

Santee-Lynches Regional Human Services Transportation Coordination Plan



Prepared by



for the

South Carolina Department of Transportation

and the

Santee-Lynches Council of Governments

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Report Edits

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Page and Location	Change / Edit
Cover	Removed draft; changed month to September
Footer, all sections	Removed draft
Page 5	Edited punctuation in funding programs list; Changed funding category "5" to "Older Americans Act"
Page 6	Corrected last sentence in the first paragraph to reflect the latest guidelines from the CCAM allowing non-programmatic riders onto services as long as the cost of providing the service is provided.
Page 6	1 st bullet: changed "various programs" to "Older Americans Act" programs
Page 8, table	Inserted new row after "Medicaid"; changed "Grants for Supportive Services.." to "Older Americans Act"; Changed last row to "Dept. of Labor, Education and Training Administration" and added "Individuals age 55 and older"; Changed "Dept" to Department
Page 10	Paragraph 2, changed four to three; Updated overall population paragraph with 2006 US Census data
Page 11	First paragraph under Section 2.2 updated with more region-specific information.
Page 17	Changed "will be held" to "was conducted"
Page 17	Added info about a second private provider in the Region.
Pages 19-20	Updated Tables 6 and 7 with latest data as well as supporting text.
Page 22	Corrected inconsistencies about the transportation study on-going simultaneously with the coordination plan.
Page 28	Changed the illustrative example in Section 5.1.3 since the example in the Draft had already been attempted in the Region.
Page 30	It was determined by the regional steering committee that the access to jobs was under-emphasized during the development of the plan and therefore added as a part of the comments to the draft plan.
Page C-1	Added new paragraph after paragraph 2, "Consideration was also given..."
Throughout document	Standardized use of: SCDOT, FTA, federal, New Freedom Program; spelling out numbers one through ten; indention of bulleted lists

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Section 1: Purpose and Background of Coordination Plan

The purpose of this plan is to ensure that federal requirements regarding coordination are satisfied as well as assist the Santee-Lynches region in its continuing efforts to develop an efficient and effective transit service network.

1.1 Background¹

The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) created a requirement that a locally-developed, coordinated public transit/human service planning process and an initial plan be developed by 2007 as a condition of receiving funding for certain programs directed at meeting the needs of older individuals, persons with disabilities and low-income persons. Plans must be developed through a process that includes representatives of public, private, and non-profit transportation and human service providers, as well as the general public. Complete plans, including coordination with the full range of existing human service transportation providers, are required by federal Fiscal Year (FY) 2008.

The South Carolina Department of Transportation (SCDOT), through the consulting team of TranSystems/URS and in partnership with Councils of Governments (COGs) and interested stakeholders, has developed regional coordinated plans that meet the requirements of SAFETEA-LU and the Federal Coordinating Council on Access and Mobility (CCAM). While at a minimum projects funded under the Federal Transit Administration (FTA) formula programs for Sections 5310, 5316 and 5317 must be derived from a coordinated plan, the coordinated plans will incorporate activities offered under other programs sponsored by federal, state and local agencies. These programs would include, as appropriate, FTA's Section 5307 and 5311 programs, as well as Temporary Assistance for Needy Families (TANF), Workforce Investment Act (WIA), Vocational Rehabilitation, Medicaid, Community Action (CAP), Independent Living Centers, and Agency on Aging (AoA) programs among others.

On October 1, 2006, the CCAM released the following policy statement:

“Member agencies of the Federal Coordinating Council on Access and Mobility resolve that federally-assisted grantees that have significant involvement in providing resources and engage in transportation delivery should participate in a local coordinated human services transportation planning process and develop plans to achieve the objectives to reduce duplication, increase service efficiency and expand access for the transportation-disadvantaged populations as stated in Executive Order 13330.”

SCDOT has attempted to facilitate this by developing a plan in each region of the state and inviting all of the agencies that meet the letter and intent of this policy to the table and encouraging their participation throughout the plan development process.

Development and content of coordinated plans are intended to be specific to the needs and issues of each region. The coordinated plans will be developed to address intra-

¹ Much of this section was written by the South Carolina Department of Transportation (SCDOT).

and inter-regional needs and issues, and in a manner that allows the COGs, concurrent with regional long range transportation plan (LRTP) updates, to directly update the regional coordinated plan. Further, the coordinated plans will be developed in a manner that allows the COGs to adapt and expand the plans to incorporate programs and initiatives specific to their regions.

Each coordinated plan's development will at a minimum:

- Assess and document transportation needs in each region for individuals with disabilities, older adults, and persons with limited incomes;
- Inventory available services in each region and identify areas of redundancy and gaps in service;
- Identify and document restrictions on eligibility for funding;
- Identify and document short- and long-range strategies in each region to address the identified gaps in service, including mobility management strategies;
- Identify and document technological resources currently available and appropriate for coordination of transportation services;
- Identify and document coordination actions in each region to eliminate or reduce duplication in services and strategies for more efficient utilization of resources; and
- Document and prioritize implementation strategies to increase coordination of transportation services in each region.

SAFETEA-LU also allows two significant changes to the standard procedures defined by previous legislation. Under the new regulations, project proponents are allowed to use dollars from other federal programs as match to FTA funds, and expenses related to mobility management can be considered a capital expense. These are two significant changes that allow greater flexibility for budgeting and financing human service transportation.

