and urban trip rate data were derived from the 2001 National Household Travel Survey (NHTS) at the South Region level, to be consistent in the way the APTNA trip rates were derived and discussed in the previous section.

[13] Appalachian Regional Transit Plan, 2008.

Table 5-6: Appalachian Region Household Data

	Households (15 to 64)				Households (Over 65)				Total Households Without a Vehicle			
	2010	2020	2030	2040	2010	2020	2030	2040	2010	2020	2030	2040
Anderson County	2,787	2,971	3,254	3,597	3,333	3,553	3,892	4,301	1,698	1,810	1,810	1,810
Cherokee County	1,163	1,194	1,204	1,341	1,496	1,535	1,549	1,725	798	819	819	819
Greenville County	5,145	5,649	6,183	6,801	8,123	8,918	9,763	10,738	2,425	2,662	2,662	2,662
Oconee County	1,133	1,204	1,359	1,506	1,323	1,405	1,587	1,758	926	984	984	984
Pickens County	1,468	1,524	1,636	1,806	1,585	1,646	1,767	1,950	857	890	890	890
Spartanburg County	4,390	4,722	5,114	5,639	5,573	5,994	6,492	7,159	3,027	3,256	3,256	3,256
Rural	***16,086***	***17,263***	***18,752***	***20,690***	***21,433***	***21,433***	***21,433***	***21,433***	***9,731***	***9,731***	***9,731***	***9,731***
Anderson County	1,635	1,743	1,909	2,110	1,089	1,161	1,272	1,405	2,724	2,904	2,904	2,904
Cherokee County	698	716	723	805	365	375	378	421	1,063	1,091	1,091	1,091
Greenville County	5,698	6,256	6,848	7,533	2,720	2,986	3,269	3,596	8,418	9,242	9,242	9,242
Oconee County	397	422	476	528	207	220	248	275	604	642	642	642
Pickens County	728	756	812	896	611	634	681	752	1,339	1,390	1,390	1,390
Spartanburg County	2,546	2,738	2,966	3,270	1,363	1,466	1,588	1,751	3,909	4,205	4,205	4,205
Urban	***11,702***	***12,631***	***13,734***	***15,141***	***6,355***	***6,842***	***7,436***	***8,200***	***18,057***	***19,474***	***19,474***	***18,057***
Appalachian COG	**27,788**	**29,895**	**32,485**	**35,831**	**27,788**	**28,275**	**28,869**	**29,633**	**27,788**	**29,205**	**29,205**	**27,788**

For the Mobility Gap methodology, the trip rates for households with vehicles serves as the target for those households without vehicles, and the "gap" (the difference in trip rates) is the amount of transit service needed to allow equal mobility between households with zero vehicles and households with one or more vehicles. The assumption of this method is that people without vehicles will travel as much as people who have vehicles, which is the transit demand.

The equation used in the Mobility Gap method is:

$$\textbf{Mobility Gap} = \textbf{Trip Rate}_{\text{HH w/Vehicle}} - \textbf{Trip Rate}_{\text{HH w/out Vehicle}}$$

Where, "HH w/ Vehicle" = households with one or more vehicles, and

"HH w/out Vehicle" = households without a vehicle.

Table 5-7 shows that for elderly households with people age 65 and older, a rural mobility gap of 5.88 (7.64-1.76) trips per day and an urban mobility gap of 7.40 (9.97-2.57) person-trips per day per household exist between households with and without an automobile. For younger households with individuals between the age of 15 and 64, a rural mobility gap of 6.00 (10.09-4.09) trips per day and an urban mobility gap of 0.74 (8.36-7.62) person-trips per day per household exist between households with and without an automobile.[14]

Table 5-7: Mobility Gap Rates

	Person-Trip Rates				Mobility Gap	
	Rural		Urban			
	0-Vehicle	1+vehicles	0-Vehicle	1+vehicles	Rural	Urban
Age 15-64	4.09	10.09	7.62	8.36	6.00	0.74
Age 65+	1.76	7.64	2.57	9.97	5.88	7.40

As illustrated in the calculation below, the Mobility Gap was calculated by multiplying the trip rate difference for households without vehicles available compared to households with one or more vehicles by the number of households without vehicles in each county:

Trip Rate Difference (between 0-vehicle and 1+ vehicle households) **x** ***Number of households with 0-vehicles available*** **x** ***Number of days (365)*** **=** ***Mobility Gap (number of annual trips)***

Using the updated U.S. Census 2010 household data (Table 4-6) and the appropriate Mobility Gap trip rate, the estimated demand was calculated for each county in the Appalachian Region. **Table 5-8** presents the annual and daily demand for 2010, 2020, 2030, and 2040.

[14] 2001 NHTS.

Table 5-8: Appalachian Region Travel Demand using Mobility Gap Method

	Annual Trip Demand - Mobility Gap				Daily Trip Demand			
	2010	2020	2030	2040	2010	2020	2030	2040
Anderson County	3,681,434	3,924,874	3,924,874	3,924,874	10,086	10,753	10,753	10,753
Cherokee County	1,730,144	1,775,725	1,775,725	1,775,725	4,740	4,865	4,865	4,865
Greenville County	5,257,643	5,772,367	5,772,367	5,772,367	14,405	15,815	15,815	15,815
Oconee County	2,007,661	2,132,732	2,132,732	2,132,732	5,500	5,843	5,843	5,843
Pickens County	1,858,062	1,929,377	1,929,377	1,929,377	5,091	5,286	5,286	5,286
Spartanburg County	6,562,839	7,058,975	7,058,975	7,058,975	17,980	19,340	19,340	19,340
Rural	**21,097,781**	**22,594,050**	**22,594,050**	**22,594,050**	**57,802**	**61,902**	**61,902**	**61,902**
Anderson County	4,046,638	4,314,228	4,314,228	4,314,228	11,087	11,820	11,820	11,820
Cherokee County	1,579,140	1,620,743	1,620,743	1,620,743	4,326	4,440	4,440	4,440
Greenville County	12,505,360	13,729,637	13,729,637	13,729,637	34,261	37,615	37,615	37,615
Oconee County	897,272	953,170	953,170	953,170	2,458	2,611	2,611	2,611
Pickens County	1,989,151	2,065,498	2,065,498	2,065,498	5,450	5,659	5,659	5,659
Spartanburg County	5,807,015	6,246,013	6,246,013	6,246,013	15,910	17,112	17,112	17,112
Urban	**26,824,576**	**28,929,288**	**28,929,288**	**28,929,288**	**73,492**	**79,258**	**79,258**	**79,258**
Appalachian COG	**47,922,357**	**51,523,339**	**51,523,339**	**51,523,339**	**131,294**	**141,160**	**141,160**	**141,160**

The Mobility Gap approach yields high estimates of travel need in the Appalachian Region. While this method may provide a measure of the relative mobility limitations experienced by households that lack access to a personal vehicle, it is important to acknowledge that these estimates far exceed actual trips provided by local transit systems.

The Appalachian Region's 2010 rural daily demand is approximately 60,000 person-trips per day, while urban daily demand is approximately 75,000 person-trips per day. The Mobility Gap method estimates the Appalachian Region transit demand (based upon 365 days of service) at 48 million person-trips per year for 2010, and approximately 52 million per year for 2040. Daily person-trips for the Appalachian Region would be approximately 141,000 by 2040.

5.5.3 Comparison Between Demand Methodologies

The transit demand results estimated by the two methods show a substantial difference in the range of transit service for the Appalachian region. The APTNA method estimates annual transit demand at 3.8 million person-trips per year for 2010, while the Mobility Gap method estimates annual transit demand at 47.9 million person-trips per year. **Table 5-9** compares results for the two methods.

Table 5-9: Appalachian Region Transit Demand Comparison for Two Methods

	Demand	2010	2020	2030	2040
APTNA[(1)])	Annual	3,781,778	4,060,075	4,414,856	4,870,696
Mobility Gap[(2)]	Annual	47,922,357	51,523,339	51,523,339	51,523,339
Actual	Trips 2011	3,434,157	--	--	--

[(1)] APTNA considers only 3 markets: 65+ years old; under 65, above poverty line, but disabled; and Under 65 living in poverty.
[(2)] Based on differences in household trip rates between households with vehicles available and those without – independent of age, poverty or disables characteristics.

Both methods indicate that the current level of reported transit service provided in the Appalachian Region (3.4 million annual trips) falls short of the estimated transit demand.

Key differences exist between the two model's assumptions, which are why the transit needs derived from each method are extremely different. The APTNA Method is derived specifically for the estimation of transit demand, assuming that a high-quality level of service is provided. Transit demand, as estimated by the APTNA method, is based upon three population groups: the elderly, the disabled and those living in poverty. Commuters and students within the region using transit are not factored into this methodology.

On the contrary, the Mobility Gap method estimates the additional trips that might be taken by households without a vehicle if an additional mode of transportation were provided, such as transit. The Mobility Gap method estimates transportation demand that could be served by transit. However, these trips might also be served by other modes. Therefore, the Mobility Gap method estimates an "ultimate" demand.