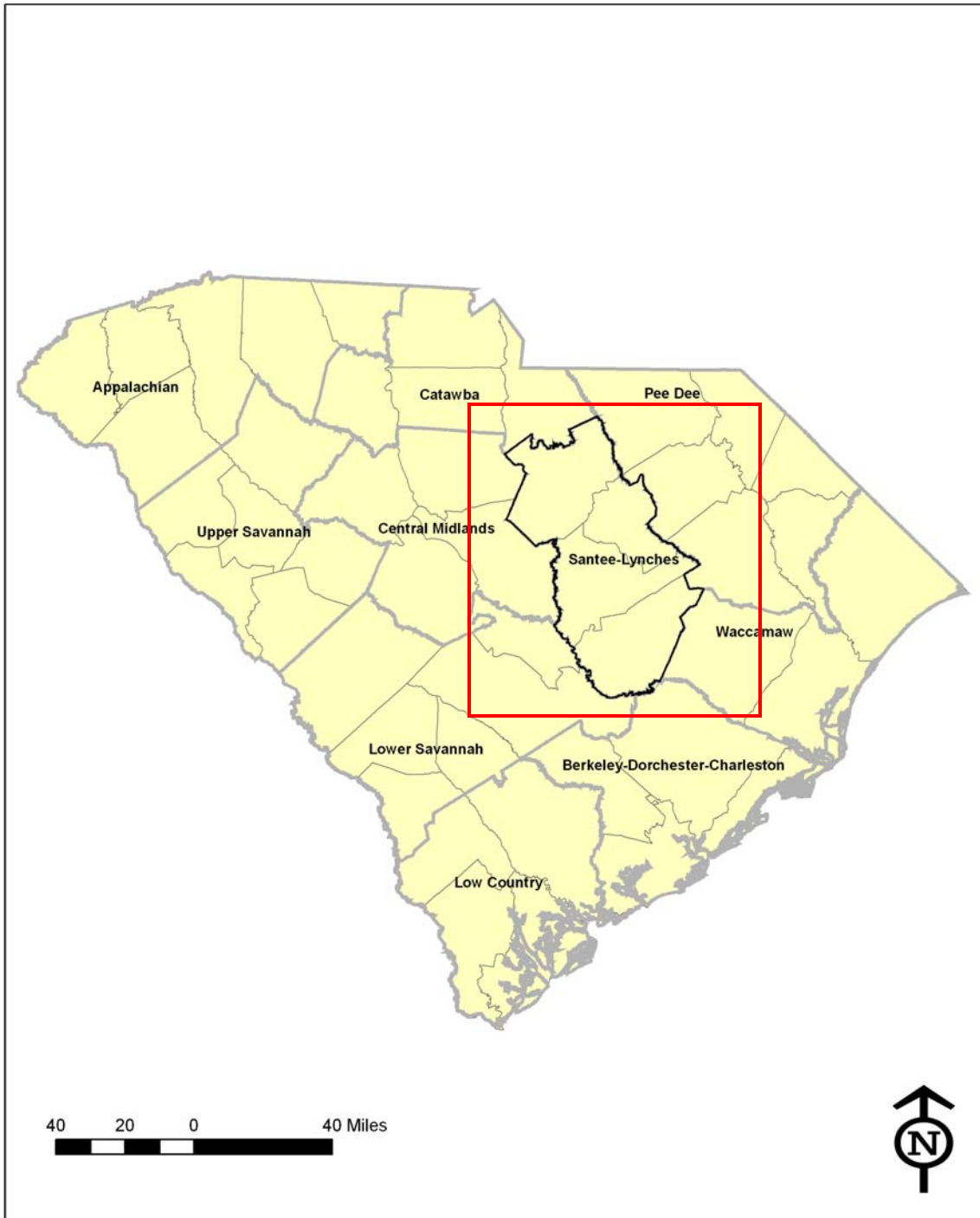
1.2 Planning Process

The consultant team of TranSystems/URS, with oversight from SCDOT and a committee of COG representatives, has developed ten regional coordinated plans, one plan for each of South Carolina's COG regions (refer to Figure 1). The regional coordination plans are intended to meet the requirements of SAFETEA-LU and the guidance detailed in the Federal Register Notice dated March 29, 2007 entitled, "Elderly Individuals and Individuals With Disabilities, Job Access and Reverse Commute, New Freedom Programs: Final Circulars effective May 1, 2007."

The development of the Santee-Lynches plan involved three basic steps:

1. Developing an inventory of services in the region as well as a sense of transportation needs.
2. Development of strategies and actions.
3. Development of the regional plan document.

Figure 1: South Carolina's Ten Council of Government (COG) Regions



Source: South Carolina Department of Transportation.

At each step SCDOT and its consultant team met with representatives of each COG region to solicit input and feedback.

This regional coordination plan also benefits from a parallel statewide planning effort undertaken by SCDOT. The statewide transportation plan's transit element involves a significant public outreach including key stakeholder interviews, focus groups, and general public attitudinal surveys. In addition, socio-economic and demographic data as well as provider statistics were compiled. These data will be used selectively in this regional coordination plan.

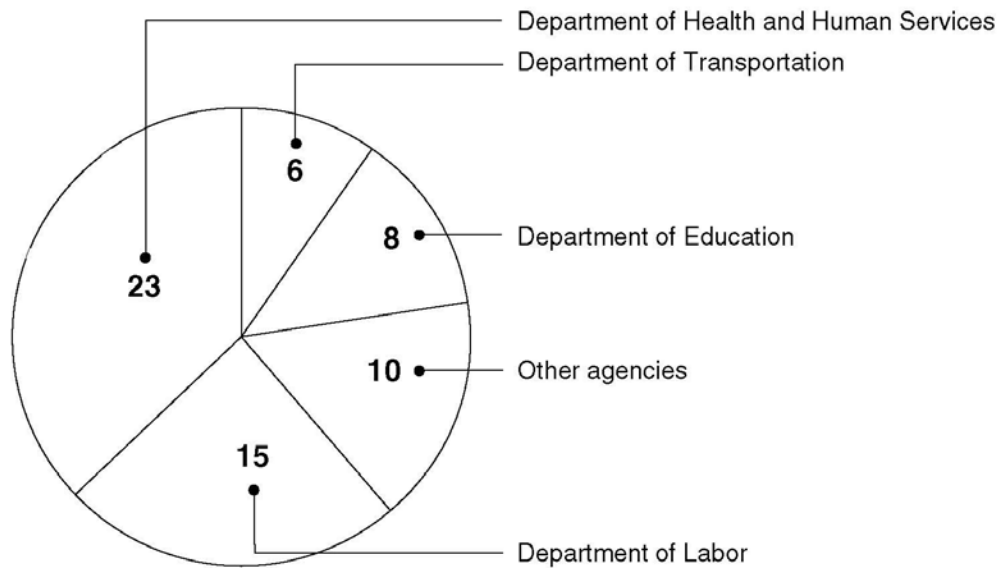
1.3 Funding Barriers to Coordination

One area of common concern to all regions is the role of federal and state funding in promoting coordination. In this regard, this section analyzes to what extent federal funds inhibit coordination. Included in this discussion is a brief review of important transportation funding programs and associated regulations that could affect coordinated transit. These programs do not restrict coordination through regulation; however, there are practical and programmatic issues that add to the challenge of coordination.

1.3.1 Regulatory Review

In June 2003, the U.S. General Accounting Office (GAO) issued a study on federal transportation funding and coordination entitled *Transportation-Disadvantaged Populations*. The study reported that there were 62 federal programs that fund transportation. Of those, 16 are regularly used for public transportation, with six from the USDOT through the FTA (refer to Figure 2).

Figure 2: Sources of Federal Transportation Funds



Source: *Transportation-Disadvantaged Populations*, Figure 1, page 9, USGAO, June 2003.

The ten, non-DOT funding programs most commonly used for transportation are:

1. Transitional Assistance for Needy Families (TANF) - provides assistance to families with children. Such assistance can include help in funding transportation needs.
2. Vocational Rehabilitation - targets persons with disabilities and provides a variety of vocational services including transportation.
3. Medicaid - assists people with accessing medical services including transportation to such services.
4. Head Start - assists pre-school children with a variety of services including education readiness, health care, and transportation to/from such services.
5. Older Americans Act - assists in developing services for older people which include nutrition services, senior centers, and transportation.
6. Workforce Investment Act (WIA): Adults - provides job skill training services as well as transportation to/from such services.
7. WIA: Youth - provides job skill training services to youth as well as transportation to/from such services.
8. WIA: Displaced Workers - provides job skill training services as well as transportation to/from such services.
9. Program for Native Americans (under Older Americans Act) - provides a variety of social service funding (e.g., nutrition and caregiver services) for Native Americans.
10. Senior Community Service Employment program - provides work opportunities for older Americans.²

In addition, these six US DOT programs were listed among the top human service transportation funding programs:

1. Capital Grants (Section 5309)
2. Urbanized Area Formula Program (Section 5307)
3. Non-urbanized Area Formula Program (Section 5311)
4. Job Access and Reverse Commute (Section 5316)
5. Over-the-Road Bus Program (Section 3038)
6. Transportation for Elderly and Persons with Disabilities (Section 5310)

Table 1 on the next page summarizes these 16 programs. In addition, one more program is included in the table that was not part of the 2003 GAO study. Since that study, the “New Freedom Program” was enacted. The New Freedom Program (Section 5317) is intended to provide operating and capital assistance to services that go beyond Americans with Disabilities Act (ADA) complementary paratransit requirements.

Table 1 explains, in brief, each of the top 16 transportation programs (plus the New Freedom Program), including the responsible federal agency, typical recipients, target population, and the scope of funding. As shown in the table, each funding program covers a variety of transportation costs. Some programs are targeted to specific populations while others (such as many of the USDOT programs) are open to the general public. Those programs that are intended for specific population do not restrict

²Table 1, page 10 of *Transportation-Disadvantaged Populations, Figure 1, page 9, USGAO, June 2003.*

service to only their own clients and could be open to the general public when the cost of providing transportation is also shared.

In South Carolina, many of the non-DOT funding programs are administered through the state. Only the Head Start Program provides funds directly from the federal government directly to a local entity. The USDOT programs are generally handled through the state or directed toward designated recipients.

In February 2004, Executive Order 13330 (Human Service Transportation Coordination) was issued and "...direct[ed] Federal agencies funding human services transportation services to undertake efforts to reduce transportation service duplication, increase efficient transportation delivery, and expand transportation access for seniors, persons with disabilities, children, low-income persons and others..." This order reinforces that federal programs, through regulation, do not prohibit coordination and the sharing of resources.

While funds at the federal level would appear to offer no regulatory barriers to coordination, the administration of those funds at the state and local levels were also reviewed to determine if those governmental units created any barriers to coordination.

The following state entities were contacted to determine whether the State of South Carolina and others placed any requirements that would burden coordination:

- Lieutenant Governor's Office on Aging (Older Americans Act programs)
- South Carolina Commission for Minority Affairs (Older Americans Act as applied to Native Americans)
- Department of Health and Human Services (Medicaid)

Based on discussions and research with these agencies, none of the non-DOT transportation programs, as administered, imposed any restrictions that would prevent coordination.

However, because each program has an intended targeted population, transportation services provided under the given program must honor the regulatory intent. While this presents a challenge, it does not, per se, prohibit coordination.