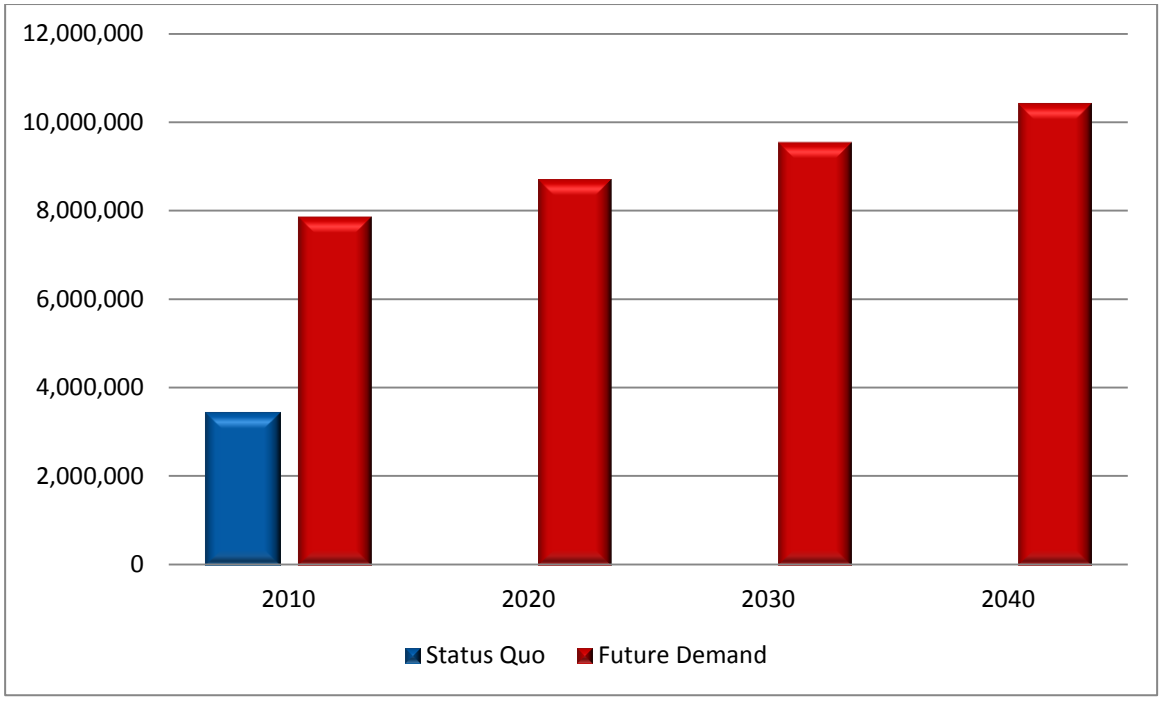
The APTNA method's estimate for urban transit need is not realistic, and the Mobility Gap method for estimating urban transit need is too overstated. In the previous 2008 plan, the methodology calculations were modified by the study team to produce a more realistic estimate. This updated plan continues to use the 2008 Plan estimates for 2010, 2020, and 2030. For 2040, an updated demand was calculated using an average of the percent of increase for the modified projections. **Table 5-10** shows the results of the adjustments made to the Appalachian Region's transit needs. A comparison with the current level of transit service in the Appalachian Region (3.4 million trips per year) suggests the adjusted transit demand method is realistic, while the estimate provided by the APTNA method is a low-end goal and the Mobility Gap method is a "high-end" goal for the region.

Table 5-10: Appalachian Region Adjusted Transit Demand

Demand	2010	2020	2030	2040
2013 Adjusted Needs	7,864,000	8,708,000	9,543,000	10,422,000
Actual Trips 2011	3,434,000	--	--	--
Needs Met	44%	--	--	--

Based on the adjusted transit demand forecast, the total transit demand in 2010 was estimated at 7.9 million one-way trips. In FY 2011, 3.43 million trips were provided. The percent of demand met is 44 percent. To meet the current transit need, 4.4 million additional trips are needed among the existing transit systems. The demand forecast shows that by 2040, the estimated transit demand will exceed 10.4 million trips (**Figure 5-1**).

Figure 5-1: Appalachian Region Transit Demand



5.6 Benefits of Expansion in Public Transportation

The impacts of public transit go beyond transportation-related measures of mobility and accessibility, and in recent years there has been increasing recognition of transit's social, economic, environmental quality, and land use and development impacts.

- **Social/Demographic**: Public transportation has significant positive impacts on personal mobility and workforce transportation, in particular for seniors, disabled persons, and low-income households (where the cost of transportation can be a major burden on household finances).
- **Economic**: Public transportation provides a cost savings to individual users in both urban and rural areas. For urban areas, transit can support a high number of workforce trips and thus major centers of employment in urban areas, and major professional corporations currently see proximity to public transit as an important consideration when choosing office locations.
- **Environmental Quality**: Under current conditions, an incremental trip using public transportation has less environmental impact and energy usage than one traveling in an automobile; and greater usage of transit will positively impact factors such as air pollution in the state. As the average fuel economy for all registered vehicles increases due to natural retirement of older inefficient vehicles and more strict emissions standards for new vehicles, the overall impact to the environment decreases. Nevertheless, public transportation is expected to continue to be a more environmentally friendly form of travel.

Research indicates the benefits of a transit investment are intimately linked with the efficiency and usefulness of the service as a convenient, well-utilized transportation asset. One example includes improvements in air pollution or roadway congestion are directly linked to capturing transit ridership that may otherwise use an automobile for a trip.

6. POTENTIAL FUNDING SOURCES

The issue of funding continues to be a crucial factor in the provision of public transit service and has proven to be the single greatest determinant of success or failure. Funding will ultimately control growth potential for the agency. Dedicated transit funding offers the most sustainable funding source for transit agencies. Experience at agencies across the country underscores the critical importance of developing secure sources of local funding – particularly for ongoing operating subsidies – if the long-term viability of transit service is to be assured. Transit agencies dependent on annual appropriations and informal agreements may have the following consequences:

- Passengers are not sure from one year to the next if service will be provided. As a result, potential passengers may opt to purchase a first or second car, rather than rely on the continued availability of transit service.
- Transit operators and staff are not sure of having a long-term position. As a result, a transit system may suffer from high turnover, low morale, and a resulting high accident rate.
- The lack of a dependable funding source inhibits investment for both vehicles and facilities. Public agencies are less likely to enter into cooperative agreements if the long-term survival of the transit organization is in doubt.

To provide high-quality transit service and to become a well-established part of the community, a dependable source of funding is essential. Factors which must be carefully considered in evaluating financial alternatives include the following:

- It must be equitable – the costs of transit service to various segments of the population must correspond with the benefits they accrue.
- Collection of tax funds must be efficient.
- It must be sustainable – the ability to confidently forecast future revenues is vital in making correct decisions regarding capital investments such as vehicles and facilities.
- It must be acceptable to the public.

A wide number of potential transit funding sources are available. The following discussion provides an overview of these programs, focusing on Federal, state, and local sources.

6.1 Appalachian Region

Given the continued growth in population and employment projected for South Carolina and the Appalachian Region, particularly in communities along the I-85 corridor, public transportation will become increasingly important as a viable transportation option. However, for the Region to provide continuous, reliable and expanding transit services, a stable funding mechanism will be imperative. Particularly in Greenville, Spartanburg, and Anderson Counties, city-county cooperation in the identification of long-term funding sources is crucial.

In the Appalachian Region's largest city, Greenville, GTA recently completed their future Transit Vision and Master Plan with coordination for services to other municipalities and major unincorporated areas in Greenville County. GTA's Transit Vision and Master Plan identified a sales tax referendum as the preferred mechanism for support of future transit services.

Transit funding revenues for the Appalachian Region are shown in **Figure 6-1** and **Table 6-1**. Approximately 15 percent of total funding for transit operations is from local funds in the region. Approximately 31 percent of the operating revenues are from Federal programs. These include FTA programs for 5307, 5310, 5311, 5316, 5317, and Federal ARRA funding dollars. Federal dollars fund approximately 96 percent of the capital expenditures in the region. State funding represents approximately 11 percent for operations and one percent of regional capital projects. The region as a whole has a farebox return ratio of approximately eight percent. This ratio is low due to the transit service in Clemson which is fare-free, but heavily subsidized by Clemson University.