Table 1: Summary of Top Federal Human Service Transportation Funding Programs (Continued on next page)

Program	Responsible Agency	Recipients	Target Population	Transportation Funding	Coordination Issues	Other Information
Capital Grants (Section 5309)	US DOT (FTA)	Designated Recipients and States.	General population	Wide variety of capital funding including for vehicles and facilities.		Congressional earmarks popular method in securing this funding.
Urbanized Area Formula Program (Section 5307)	US DOT (FTA)	Designated Recipients in urban areas over 50,000 in population.	General population	Wide variety of funding for capital, planning and operations (for areas with less than 200,000 in population)		
Non-urbanized Formula Program (Section 5311)	US DOT (FTA)	For States to assist rural areas under 50,000 in population. Recipients can be public agencies, non-profit agencies, and Native American Tribes.	General population	Wide variety of funding for capital, planning and operations.		
Job Access and Reverse Commute (Section 5316)	US DOT (FTA)	Local governmental agencies and non-profit organizations.	General population of workers with nontraditional work schedules.	Wide variety of funding for capital and operations.		
New Freedom Program (Section 5317)	US DOT (FTA)	Designated Recipients and States.	Persons with disabilities	Operating and capital assistance that go beyond ADA requirements		
Over-the-Road Bus Program/Over-the-Road Bus Accessibility (Section 3038)	US DOT (FTA)	Private operators of over-the-road buses	General population	Capital projects relating to improving accessibility including retrofit of lifts and the purchase of new vehicles.		
Transportation for Elderly and Persons with Disabilities (Section 5310)	US DOT (FTA)	States on behalf local recipients such as non-profit and public agencies	Elderly and persons with disabilities	Mainly capital though services can be purchased if through a contract.		
Transitional Assistance for Needy Families (TANF)	US Department of Health and Human Services (HHS)	Payments directly to clients	Persons on Welfare looking for unsubsidized employment	Gas vouchers, bus tokens, car repairs, \$0 down/0% car loans, some contracts with Transportation providers	Clients living in rural areas, 2 nd and 3 rd shift needs, need to take children to day care	No specific regulations dealing with transportation

Section 1: Purpose and Background of Coordination Plan

Program	Responsible Agency	Recipients	Target Population	Transportation Funding	Coordination Issues	Other Information
Vocational Rehabilitation Department	US Department of Education	Payments directly to clients	Persons with a physical or mental disability that is an impediment to employment	Up to the individual client, although the program is described as a gas money or bus ticket program	No statutory or regulatory issues noted. There are certain options that they choose not to do to "stretch" funds.	Issues with rural areas where there is no public transportation services
Medicaid	US Department of HHS (Medicaid)	DSN Boards (In South Carolina a portion of the revenue for transportation is from State General Funds)	MA eligible with physical, social or mental disability	Provided directly by DSN for residential clients. DSN's may contract with transit providers for community based customers	Unique needs of clients, specifically the need for van aides to ride with clients due to behavioral issues.	Since mainstreaming is an ultimate goal, a client could be trained to use transit and community placements try to take into account bus service
Medicaid, Title 19	US Department of HHS	The South Carolina Department of Human Services has recently converted this program to a brokerage system	Low-income households with need for non-emergency medical transportation	Brokers are paid a capitated rate, based on the total number of eligible clients	Program allows client to choose the facility where they will receive care, which can lead to long trips	
Head Start	US Department of HHS	Direct to agencies	Pre-school children (3 to 4 years of age)	Agencies may operate own service or contract	No restrictions, though vehicles and needs of children may be in conflict with adults	
Older Americans Act	US Department of HHS		Seniors			
Workforce Investment Act (3)	US Department of Labor	State works with regions which has contracts with educational institutions.	Unemployed, under employed workers	Provides compensation for transportation costs which can be for private automobile as well as public transit.	None.	Job training; WIA has three programs targeting dislocated workers, adult and youth services.
Program for Native Americans, Alaskan Native, and Native Hawaiian Elders	US Department of HHS (Older Americans Act)	US provides grants directly to Federally recognized tribes	Native American Seniors			Only one tribe in South Carolina (Catawba); 23 other tribes not recognized.
Senior Community Service Employment Program	Department of Labor, Education and Training Administration	Individuals age 55 and older	Seniors needing job training or re-training	Can fund a variety of transportation costs including gas money and bus fares.		

1.3.2 Non-regulatory Challenges

While regulatory factors do not prevent different social programs from sharing resources, there are practical and programmatic considerations that can make coordination challenging. Some of these are service delivery issues, and others relate to administrative issues.

Service delivery related issues include special requirements imposed by certain funding streams that are unique and not common to other funding streams. For example, Head Start requires on-vehicle monitors and use of safety restraints for passengers. These requirements are not typical with general public services funded by FTA. Thus, for an operator of FTA-only funded services, transporting a Head Start client would require these additional features, creating additional expense.

Administrative-related issues refer to the documentation of the use of a funding stream's dollars. For example, Medicaid only pays for medical-related transportation. A service provider who transports the general public as well as a Medicaid traveler would need to document to Medicaid the incremental cost of the trip. This would demonstrate to Medicaid that it is paying for only its share of the service. While a cost allocation formula can overcome this, this still presents an administrative hurdle in providing shared services.

1.3.3 Conclusion

This review found that solely on a regulatory basis, federal transportation funding does not, per se, prohibit or restrict coordination. However, some programs present service delivery and administrative issues that require creative thinking and tenacity to overcome practical and programmatic challenges to sharing resources.

1.4 Organization of the Document

This regional plan has these three main parts:

1. *Section 2: Introducing the Santee-Lynches Region* profiles the region's population and service providers. It also contains information regarding transit needs in the region.
2. *Section 3: State of Coordination* examines current efforts at human service transportation coordination and explores some of the barriers and opportunities to further coordination.
3. *Section 4: Coordination Strategies and Actions* provide initial ideas for the region to continue its development of coordinated transit.
4. *Section 5: Next Steps* provides direction for the region in implementing the strategies and actions from Section 4.

Section 2: Introducing the Santee-Lynches Region

The Santee-Lynches region consists of four counties in the center of South Carolina: Clarendon, Kershaw, Lee, and Sumter (refer to Figure 1). This section provides a demographic and service profile of the region as well as an identification of needs.

2.1 Profile of Region⁶

The Santee-Lynches region is comprised of four counties in center of South Carolina: Clarendon, Kershaw, Lee, and Sumter.

Overall Population

According to U.S. Census Bureau estimates, in 2006, the combined population of the Santee-Lynches region was about 216,000 people. The largest county in the region was Sumter with 104,400 persons, and Lee County was the smallest with 20,600. With the exception of Kershaw County, all counties grew at a slower rate between 2000 and 2006 than was found statewide (7.7 percent). Kershaw County grew at a rate of 9.2 percent during the same time period. Clarendon County grew by 2.6 percent, Lee County grew by 2.2 percent, and Sumter County's population remained stable.

Elderly Population

In 2004, 12.4 percent of South Carolina's population was age 65 years and over. Clarendon County had the highest proportion of elderly residents in the region (14.7 percent), while Kershaw County had 12.9 percent. Lee and Sumter Counties have relatively younger populations, with populations of persons age 65 and over of 12 percent and 11.9 percent, respectively. Overall the proportion of persons age 65 and over in the Santee-Lynches region was 12.6 percent.

Disabled Population

According to the 2000 U.S. Census, 810,857 persons age five and over were identified with a disability in South Carolina, representing approximately 22.2 percent of total population in this cohort. The greatest proportion of persons identified with a disability is found in persons age 65 and over, 48.5 percent in 2000. The proportion of persons identified with a disability was slightly higher in the Santee-Lynches region than was found statewide, 24.1 percent (44,948 persons). Clarendon County had the highest percentage of disabled persons in the region at 28.6 percent (8,324 persons). The number of disabled persons in Kershaw, Lee and Sumter Counties was 11,376 (23.3 percent), 3,938 (23.0 percent) and 21,310 (23.3 percent), respectively.

Persons Below the Poverty Level

In 2003, 13.8 percent of South Carolina's population was living in poverty. In the Santee-Lynches region, three out of four counties had higher proportions of residents living in poverty than was found statewide. The proportion of persons living in poverty in

⁶ This section is from the Statewide Transportation Plan, 2007.

Clarendon County was 21.3 percent (the third highest in the state), followed by Lee County at 20.5 percent, and Sumter County at 16.3 percent. The percent of population living in poverty in Kershaw County was 12 percent.

Median Household Income

In 2003, the median household income in South Carolina was \$38,003. Three of the region's counties had median household incomes below that of the state average. Lee County had the lowest median income at \$26,015, followed by Clarendon at \$26,721 and Sumter at \$32,807. Kershaw County had a median household income higher than the state average at \$40,288.

Change in Daytime Population

All of the counties in the Santee-Lynches region experienced decreases in daytime population. Lee County experienced the greatest daytime population decrease at 14.2 percent (indicative of the lack of employment opportunities in the county), and Sumter County had the lowest at 0.3 percent.

Demographic Summary

The Santee-Lynches region is largely rural, with Sumter serving as the major economic center. The region as a whole is experiencing only modest growth, although portions of Kershaw County are growing more rapidly as they transition into bedroom communities to Columbia. Although the percentage of elderly in the Santee-Lynches region is comparable to that of the rest of the state, the region has a higher percentage of persons living in poverty. A significant portion of the region's population leaves the region for work, primarily destined for jobs in the Columbia area. These characteristics illustrate that most of the transit needs in the region are focused on connecting rural residents to jobs and basic services.

2.2 Services⁷

The Santee-Lynches region is served by one public transit provider, the Santee Wateree Regional Transit Authority (SWRTA). The agency provides a variety of services within each of the region's four counties as well as services that connect to major destinations in other regions (such as Columbia and Myrtle Beach). SWRTA operates fixed routes in the Sumter urbanized area, commuter services to Myrtle Beach and Columbia, and a variety of demand response (dial-a-ride) services operating for the general public under contract to the region's human service agencies. The general public can also utilize the dial-a-ride services on a "space-available" basis for a \$2.00 (ambulatory/walkers) and \$3.00 (non-ambulatory/wheelchair-bound) for every 10-mile radius.

⁷ From the Statewide Transportation Plan, 2007.

Regional Overview

SWRTA, the only public transit provider in the region, had 84 vehicles actively providing service in FY 2005, continuing a growth trend from previous years. In FY 2005, the system provided just over 400,000 passenger trips.

Table 2 shows the trends in the number of active vehicles providing service. As shown in the table, SWRTA's fleet has grown considerably between FY 2002 and FY 2005. Much of the growth has occurred in the fixed route services, although the number of vehicles providing demand-response service has grown as well.