Figure 6-1: Appalachian Region Operating Revenues

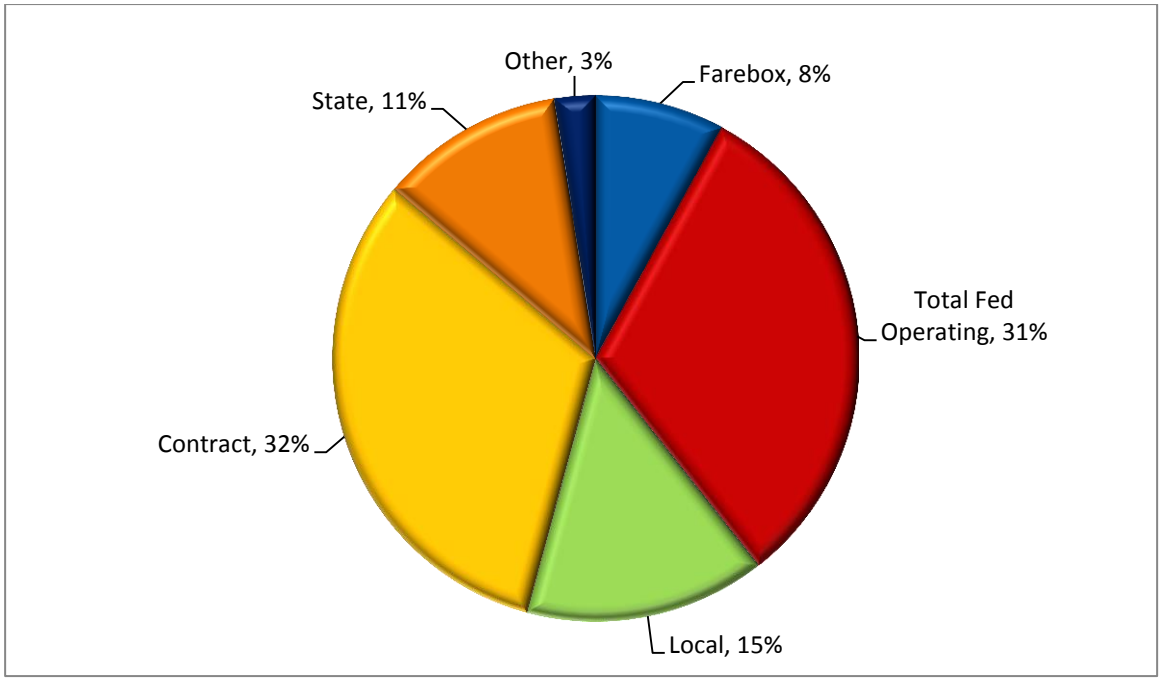


Table 6-1: Appalachian Region Transit Funding Revenues

Agency	Farebox	Operating Revenues						Capital					Total Revenue Oper/Cap
		Total Fed Operating	Local	Contract	State	Other	TOTAL OP REVENUES	Total Federal Capital Assistance	Local Cap Assist	State Cap Assist	Other	Total Cap	
City of Anderson	$63,403	$373,319	$172,250	--	$118,759	--	$727,731	--	--	--	--	--	$727,731
City of Clemson	--	$958,302	$178,853	$1,252,105	$338,999	--	$2,728,259	$2,435,202	$16,770	$16,770	--	$2,468,742	$5,197,001
GTA	$497,886	$232,451	$710,000	--	$287,251	$275,010	$2,002,597	$1,664,007	$6,471			$1,670,478	$3,673,075
City of Spartanburg (SPARTA)	$211,165	$506,904	$406,904	--	$123,470	--	$1,248,443	$8,765	--	--	$102,058	$ 110,823	$1,359,266
Spartanburg County Transportation Services	$98,421	$1,164,596	$ 48,500	$2,252,456	$265,981	--	$3,829,954	$ 311,438	--	$22,417	--	$ 333,855	$4,163,809
City of Seneca	--	$215,107	$107,591	--	$107,533	--	$430,231	--	--	--	--	--	$430,231
Total Appalachian Region	**$870,875**	**$3,450,679**	**$1,624,098**	**$3,504,561**	**$1,241,993**	**$275,010**	**$10,967,215**	**$4,419,412**	**$23,241**	**$39,187**	**$102,058**	**$4,583,898**	**$15,551,113**
% of Rev	8%	31%	15%	32%	11%	3%		96%	1%	1%	2%		

6.2 Statewide Transit Funding

To fully address transit needs in the state, new revenue sources will need to be tapped. Potential new funding sources could come from a variety of levels, including Federal, state, and local governments, transit users, and private industry contributors. Based on the level of transit need in the state, a combination of sources will be needed to make significant enhancements in the level of service that is available. In many communities, transit has been regarded as a service funded largely from Federal grants, state contributions, and passenger fares. However, with the strains on the Federal budget and restrictions on use of funds, coupled with a lack of growth in state funding, communities are recognizing that a significant local funding commitment is needed not only to provide the required match to draw down the available Federal monies, but also to support operating costs that are not eligible to be funded through other sources.

Historically, funding from local or county government in South Carolina has been allocated on a year-to-year basis, subject to the government's overall fiscal health and the priorities of the elected officials at the time. Local funding appropriated to a transit system can vary significantly from year to year, making it difficult for systems to plan for the future and initiate new services. To reduce this volatility, systems have been pushing for local dedicated funding sources that produce consistent revenues from year to year. For example, Charleston County dedicated a half-cent transportation sales tax, a portion of which is allocated to the Charleston Area Regional Transportation Authority (CARTA) and the Berkeley-Charleston-Dorchester Rural Transportation Management Association (BCDRTMA). Richland County also recently passed a one percent Transportation Tax, in addition to the Local Option Tax already imposed. The proceeds of the tax program support the Central Midlands Regional Transit Authority (CMRTA) system. **Appendix D** presents a summary chart of the South Carolina Sales and Use Taxes from www.sctax.org.

For both local leaders and residents, there appears to be a growing realization that transit funding should come from all levels of government, in addition to transit users and other sources. As part of the input gathered through the extensive 2008 Statewide Plan focus group process, participants were asked if they would be willing to have local taxes used to fund public transportation services. Of the community leaders that were surveyed, 89 percent indicated that they would be willing to have local taxes used for public transportation; likewise, 80 percent of the residents who participated in the focus groups stated that they would be willing to have their local taxes used to fund public transportation.

6.3 Federal Funding Sources

The Federal government has continued to sustain and slightly increase funding levels for public transportation in urban and rural areas. In addition, changes in program requirements have provided increased flexibility in the use of Federal funds. In October 2012, Moving Ahead for Progress in the 21st Century Act (MAP-21) passed and was signed into law. Prior to MAP-21, the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) was in place. MAP-21 has several new provisions for public transit agencies and builds upon previous surface transportation laws. **Table 6-2** provides a snapshot of the MAP-21 programs and the funding levels for two years. Future funding revenues for the long-term are presented in the overall Statewide Transit Plan.

Table 6-2: MAP-21 Programs and Funding Levels

PROGRAM	MAP-21 AUTHORIZATIONS		
	FY 2013 *(Millions of Dollars)*	**FY 2014** *(Millions of Dollars)*	**Two-Year Total** *(Millions of Dollars)*
Total All Programs	**10,578.00**	**10,695.00**	**21,273.00**
Formula Grant Programs Total(Funded from the Mass Transit Account)	**8,478.00**	**8,595.00**	**17,073.00**
§ 5305 Planning	126.90	128.80	255.70
§ 5307/5336 Urbanized Area Formula	4,397.95	4,458.65	8,856.60
§ 5310 Seniors and Individuals with Disabilities	254.80	258.30	513.10
§ 5311 Rural Area Basic Formula	537.51	545.64	1,083.15
§ 5311(b)(3) Rural Transportation Assistance Program	11.99	12.16	24.15
§ 5311(c)(1) Public Transp. on Indian Reservations	30.00	30.00	60.00
§ 5311(c)(2) Appalachian Development Public Transp.	20.00	20.00	40.00
§ 5318 Bus Testing Facility	3.00	3.00	6.00
§ 5322(d) National Transit Institute	5.00	5.00	10.00
§ 5335 National Transit Database	3.85	3.85	7.70
§ 5337 State of Good Repair	2,136.30	2,165.90	4,302.20
§ 5339 Bus and Bus Facilities Formula	422.00	427.80	849.80
§ 5340 Growing States and High Density States	518.70	515.90	1,044.60
§ 20005(b) of MAP-21 Pilot Program for TOD Planning	10.00	10.00	20.00
Other Programs Total (Funded from General Revenue)	**2,100.00**	**2,100.00**	**4,200.00**
§ 5309 Fixed-Guideway Capital Investment	1,907.00	1,907.00	3,814.00
§ 5312 Research, Development, Demo., Deployment	70.00	70.00	140.00
§ 5313 TCRP	7.00	7.00	14.00
§ 5314 Technical Assistance and Standards Development	7.00	7.00	14.00
§ Human Resources and Training	5.00	5.00	10.00
§ Emergency Relief	(a)	(a)	(a)
§ 5326 Transit Asset Management	1.00	1.00	2.00
§ 5327 Project Management Oversight	(b)	(b)	(b)
§ 5329 Public Transportation Safety	5.00	5.00	10.00
§ 5334 FTA Administration	98.00	98.00	196.00

(a) Such sums as are necessary.

(b) Project Management Oversight funds are a variable percentage takedown from capital grant programs.

Source: APTA 2013.