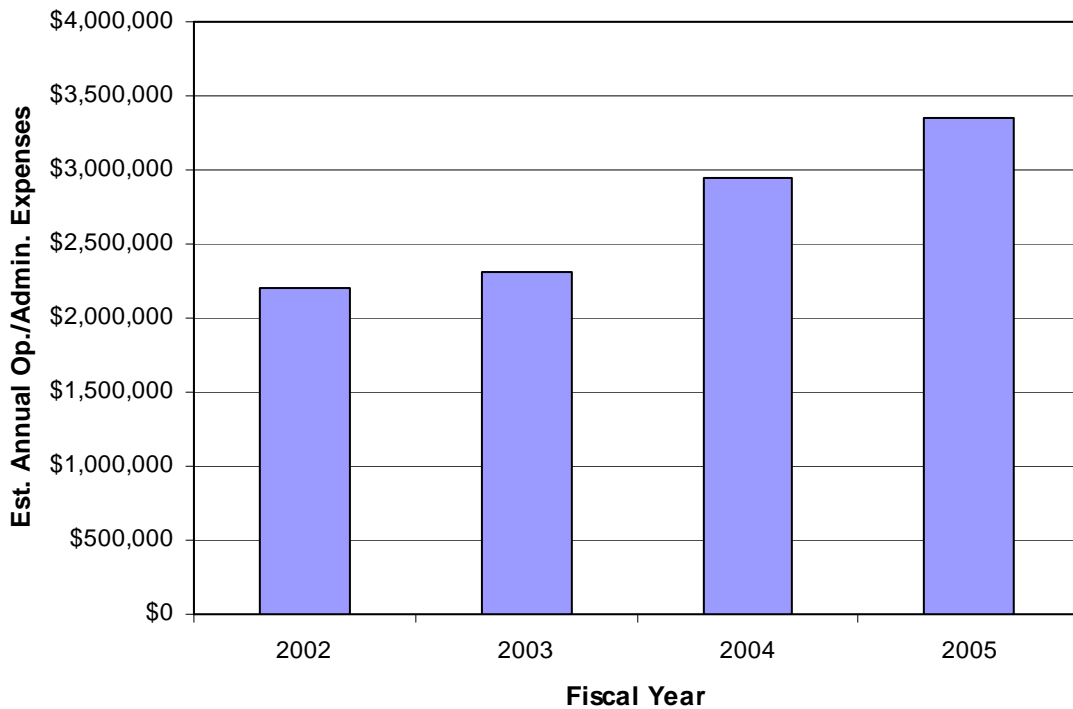
Table 2: Santee-Lynches Region Composite Vehicles in Maximum Service (FY 2002 to FY 2005)

Area	Fiscal Year			
	2002	2003	2004	2005
Fixed Route	11	12	16	24
Demand Response	52	53	58	58
Other	2	2	2	2
Totals	65	67	76	84

Source: Data by SCDOT

The estimated annual operating costs of SWRTA totaled approximately \$3.3 million in FY 2005. As shown in Figure 3, the operating costs of the system have increased considerably in recent years, corresponding to the growth in the amount of services provided.

Figure 3: Annual Operating Expenses (Region Totals FY 2002 to FY 2005)



Source: Data by SCDOT

Trends in Ridership and Amount of Service Provided

Transit ridership has increased in the Santee-Lynches region during the four-year period between FY 2002 and FY 2005. The amount of service has also increased, though to a lesser extent. Tables 3 through 5 illustrate composite data for ridership, vehicle miles of service, and vehicle hours of service, broken down by type of service as well as by urban and rural setting.

Table 3 shows ridership by type of service (fixed route, demand response, other) as well as by geographic area (urban versus rural). Ridership has increased across all service sectors, especially in fixed route operations. In addition, ridership in both the Sumter urbanized area as well as the surrounding rural areas has grown.

Table 3: Santee-Lynches Region Composite Passengers by Service Type and Geographic Area (FY 2002 to FY 2005)

Service Type	Fiscal Year			
	2002	2003	2004	2005
Fixed Route	76,715	79,337	103,601	156,694
Demand Response	210,100	207,178	252,314	245,974
Other	2,897	2,893	3,595	5,008
Totals	289,712	289,408	359,510	407,676

Area	Fiscal Year			
	2002	2003	2004	2005
Urban	154,629	147,461	181,901	225,505
Rural	135,083	141,947	177,609	182,171
Totals	289,712	289,408	359,510	407,676

Source: Data by SCDOT

Tables 4 and 5 show the amount of service provided, in terms of vehicle miles and hours, respectively. Service provided is shown both for type of service (fixed route, demand response, other) and geographic area (urban versus rural). It should be noted that most of the growth has occurred in the fixed route operations. More miles of demand response service were also offered, albeit using fewer vehicles hours (indicating that SWRTA is making more effective use of their demand response fleet). Reflecting the generally rural nature of the region, the majority of service is offered in the rural area.

Table 4: Santee-Lynches Region Composite Vehicle Miles (FY 2002 to FY 2005)

Area	Fiscal Year			
	2002	2003	2004	2005
Fixed Route	277,624	321,045	403,992	580,433
Demand Response	1,391,380	1,517,642	1,704,446	1,558,014
Other	16,857	18,573	21,297	29,727
Totals	1,685,861	1,857,260	2,129,735	2,168,174

Area	Fiscal Year			
	2002	2003	2004	2005
Urban	448,170	454,077	508,532	620,951
Rural	1,237,691	1,403,183	1,621,203	1,547,223
Totals	1,685,861	1,857,260	2,129,735	2,168,174

Source: Data by SCDOT

Table 5: Santee-Lynches Region Composite Vehicle Hours (FY 2002 to FY 2005)

Area	Fiscal Year			
	2002	2003	2004	2005
Fixed Route	19,522	21,125	24,098	32,310
Demand Response	93,614	93,545	97,447	76,022
Other	1,143	1,159	1,228	1,481
Totals	114,279	115,829	122,773	109,813

Area	Fiscal Year			
	2002	2003	2004	2005
Urban	32,315	31,214	32,458	38,137
Rural	81,964	84,615	90,315	71,676
Totals	114,279	115,829	122,773	109,813

Source: Data by SCDOT

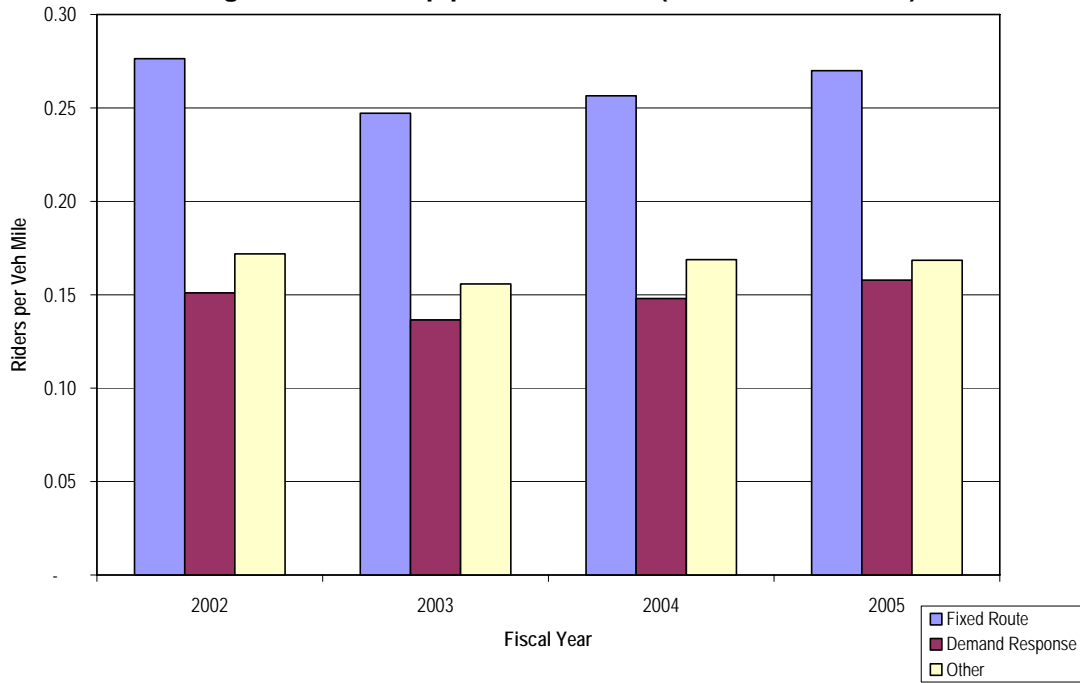
Trends in Efficiency and Effectiveness

Figures 4 and 5 present trends in revenue and expenses as well as measures of key cost efficiency and service effectiveness. These measures include the following:

- Ridership per vehicle mile;
- Ridership per vehicle hour; and
- Operating cost per rider, per mile, and per hour.

As shown in Figure 4, the ridership per mile has remained steady for all types of services during the period of analysis.

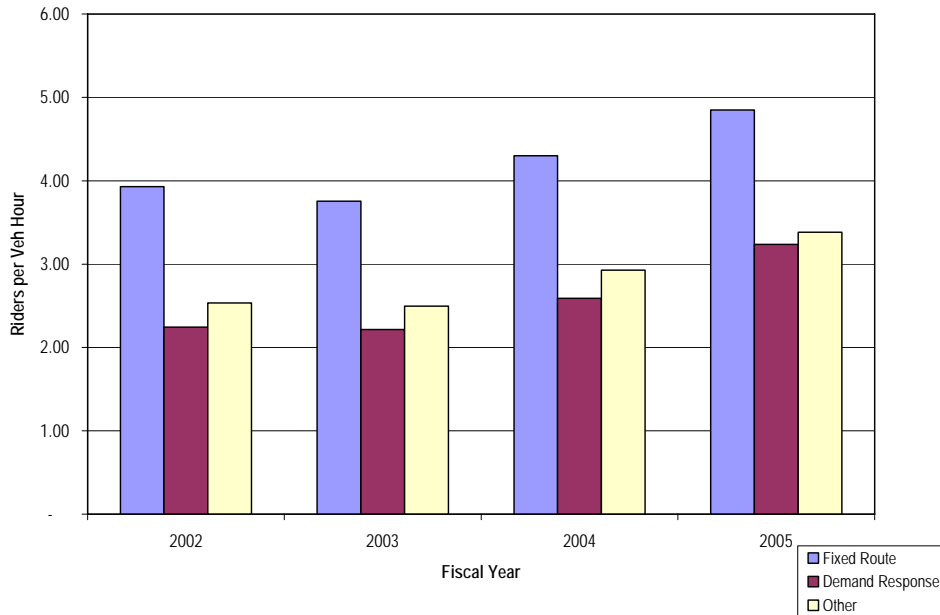
Figure 4: Ridership per Vehicle Mile (FY 2002 to FY 2005)



Source: Data by SCDOT

Figure 5 illustrates an increase in effectiveness in terms of passengers per hour for all types of services, due to the more effective use of resources. Ridership increased, while the hours of service remained stable.