7. FINANCIAL PLAN

The transit needs and projects identified in this Regional Transit Plan were outlined based primarily upon improved transit coverage, higher service levels, and stakeholder and public comments in locally adopted plans. The following financial plan considers fiscal constraints and other trade-offs in the planning process. The identified transit needs require funding above and beyond what is spent today. The existing transit agencies in the region provide approximately 3.4 million trips annually, which meets 44 percent of the overall transit needs for the region. The unmet needs, given the prospect of continued population and employment growth, will include more connectivity, opportunities for improved efficiencies, greater emphasis on commuter transportation and a substantial need for increases in the overall funding for transit.

The Appalachian Region represents a cross-section of the rural networks, human service transportation programs and urban service. The public perception of transit is good within the region, but it is deemed a public service rather than a viable commute option. However, traffic issues, mobility problems, and/or the need to continue stimulating growth and economic development will continue to heighten the benefits that can be realized through the implementation of transit.

Table 7-1 presents the projected financial plan for the Appalachian Region using the "maintain existing services" scenario. The table includes projections for the short-term and for the long-term until 2040, which are cost constrained. The information was calculated using a constant FY 2011 dollar. Service levels provided today at the transit agencies would remain the same into the future. As discussed in Section 5 of this report, should this scenario continue, the unmet needs for public transit in the Appalachian Region would increase.

7.1 Increase to 50 Percent of Needs Met

The existing transit demand for 2010, as discussed earlier in Section 4, was approximately 7.9 million trips, with approximately 44 percent (3.4M trips) of that need met with existing services. The 2020 projected demand increases to 8.7 million trips. One goal for the Appalachian Region may be to increase the need met to 50 percent by 2020, which equates to providing 4.4M trips or an increase of 919,934 one-way trips. With an existing regional average of 20.9 passengers per hour, transit agencies in the region would need to increase revenue service hours by 44,000 annually (919,934/20.9). The average cost per hour for the region is $42.10. To meet approximately 50 percent of the need in 2020, operating and administrative budgets would need to increase by approximately $1.8M (44,015 x $42.10) annually.

Table 7-1: Appalachian Region Maintain Existing Services Plan

Agency	Financial Plan (2014-2020) Operating/Admin Expenses								Operating Costs 2013-2020 (8-yr Total)	Operating Costs (2021-2030)	Operating Costs (2031-2040)	28 yr Total (2013-2040)
	2013	2014	2015	2016	2017	2018	2019	2020				
City of Anderson	$727,731	$727,731	$727,731	$727,731	$727,731	$727,731	$727,731	$727,731	$5,821,848	$7,277,310	$7,277,310	$20,376,468
City of Clemson	$2,271,969	$2,271,969	$2,271,969	$2,271,969	$2,271,969	$2,271,969	$2,271,969	$2,271,969	$18,175,752	$22,719,690	$22,719,690	$63,615,132
GTA	$2,195,832	$2,195,832	$2,195,832	$2,195,832	$2,195,832	$2,195,832	$2,195,832	$2,195,832	$17,566,654	$21,958,317	$21,958,317	$61,483,288
City of Spartanburg (SPARTA)	$1,195,306	$1,195,306	$1,195,306	$1,195,306	$1,195,306	$1,195,306	$1,195,306	$1,195,306	$9,562,448	$11,953,060	$11,953,060	$33,468,568
Spartanburg County Transportation Services	$3,621,599	$3,621,599	$3,621,599	$3,621,599	$3,621,599	$3,621,599	$3,621,599	$3,621,599	$28,972,792	$36,215,990	$36,215,990	$101,404,772
City of Seneca	$595,588	$595,588	$595,588	$595,588	$595,588	$595,588	$595,588	$595,588	$4,764,704	$5,955,880	$5,955,880	$16,676,464
Total Appalachian Region	**$10,608,025**	**$10,608,025**	**$10,608,025**	**$10,608,025**	**$10,608,025**	**$10,608,025**	**$10,608,025**	**$10,608,025**	**$84,864,198**	**$106,080,247**	**$106,080,247**	**$297,024,692**

The above scenario with the goal of meeting 50 percent of the public transportation needs in the region is one example of increasing public transportation services for residents and visitors to the region. Citizens of the region must work with local officials to determine priorities for their community. The actions listed below support increasing the levels of public transportation.[15]

1. First and foremost, greater financial participation at both the State and local government level is critical to the success of public transportation as a viable mobility solution. Many of the transit systems in South Carolina struggle on an annual basis to generate the matching funds for Federal formula dollars.

2. A number of potential local funding mechanisms could be implemented at the local (some at the State) level to generate funds. Most of these methods require substantial political capital in order to implement them. Adding to the difficulty of establishing these mechanisms is the fact that there are legislative restrictions against them. A concerted effort among transit providers and SCDOT should be undertaken to approach the State Legislature about changes in the restrictions placed on local funding mechanisms.

3. Broad flexibility with local control for funding options must also be made available such as sales and gas taxes, vehicle registration fees, property taxes and tax allocation districts. Local governments within South Carolina (Columbia and Charleston) and elsewhere in the Southeast (including Atlanta, Charlotte and now Charleston) have used local sales tax revenues to pay for transit services.

4. State funding support for public transit should be increased to expand service and provide increased mobility and travel choices. As is the case with local funding mechanisms, legislation has restricted the use of State motor fuel user fee receipts for transit to 0.25cent out of 16.8 cents per gallon. This translates to about $6 million per year for transit programs. This fee is based purely on the level of fuel consumption, and is not indexed to inflation.

5. Transit's role in economic development and supporting tourism is on the rise and transit providers and the state transit association have taken a more visible approach to engaging chambers and economic development agencies in the planning process. Critical to the expansion of transit, as well as the introduction of premium service transit, like bus rapid transit and rail service, will be how well the transit community engages the tourism and development communities into the design of service and ultimately the funding of new service.

6. With an array of technology-oriented industries and major regional activity centers situated along the I-85 corridor, transit providers should focus their efforts on approaching the business community and tourism industry for their support of transit.

[15] 2008 Regional Transit Plan.

7. South Carolina has one of the fastest growing elderly populations in the U.S. because of the State's allure as a retirement destination. Many of these individuals have higher incomes (although may still be fixed incomes) and come from areas of the country where transit plays a greater role as a transportation option. Transit systems cannot be slow to react to new developments with elderly populations and should look for opportunities to partner with these developments to help fund transit programs. Transit service demand among the elderly population is expected to continue growing swiftly in the Appalachian Region.

8. Rural transportation is a core function of transit in South Carolina and service in these areas should be expanded. New and expanded services connecting to rural commerce centers such as Gaffney should be evaluated.

9. In South Carolina, the State is responsible for transportation and local governments are responsible for land use and zoning. Frequently there are inadequate incentives for municipalities to cooperate with one another and the State on transportation and land use issues. There is a need to take voluntary but cumulative steps toward improving transportation and land use planning in the State.

10. Access management techniques can help increase public safety, extend the life of major facilities, reduce congestion, support alternative transportation modes, and improve the appearance and quality of the built environment while ensuring appropriate access to adjacent businesses and other land uses. Managing access to transportation facilities and services is one way to preserve the operational integrity of the transportation system while ensuring its compatibility with adjacent land uses.

7.2 Conclusion

This 2040 Regional Transit Plan Update for the Appalachian Region provides information relative to transit services in the past five years. The plan identifies existing transit services, public outreach with cooperative partners - SCDOT, the MPOs, COGs, and regional stakeholders to move toward effective multimodal transportation options for the state. The need for collaborative efforts at all levels is pertinent as identified earlier in this report. Though many challenges lie ahead, this plan is realistic and provides updated information regarding future regional planning. A balance can be struck between anticipated transit demand and realistic levels of service in the Appalachian Region. State and regional partners may build on the analyses within this plan to help articulate the purpose and need for enhanced transit services and pursue the most acceptable mechanisms to fill gaps in funding.

APPENDIX A: EXISTING TRANSIT SERVICES

Table A-1: Ridership by Urban vs. Rural - Appalachian Region
FY 2009 to FY 2011

Agency	Area	2009	2010	2011
City of Anderson	Urban	313,025	267,256	327,415
	Rural	0	0	0
	Total	**313,025**	**267,256**	**327,415**
City of Clemson	Urban	0	0	0
	Rural	1403,523	1,369,916	1,383,893
	Total	1403,523	1,369,916	1,383,893
Greenville Transit Authority/Greenlink	Urban	675,417	749,766	702,364
	Rural	0	0	0
	Total	**675,417**	**749,766**	**702,364**
City of Spartanburg (SPARTA)	Urban	534,599	519,084	513,526
	Rural	0	0	0
	Total	534,599	519,084	513,526
Spartanburg County Transportation Services	Urban	92,469	95,597	113,793
	Rural	61,646	63,732	75,862
	Total	**154,115**	**159,329**	**189,655**
	Other - Medicaid	78,879	86,248	78,699
City of Seneca	Urban	0	0	0
	Rural	209,880	239,433	238,605
	Total	**209,880**	**239,433**	**238,605**
Total Appalachian Region	**Urban**	**1,615,510**	**1,631,703**	**1,657,098**
	Rural	**1,675,049**	**1,673,081**	**1,698,360**
	Total	**3,290,559**	**3,304,784**	**3,355,458**
	Other - Medicaid	**78,879**	**86,248**	**78,699**

(1) The City of Clemson service was rural in FY 2011 but went into the Greenville urbanized area in FY 2013 based on 2010 census data.

(2) Does not include the Mauldin-Simpsonville route which started in October, 2012

Table A-2: Annual Vehicle Revenue Miles Urban vs Rural - Appalachian Region
FY 2009 to FY 2011

Agency	Area	2009	2010	2011
City of Anderson	Urban	142,458	178,156	190,033
	Rural	0	0	0
	Total	**142,458**	**178,156**	**190,033**
City of Clemson	Urban	0	0	0
	Rural	541,467	539,211	493,006
	Total	541,467	539,211	493,006
Greenville Transit Authority/Greenlink	Urban	591,708	605,250	593,064
	Rural	0	0	0
	Total	**591,708**	**605,250**	**593,064**
City of Spartanburg (SPARTA)	Urban	272,805	275,826	278,747
	Rural	0	0	0
	Total	**272,805**	**275,826**	**278,747**
Spartanburg County Transportation Services	Urban	645,049	658,844	808,678
	Rural	430,032	439,230	539,119
	Total	**1,075,081**	**1,098,074**	**1,347,797**
	Other - Medicaid	571,020	628,498	820,800
City of Seneca	Urban	0	0	0
	Rural	186,479	186,276	157,696
	Total	**186,479**	**186,276**	**157,696**
Total Appalachian Region	**Urban**	**1,652,020**	**1,718,076**	**1,870,522**
	Rural	**1,157,978**	**1,164,717**	**1,189,821**
	Total	**2,809,998**	**2,882,793**	**3,060,343**
	Other - Medicaid	**571,020**	**628,498**	**820,800**

(1) The City of Clemson service was rural in FY 2011, but was changed to the Greenville urbanized area in FY 2013 based on 2010 census data.
(2) Does not include the Mauldin-Simpsonville route which started in October, 2012
(3) Only revenue miles were reported

Table A-3: Annual Revenue Vehicle Hours by Urban vs. Rural - Appalachian Region
FY 2009 to FY 2011

Agency	Area	2009	2010	2011
City of Anderson	Urban	9,372	11,024	12,496
	Rural	0	0	0
	Total	**9,372**	**11,024**	**12,496**
City of Clemson	Urban	0	0	0
	Rural	45,086	46,481	43,684
	Total	**45,086**	**46,481**	**43,684**
Greenville Transit Authority/Greenlink	Urban	44,163	43,388	44,798
	Rural	0	0	0
	Total	**44,163**	**43,388**	**44,798**
City of Spartanburg (SPARTA)	Urban	21,254	21,388	22,491
	Rural	0	0	0
	Total	**21,254**	**21,388**	**22,491**
Spartanburg County Transportation Services	Urban	37,675	39,519	48,286
	Rural	25,116	26,346	26,820
	Total	**62,791**	**65,865**	**75,106**
	Other - Medicaid	30,835	33,918	44,350
City of Seneca	Urban	0	0	0
	Rural	11,261	10,639	9,036
	Total	**11,261**	**10,639**	**9,036**
Total Appalachian Region	**Urban**	**112,464**	**115,319**	**128,071**
	Rural	**81,463**	**83,466**	**79,540**
	Total	**193,927**	**198,785**	**207,611**
	Other - Medicaid	**30,835**	**33,918**	**44,350**

(1) The City of Clemson service was rural in FY 2011 but went into the Greenville urbanized area in FY 2013 based on 2010 census data.
(2) Does not include the Mauldin-Simpsonville route which started in October, 2012
(3) Only revenue hours were reported.

Table A-4: Operating/Administrative Costs Urban vs Rural - Appalachian Region
FY 2009 to FY 2011

Agency	Area	2009	2010	2011
City of Anderson	Urban	$649,559	$675,990	$727,731
	Rural	$0	$0	$0
	Total	**$649,559**	**$675,990**	**$727,731**
City of Clemson	Urban	$0	$0	$0
	Rural	$1,749,620	$2,408,806	$2,271,969
	Total	**$1,749,620**	**$2,408,806**	**$2,271,969**
Greenville Transit Authority/Greenlink	Urban	$2,107,778	$2,033,191	$2,195,832
	Rural	$0	$0	$0
	Total	**$2,107,778**	**$2,033,191**	**$2,195,832**
City of Spartanburg (SPARTA)	Urban	$1,276,177	$1,226,738	$1,195,306
	Rural	$0	$0	$0
	Total	**$1,276,177**	**$1,226,738**	**$1,195,306**
Spartanburg County Transportation Services	Urban	$1,388,319	$1,435,913	$1,505,732
	Rural	$925,474	$957,263	$1,005,138
	Total	**$2,313,793**	**$2,393,176**	**$2,510,870**
	Other - Medicaid	$958,951	$1,383,717	$1,110,729
City of Seneca	Urban	$0	$0	$0
	Rural	$529,084	$542,664	$595,588
	Total	**$529,084**	**$542,664**	**$595,588**
Total Appalachian Region	**Urban**	**$5,421,833**	**$5,371,832**	**$5,624,601**
	Rural	**$3,204,178**	**$3,908,733**	**$3,872,695**
	Total	**$8,626,011**	**$9,280,565**	**$9,497,296**
	Other - Medicaid	**$958,951**	**$1,383,717**	**$1,110,729**

(1) The City of Clemson service was rural in FY 2011 but went into the Greenville urbanized area in FY 2013 based on 2010 census data.

(2) Does not include the Mauldin-Simpsonville route which started in October, 2012

Table A-5: Passengers per Revenue Vehicle Mile, Urban vs. Rural - Appalachian Region
FY 2009 to FY 2011

Agency	Area	2009	2010	2011
City of Anderson	Urban	2.20	1.50	1.72
	Rural	--	--	--
	Total	**2.20**	**1.50**	**1.72**
City of Clemson	Urban	--	--	--
	Rural	2.59	2.54	2.81
	Total	**2.59**	**2.54**	**2.81**
Greenville Transit Authority/Greenlink	Urban	1.14	1.24	1.18
	Rural	--	--	--
	Total	**1.14**	**1.24**	**1.18**
City of Spartanburg (SPARTA)	Urban	1.96	1.88	1.84
	Rural	--	--	--
	Total	**1.96**	**1.88**	**1.84**
Spartanburg County Transportation Services	Urban	0.14	0.15	0.14
	Rural	0.14	0.15	0.14
	Total	**0.14**	**0.15**	**0.14**
	Other - Medicaid	0.14	0.14	0.10
City of Seneca	Urban	--	--	--
	Rural	1.13	1.29	1.51
	Total	**1.13**	**1.29**	**1.51**
Total Appalachian Region	**Urban**	**0.98**	**0.95**	**0.89**
	Rural	**1.45**	**1.44**	**1.43**
	Total	**1.17**	**1.15**	**1.10**
	Other - Medicaid	**0.14**	**0.14**	**0.10**

(1) The City of Clemson service was rural in FY 2011 but went into the Greenville urbanized area in FY 2013 based on 2010 census data.
(2) Does not include the Mauldin-Simpsonville route which started in October, 2012
***(3)** Only revenue miles were reported.*

Table A-6: Passengers per Revenue Vehicle Hour, Urban vs. Rural - Appalachian Region
FY 2009 to FY 2011

Agency	Area	2009	2010	2011
City of Anderson	Urban	33.40	24.24	26.20
	Rural	--	--	--
	Total	**33.40**	**24.24**	**26.20**
City of Clemson	Urban	--	--	--
	Rural	31.13	29.47	31.68
	Total	**31.13**	**29.47**	**31.68**
Greenville Transit Authority/Greenlink	Urban	15.29	17.28	15.68
	Rural	--	--	--
	Total	**15.29**	**17.28**	**15.68**
City of Spartanburg (SPARTA)	Urban	25.15	24.27	22.83
	Rural	--	--	--
	Total	**25.15**	**24.27**	**22.83**
Spartanburg County Transportation Services	Urban	2.45	2.42	2.36
	Rural	2.45	2.42	2.83
	Total	**2.45**	**2.42**	**2.53**
	Other - Medicaid	2.56	2.54	1.77
City of Seneca	Urban	--	--	--
	Rural	18.64	22.51	26.41
	Total	**18.64**	**22.51**	**26.41**
Total Appalachian Region	**Urban**	**14.36**	**14.15**	**12.94**
	Rural	**20.56**	**20.05**	**21.35**
	Total	**16.97**	**16.62**	**16.16**
	Other - Medicaid	**2.56**	**2.54**	**1.77**

(1) The City of Clemson service was rural in FY 2011 but went into the Greenville urbanized area in FY 2013 based on 2010 census data.
(2) Does not include the Mauldin-Simpsonville route which started in October, 2012
***(3)** Only revenue hours were reported.*

Table A-7: Cost per Passenger Trip, Urban vs. Rural - Appalachian Region
FY 2009 to FY 2011

Agency	Area	2009	2010	2011
City of Anderson	Urban	$2.08	$2.53	$2.22
	Rural	--	--	--
	Total	**$2.08**	**$2.53**	**$2.22**
City of Clemson	Urban	--	--	--
	Rural	$1.25	$1.76	$1.64
	Total	$1.25	$1.76	$1.64
Greenville Transit Authority/Greenlink	Urban	$3.12	$2.71	$3.13
	Rural	--	--	--
	Total	**$3.12**	**$2.71**	**$3.13**
City of Spartanburg (SPARTA)	Urban	$2.39	$2.36	$2.33
	Rural	--	--	--
	Total	$2.39	$2.36	$2.33
Spartanburg County Transportation Services	Urban	$15.01	$15.02	$13.23
	Rural	$15.01	$15.02	$13.25
	Total	**$15.01**	**$15.02**	**$13.24**
	Other - Medicaid	$12.16	$16.04	$14.11
City of Seneca	Urban	--	--	--
	Rural	$2.52	$2.27	$2.50
	Total	**$2.52**	**$2.27**	**$2.50**
Total Appalachian Region	**Urban**	**$3.36**	**$3.29**	**$3.39**
	Rural	**$1.91**	**$2.34**	**$2.28**
	Total	**$2.62**	**$2.81**	**$2.83**
	Other - Medicaid	**$12.16**	**$16.04**	**$14.11**

(1) The City of Clemson service was rural in FY 2011 but went into the Greenville urbanized area in FY 2013 based on 2010 census data.

(2) Does not include the Mauldin-Simpsonville route which started in October, 2012

APPENDIX B: KICKOFF MEETING - TRANSIT, BICYCLE, PEDESTRIAN SESSION – SUMMARY DISCUSSION

What are the most important issues for the State of South Carolina for all modes?
• *Lack of transportation in rural areas* • *Safety & reliability* • *Funding* • *Flexibility in funding for local communities* • *Providing links to passenger rail* • *Coordination of land use and viable transportation options* • *Management of transit systems* • *Lack of public awareness for public transit services. Similar for bicycle and pedestrian facilities* • *Lack of coordination among all levels of governments – local, county, regional, MPO, state, and Federal. Also lack of coordination across the modes – roadway, transit, etc.* • *Lack of accommodation for pedestrians/bike on existing facilities. New designs should have all modes considered* • *Cultural issue that roadways are for cars* • *There is existing SC DOT Complete Streets policy. The concept/policy needs to be implemented and supported at all levels*

We just identified many important needs and issues for the State. In addition to those needs, what are needs/challenges for the underserved populations, such as the elderly, minority, and low income residents?
• *Access to transportation, including public transit, vehicles, etc.* • *A need for reliable, scheduled service vs. demand response. People will know when the next transit bus is coming* • *Provide connections for among transit agencies, when moving between communities.* • *Transit agencies need to update transit networks to reflect changes within the community. The routes need to travel where people want to go* • *Connections to jobs* • *Increase rideshare programs, such as carpool, vanpool* • *Car culture* • *Transit options are limited with service only during certain hours. After hours and weekends often have limited services and service areas* • *Statewide dedicated funding* • *Lack of end user advocates (organized) – Need to develop grass roots local organizations to support public transit at the local levels. These efforts need to be carried forward to regional and statewide agencies* • *Need for dedicated maintenance of transit facilities, including bus stations, access to bus stops, sidewalks, curb cuts, transit vehicles, etc.* • *Expand transit agencies to the general public – not restricted to seniors or human services clients*

Are there specific projects/services in your community or in South Carolina that are successful examples of public transit, bicycle, or pedestrian coordination?

• *Lexington-Irmo trail system*
  ○ *long continuous system*
  ○ *good connection*
• *1% sales tax – Beaufort – great projects*
• *East Coast greenway*
• *Palmetto Trail*
  ○ *Ecotourism*
• *Swamp Rabbit - Greenville*
  ○ *TR*
  ○ *high use*
  ○ *economic development*
  ○ *public-private partnership*
  ○ *restrooms/parking*
  ○ *economic benefits*
• *Charleston*
  – Cruise ship impact mitigation
  – 300K riders on trolley
  – IM
  – CVB, Ports/Chas/CARTA
• *Multiuse paths in Hilton Head*
  ○ *spend tourist on infrastructure*
• *NCDOT document economic benefits of bikes*
• *Local ordinance allowing bikes on sidewalk*
• *CAT connections to other cities*

Do you believe there is community/public and political support for public transit, bicycles, and pedestrian projects?
• *No; not enough.*

How do we build community and political support for public transit, bicycles, and pedestrian projects?

• *Local grass roots organizations to support projects*
• *Advocacy*
• *Success stories – promote successful projects across the state to show where coordination has worked and is a great example for all levels of government*
• *DOT sponsored PDAs*
• *Use communication methods*
  ○ *Internet*
• *Realize new ways of thinking – outside the box*
  ○ *Communication*
  ○ *young people*
• *"Communities for cycling" brings together various – BMP*
• *Find other ways of communicating (see above). e.g. TV kiosks at DMV – line scroll at bottom of screen available for announcements, waiting area clients, captive market*

What things could SCDOT do (change/enhance) to help people ride public transit, use bicycle and pedestrian facilities?
• *Support denser land development policies. Needs to be implemented from local to state and Federal levels* • *Promote 'Ride Free on Transit' opportunities* • *On all projects, implement complete streets policy, including all DOT-funded roadway and bridge projects. Ensuring accessibility to transit stops (sidewalks, curb cuts, etc.)* • *Support connectivity for future development projects – ensure pedestrian and transit facilities are reviewed for all projects, including park and ride locations, bike facilities, etc.* • *Review all modal alternatives for projects* • *Make bike/pedestrian facilities safer* • *Design usable trails for commuters, not just recreational trails, to provide a viable alternative to the single occupant vehicles as commuter routes* • *Support and implement technology (ex: Qr codes) for trails and transit facilities, which reaches new markets of users. This example is a new means of communicating routes. We need to use technology to the maximum and to ensure it is maintained* • *Support a multimodal user-friendly map for residents and tourists - transit/bike/pedestrian map* • *Engage and embrace Google services. SC could be a leader and partner for future use* • *Prepare transportation options for the influx of retirement age population over the next decades. Some active retirees, others need fundamental transportation services. Our transit agencies must adjust to meet the needs* • *Engage private partners to change transit image and to help in funding future projects* • *Promote alternative fuels (Seneca, e.g.)* • *Coordinate across county lines* • *Implement Transit Oriented Development with private partners* • *Educate political leaders at all levels to support public transit, bicycle and pedestrian needs and projects* • *Support an increase in the percentage of gas tax used to support transit agencies with state funding* • *Ensure the LRTP includes the needs for all modes to ensure grant applications have the needs documented*

Other Notes
• *Success – Council on Aging providing general public service. Using FTA Section 5310 and 5311 funding for their transportation program*

Wrap-up & Summary
• *Focus on connections to jobs* • *Coordination needed at all levels of government, from the local level to the state level* • *Coordination needed among all modes too; use the SCDOT Complete Streets policy as a start to multimodal projects across the state* • *More funding needed to meet the needs*

APPENDIX C: DETAILED AGENCY DATA FOR ENHANCED SERVICES

Appalachian Region

Transit Agency	Operating Needs					Capital Needs			2040 Expansion	2040 Expansion
	Existing Description	Annual Cost	Expansion Description	Annual Cost		Expansion Description	Cost		Total Op Needs	Capital Needs
City of Anderson	Maintain Existing	$880,000	Expand Rt 1	$195,000	Yr 1-6	Replace busses	$1,950,000	Yr 1-6	$5,070,000	
						Computers	$25,000	Yr 1-6	$4,400,000	$25,000
						Purchase property	$150,000	Yr 1-6		$150,000
						Add bus	$325,000	Yr 1-6		$325,000
	Maintain Existing	$1,500,000	Add 2 routes	$200,000	Yr 7-20	Add 3 busses	$400,000	Yr 7-20		$400,000
						New Facility	$2,000,000	Yr 7-20		$2,000,000
						Computers	$20,000	Yr 7-20		$20,000
						Replace fleet	$3,555,000	Yr 7-20		$3,555,000
City of Clemson	Maintain Existing	$2,700,000			Yr 1-6	Replace busses	$750,000	2013		
							$2,250,000	2014		
							$1,800,000	2016		$1,800,000
							$2,000,000	2023		$2,000,000
						Technology	$500,000	Yr 1-6		$500,000
	Maintain Existing	$2,700,000	Expand	$1,300,000	Yr 7-20	Technology	$500,000	Yr 7-20	$28,600,000	$1,500,000
Greenville Transit	Maintain Existing	$3,500,000	Expand to CU	$695,000	Yr 1-6	Add three vehicles	$300,000	Yr 1-6	$18,070,000	$300,000
			Expand shuttle to TR	$157,000	Yr 1-6	Add 2 shuttles	$150,000	Yr 1-6	$4,082,000	$150,000
	Continue M-S	$450,000	Expand to Greer	$150,000	Yr 1-6	Move facility	$2,100,000	Yr 1-6	$3,750,000	$2,100,000
			Expand to FI	$150,000	Yr 1-6	Renovate transfer	$600,000	Yr 1-6	$3,750,000	$600,000
			Increase Freq one route	$300,000	Yr 1-6	Add four busses	$600,000	Yr 1-6	$7,200,000	$600,000
			Add GSP Express	$450,000	Yr 1-6	Purchase 11 busses	$4,125,000	Yr 7-20	$10,800,000	$4,125,000
			Increase Freq all routes	$650,00	Yr 7-20	Build BRT - 1	$24,000,000	Yr 7-20	$13,650,000	$24,000,000
			Implement BRT - 1	$800,000	Yr 7-20	Replace busses	$4,500,000	Yr 7-20	$15,200,000	$4,500,000
			Implement BRT - 2	$1,600,000	Yr 7-20	Build BRT - 2	$4,500,000	Yr 7-20	$25,600,000	$4,500,000
City of Spartanburg	Maintain Exst	$600,000	Print matl	$7,000	yr 3	Replace 4 buses	$2,700,000	yr 4	$182,000	
			Farebox Trans	$5,000	each year	Replace bus	$450,000	yr 5	$40,000	
			Exp 4 routes	$250,000	yr 10	Replace 4 busses	$2,700,000	yr 12	$4,750,000	
			Farebox Trans	$6,000	each year	Replace bus	$450,000	yr 13	$162,000	
						Facility upgrade	$2,500,000	yr 15		$2,500,000
						Replace 2 hybrid batteries	$150,000	yr 8		$150,000
						4 new busses	$2,700,000	yr 8		$5,400,000
						Replace computer hdwr	$20,000	yr 10		$40,000
Spartanburg County	Maintain existing	$2,800,000	Dispatch software	$15,000	beg yr 1	Planning Study	$160,000	yr 1		$160,000
			Add security	$60,000	Beg yr 2	Prev Main	$600,000/yr	every year 1-6		
			Marketing	$20,000	Beg yr 1	Computer upgrade	$35,000 /yr	every year 1-6	$560,000	$210,000
			Expand Service	$67,000	Beg yr 1	New facility	$3,500,000	Yr 2	$1,876,000	$3,500,000
						New vehicles	$600,000	Yr 1-6		$600,000
						Replace 5 cutaways	$300,000	Yr 1		
						Replace 4 cutaways	$240,000	Yr 2		
						Replace 8 cutaways	$480,000	Yr 3		
						Replace 6 cutaways	$380,000	Yr 4		
						Replace 5 cutaways	$330,000	Yr 5		
						Replace 4 cutaways	$280,000	Yr 6		
	Maintain ex	$3,500,000	Add service	$500,000	Yr 7-20	Replace fleet	$5,200,000	Yr 7-20	$10,500,000	$1,800,000
						Prev Main	$8,500,000	Yr 7-20		
						Facility upgrade	$1,200,000	Yr 7-20		$1,200,000
						Technology upgrade	$1,800,000	Yr 7-20		$1,800,000
City of Seneca			Add 1 staff	$30,000	Yr 1-6	4 electric buses	$950,000 each	already funded	$780,000	$2,000,000
						charging station	$600,000	already funded		$500,000
			TBD by Oconee county study			TBD by Oconee county study				
Total Appalachian Region									**$159,022,000**	**$73,010,000**

APPENDIX D: SOUTH CAROLINA LOCAL SALES AND USE TAXES

Local Tax Chart and Transactions Exempt from Local Sales and Use Taxes

Please note that from time to time the Department issues information letters to update the chart and other information found in this exhibit. These information letters can be found on the Department's website (www.sctax.org).

Please check the website regularly in order to maintain an up-to-date list of the local sales and use taxes that are being imposed in South Carolina. The most current version of this information, as of the date on this publication, is South Carolina Information Letter #13-3. This Information Letter provides the following changes that take effect after the date of this publication:

- **Effective April 1, 2013, Orangeburg county will "re-impose" its 1% Capital Projects Tax;**[8]
- **Effective May 1, 2013, Bamberg county will impose a 1% Capital Projects Tax in addition to the Local Option Tax already imposed;**[9]
- **Effective May 1, 2013, Hampton county will impose a 1% Capital Projects Tax in addition to the Local Option Tax already imposed;**[10]
- **Effective May 1, 2013, Lee county will impose a 1% Capital Projects Tax in addition to the Local Option Tax already imposed;**[11]
- **Effective May 1, 2013, Marion county will impose a 1% Capital Projects Tax in addition to the Local Option Tax already imposed;**[12] **and**
- **Effective May 1, 2013, Richland county will impose a 1% Transportation Tax in addition to the Local Option Tax already imposed.**

[8] The 1% Capital Projects Tax imposed in Orangeburg county expires on March 31, 2013 and the new Capital Projects Tax becomes effective the next day on April 1, 2013. In addition, the new 1% Capital Projects Tax exempts sales of unprepared food effective April 1, 2013.
[9] While the 1% Local Option Tax already imposed in Bamberg county does not exempt the sale of unprepared food, the sale of unprepared food will be exempt from the new 1% Capital Projects Tax.
[10] While the 1% Local Option Tax already imposed in Hampton county does not exempt the sale of unprepared food, the sale of unprepared food will be exempt from the new 1% Capital Projects Tax.
[11] While the 1% Local Option Tax already imposed in Lee county does not exempt the sale of unprepared food, the sale of unprepared food will be exempt from the new 1% Capital Projects Tax.
[12] While the 1% Local Option Tax already imposed in Marion county does not exempt the sale of unprepared food, the sale of unprepared food will be exempt from the new 1% Capital Projects Tax.

Local Tax Chart and Transactions Exempt from Local Sales and Use Taxes
** See Previous Page for Effective Dates **

CHART 1: COUNTY SALES AND USE TAXES[13]

	SALES AND PURCHASES EXEMPT FROM LOCAL SALES AND USE TAXES							
COUNTY	TYPE OF LOCAL SALES AND USE TAX AND EFFECTIVE DATE	12-36-2120 12-36-2130 STATE EXEMPTIONS	12-36-2110 EXEMPTION FOR MAXIMUM TAX ITEMS	12-36-1710 EXEMPTION FOR CASUAL EXCISE ITEMS	EXEMPTION FOR FOOD STAMP PURCHASES	EXEMPTION FOR CERTAIN FOOD SALES	"GRANDFATHER CLAUSE" EXEMPTION FOR CERTAIN PURCHASES BY CONTRACTORS	NOTE
Abbeville	Local Option 5/1/92	Yes	Yes	Yes	Yes	No	Yes	
Aiken	Capital Projects 1/1/2013	Yes	Yes	No	Yes	Yes	Yes	1, 12 & 27
Allendale	Local Option 5/1/92	Yes	Yes	Yes	Yes	No	Yes	5
	Capital Projects 5/1/09	Yes	Yes	No	Yes	No	Yes	1 & 5
Anderson	No Local Sales and Use Tax is Imposed in this County							26
Bamberg	Local Option 5/1/92	Yes	Yes	Yes	Yes	No	Yes	30
	Capital Project 5/1/13	Yes	Yes	No	Yes	Yes	Yes	1 & 30
Barnwell	Local Option 5/1/99	Yes	Yes	Yes	Yes	No	Yes	
Beaufort	No Local Sales and Use Tax is Imposed in this County							1 & 6
Berkeley	Local Option 5/1/97	Yes	Yes	Yes	Yes	No	Yes	18
	Transportation 5/1/09	Yes	Yes	No	Yes	No	Yes	1 & 18
Calhoun	Local Option 5/1/05	Yes	Yes	Yes	Yes	No	Yes	
Charleston	Local Option 7/1/91	Yes	Yes	Yes	Yes	No	Yes	8
	Transportation 5/1/05	Yes	Yes	No	Yes	No	Yes	1 & 8
	Ed. Capital Imp. 3/1/11	Yes	Yes	No	Yes	Yes	Yes	1 & 8

[13] County Sales and Use Taxes" listed in this chart (Chart 1) are imposed county–wide, whether imposed by the county or one or more school districts.

	SALES AND PURCHASES EXEMPT FROM LOCAL SALES AND USE TAXES							
COUNTY	TYPE OF LOCAL SALES AND USE TAX AND EFFECTIVE DATE	12-36-2120 12-36-2130 STATE EXEMPTIONS	12-36-2110 EXEMPTION FOR MAXIMUM TAX ITEMS	12-36-1710 EXEMPTION FOR CASUAL EXCISE ITEMS	EXEMPTION FOR FOOD STAMP PURCHASES	EXEMPTION FOR CERTAIN FOOD SALES	"GRANDFATHER CLAUSE" EXEMPTION FOR CERTAIN PURCHASES BY CONTRACTORS	NOTE
Cherokee	Cherokee School 7/1/96	Yes	Yes	No	Yes	Yes	Yes	1 & 19
	Local Option 5/1/09	Yes	Yes	Yes	Yes	No	Yes	19
Chester	Local Option 5/1/94	Yes	Yes	Yes	Yes	No	Yes	3
	Capital Projects 5/1/09	Yes	Yes	No	Yes	No	Yes	1 & 3
Chesterfield	Local Option 5/1/97	Yes	Yes	Yes	Yes	No	Yes	4
	Chesterfield School 9-1-00	Yes	Yes	No	Yes	Yes	Yes	1 & 4
Clarendon	Local Option 5/1/97	Yes	Yes	Yes	Yes	No	Yes	11
	Clarendon Schools 6/1/04	Yes	Yes	No	Yes	Yes - until 6/30/05 No - effective 7/1/05	Yes	1 & 11
Colleton	Local Option 7/1/91	Yes	Yes	Yes	Yes	No	Yes	
Darlington	Local Option 5/1/97	Yes	Yes	Yes	Yes	No	Yes	10
	Darlington School 2/1/04	Yes	Yes	No	Yes	Yes	Yes	1 & 10
Dillon	Local Option 5/1/96	Yes	Yes	Yes	Yes	No	Yes	7
	School District 10/1/08	Yes	Yes	No	Yes	Yes	Yes	1 & 7
Dorchester	Transportation 5/1/05	Yes	Yes	No	Yes	No	Yes	1
Edgefield	Local Option 5/1/92	Yes	Yes	Yes	Yes	No	Yes	
Fairfield	Local Option 5/1/06	Yes	Yes	Yes	Yes	No	Yes	
Florence	Local Option 5/1/94	Yes	Yes	Yes	Yes	No	Yes	16
	Capital Projects 5/1/07	Yes	Yes	No	Yes	No	Yes	1 & 16
Georgetown	No Local Sales and Use Tax is Imposed in this County							26
Greenville	No Local Sales and Use Tax is Imposed in this County							26

	SALES AND PURCHASES EXEMPT FROM LOCAL SALES AND USE TAXES							
COUNTY	TYPE OF LOCAL SALES AND USE TAX AND EFFECTIVE DATE	12-36-2120 12-36-2130 STATE EXEMPTIONS	12-36-2110 EXEMPTION FOR MAXIMUM TAX ITEMS	12-36-1710 EXEMPTION FOR CASUAL EXCISE ITEMS	EXEMPTION FOR FOOD STAMP PURCHASES	EXEMPTION FOR CERTAIN FOOD SALES	"GRANDFATHER CLAUSE" EXEMPTION FOR CERTAIN PURCHASES BY CONTRACTORS	NOTE
Greenwood	No Local Sales and Use Tax is Imposed in this County							24
Hampton	Local Option 7/1/91	Yes	Yes	Yes	Yes	No	Yes	9
	Capital projects 5/1/13	Yes	Yes	No	Yes	Yes	Yes	1 & 9
Horry	Capital Projects 5/1/07	Yes	Yes	No	Yes	No	Yes	17
	Ed. Capital Imp. 3/1/09	Yes	Yes	No	Yes	Yes	Yes	1 & 17
Jasper	Local Option 7/1/91	Yes	Yes	Yes	Yes	No	Yes	2
	Jasper School 12/1/02	Yes	Yes	No	Yes	Yes	Yes	1 & 2
Kershaw	Local Option 5/1/97	Yes	Yes	Yes	Yes	No	Yes	
Lancaster	Local Option 5/1/92	Yes	Yes	Yes	Yes	No	Yes	20
	Capital Projects 5/1/09	Yes	Yes	No	Yes	No	Yes	1 & 20
Laurens	Local Option 5/1/99	Yes	Yes	Yes	Yes	No	Yes	
Lee	Local Option 5/1/96	Yes	Yes	Yes	Yes	No	Yes	15
	Capital Projects 5/1/13	Yes	Yes	No	Yes	Yes	Yes	1 & 15
Lexington	Lexington Schools 3/1/12	Yes	Yes	No	Yes	Yes	Yes	1 & 25
Marion	Local Option 7/1/91	Yes	Yes	Yes	Yes	No	Yes	29
	Capital Projects 5/1/13	Yes	Yes	No	Yes	Yes	Yes	1 & 29
Marlboro	Local Option 5/1/92	Yes	Yes	Yes	Yes	No	Yes	28
	Marlboro Schools 2/1/13	Yes	Yes	No	Yes	Yes	Yes	1 & 28
McCormick	Local Option 7/1/91	Yes	Yes	Yes	Yes	No	Yes	
Newberry	Capital Projects 4/1/12	Yes	Yes	No	Yes	No	Yes	1, 12 & 23

	SALES AND PURCHASES EXEMPT FROM LOCAL SALES AND USE TAXES							
COUNTY	TYPE OF LOCAL SALES AND USE TAX AND EFFECTIVE DATE	12-36-2120 12-36-2130 STATE EXEMPTIONS	12-36-2110 EXEMPTION FOR MAXIMUM TAX ITEMS	12-36-1710 EXEMPTION FOR CASUAL EXCISE ITEMS	EXEMPTION FOR FOOD STAMP PURCHASES	EXEMPTION FOR CERTAIN FOOD SALES	"GRANDFATHER CLAUSE" EXEMPTION FOR CERTAIN PURCHASES BY CONTRACTORS	NOTE
Oconee	No Local Sales and Use Tax is Imposed in this County							26
Orangeburg	Capital Projects 4/1/13	Yes	Yes	No	Yes	Yes	Yes	1, 12 & 32
Pickens	Local Option 5/1/95	Yes	Yes	Yes	Yes	No	Yes	
Richland	Local Option 5/1/05	Yes	Yes	Yes	Yes	No	Yes	31
	Transportation 5/1/13	Yes	Yes	No	Yes	No	Yes	1 & 31
Saluda	Local Option 5/1/92	Yes	Yes	Yes	Yes	No	Yes	
Spartanburg	No Local Sales and Use Tax is Imposed in this County							26
Sumter	Local Option 5/1/96	Yes	Yes	Yes	Yes	No	Yes	21
	Capital Projects 5/1/09	Yes	Yes	No	Yes	No	Yes	1 & 21
Union	No Local Sales and Use Tax is Imposed in this County							26
Williamsburg	Local Option 5/1/97	Yes	Yes	Yes	Yes	No	Yes	
York	Capital Projects 1/1/12	Yes	Yes	No	Yes	Yes	Yes	1, 12 & 22

CHART 2: CATAWBA INDIAN RESERVATION TRIBAL TAX[14]

	SALES AND PURCHASES EXEMPT FROM LOCAL SALES AND USE TAXES							
RESERVATION LOCATED IN YORK AND LANCASTER COUNTIES	TYPE OF LOCAL SALES AND USE TAX AND EFFECTIVE DATE	12-36-2120 12-36-2130 STATE EXEMPTIONS	12-36-2110 EXEMPTION FOR MAXIMUM TAX ITEMS	12-36-1710 EXEMPTION FOR CASUAL EXCISE ITEMS	EXEMPTION FOR FOOD STAMP PURCHASES	EXEMPTION FOR CERTAIN FOOD SALES	"GRANDFATHER CLAUSE" EXEMPTION FOR CERTAIN PURCHASES BY CONTRACTORS	NOTE
Catawba Indian Reservation	Tribal Tax (See Notes #13 and #14)	Yes	See Note #14	See Note #14	Yes	See Note #13	See Note #14	13 &14

CHART 3: MUNICIPAL SALES AND USE TAXES[15]

	SALES AND PURCHASES EXEMPT FROM LOCAL SALES AND USE TAXES							
Municipality	TYPE OF LOCAL SALES AND USE TAX AND EFFECTIVE DATE	12-36-2120 12-36-2130 STATE EXEMPTIONS	12-36-2110 EXEMPTION FOR MAXIMUM TAX ITEMS	12-36-1710 EXEMPTION FOR CASUAL EXCISE ITEMS	EXEMPTION FOR FOOD STAMP PURCHASES	EXEMPTION FOR CERTAIN FOOD SALES	"GRANDFATHER CLAUSE" EXEMPTION FOR CERTAIN PURCHASES BY CONTRACTORS	NOTE
Myrtle Beach	Tourism Development 8/1/09	Yes	Yes	No	Yes	Yes	Yes	1

[14] Chart 2 concerns the Catawba Tribal Sales and Use Tax; however, see Notes #13 and #14 for information on the tax rates and the application of either the State sales and use tax or the Catawba Tribal sales and use tax for sales (deliveries) made on the Catawba Indian Reservation.

[15] Chart 3 concerns the Local Tourism Development Sales and Use Tax that may only be imposed by municipalities located in a county where revenue from state accommodations tax is at least fourteen million dollars in a fiscal year. As of the date of this information letter, only Horry County meets this criterion; therefore, only municipalities in Horry County may impose the Local Tourism Development Sales and Use Tax at this time.