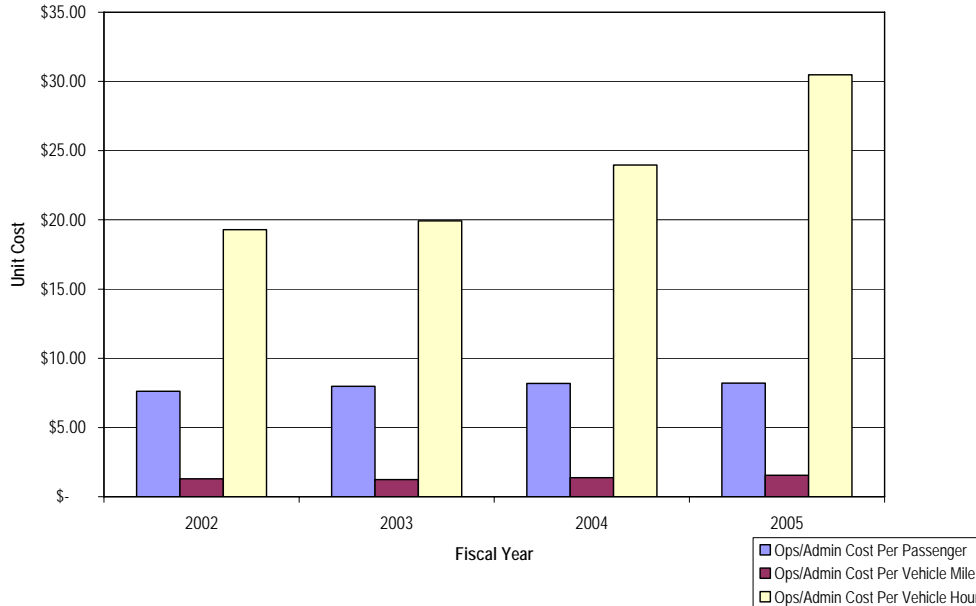
Figure 5: Ridership per Vehicle Hour (FY 2002 to FY 2005)



Source: Data by SCDOT

When measured in terms of operating cost per passenger and per vehicle mile, SWRTA's efficiency remained stable. However, operating costs per hour increased because system costs continued to increase during the analysis period.

Figure 6: Operating Cost per Passenger, per Vehicle Mile, and per Vehicle Hour (FY 2002 to FY 2005)



Source: Data by SCDOT

Other Transportation Services

Other agencies that currently provide their clients with transportation using in-house resources in the region include the following (this is not an all-inclusive list):

- The Wateree Community Action Agency currently operates a fleet of vehicles to provide transportation to those enrolled in their Head Start Program.
- The Paxville Community Development Center uses volunteer drivers to transport individuals to their centers in Paxville and Pinewood.
- In addition to its contract with SWRTA for two routes, the Lee County Council on Aging provides some services with five vehicles, including meal delivery and transportation to medical appointments.
- The Kershaw County Council on Aging has four vehicles in its fleet. The Council transports its clients to congregate meal sites and for other purposes.
- The Greenhouse Runaway and Homeless Youth Shelter operates two vehicles for transporting individuals to school, for medical appointments, for recreational purposes and shopping.
- The region is also served by two private transportation operators called B-N-T Transportation and ZIMCO.

2.3 Identified Transportation Gaps and Needs

Two key sources of information describe Santee-Lynches' human transportation service providers as well as their needs. The first was a survey conducted specifically for this coordination plan by SCDOT. The second was through meetings of Santee-Lynches' human services agencies and other stakeholders conducted on December 19, 2006; February 6, 2007; and April 12, 2007.

2.3.1 2006 SCDOT Survey

In addition to the statistical information provided by SCDOT in Section 2.2, a number of human and other service providers were surveyed to determine the nature of their services as well as factors that could help or hinder coordination. This section summarized that survey.

In late 2006, about 40 surveys were distributed to Santee-Lynches region service providers. The survey was approved and tabulated by SCDOT and distributed by Santee-Lynches COG. Twelve questionnaires were returned. The survey covered 17 areas including:

- Descriptive information about provider (budget, number of vehicles, quantity of service provided)
- Types of clients and destinations served
- Times of day and days of week of service.
- Vehicle restrictions
- Use of advanced technology
- Areas of interest with respect to coordination

Key observations from the survey are:

- The region is comprised of four relatively large counties comprised of areas with very low population densities.
- Various destinations are served, but serving remote rural areas is an issue.
- There is already a significant amount of coordination occurring among agencies. Central to these efforts is SWRTA, which provides transportation directly to agencies. SWRTA also coordinates driver training programs, provides some maintenance, and contracts with a private operator to fill in gaps.
- Five of the six respondents were open to further efforts to coordinate including the potential for sharing vehicles.

A tabulation of survey responses and a copy of the survey instrument can be found in Appendix A.

2.3.2 Santee-Lynches COG Sponsored Meetings

Except for the kick-off meeting, the consultant team and the Santee-Lynches COG staff utilized the regularly scheduled meeting of the Regional Transit Council to facilitate the development of a coordinated plan. This is a group of agency representatives that had already been established to address transportation service in the region. Santee-Lynches COG sponsored four meetings during the course of the project. All four

meetings have advanced the development of the coordination plan through the identification of transportation gaps, discussion regarding the barriers to and opportunities for coordination. Short summaries from each meeting are included in Appendix B, and the discussions at these meetings served as the basis for Sections 3 and 4 of this plan. A fourth meeting was conducted July 12, 2007, to present the draft Plan as well as an evaluation process to regionally prioritize projects.

2.4 Use of Technology

As part of the statewide transit service assessment, the survey distributed as a part of this process included specific questions about how technology was being used in transit operations. This section presents general findings about technology use from the survey questions statewide, including the Santee-Lynches region. The survey instrument and complete summary of responses are included in Appendix A.

Transportation providers were asked what advanced technologies were used to support the following operational functions: office, scheduling, reservations, dispatching, mapping/planning, accounting, eligibility determination, vehicle maintenance inventory, and in-route vehicle location. As one would expect, across state transportation providers, the greatest use of technology—supported by computers or other electronic systems—is for office functions, followed by accounting, vehicle maintenance inventory and scheduling. Approximately one-quarter to one-third of all the responding providers use technology to support reservations, dispatching, mapping/planning, and eligibility determination. Fifteen systems are utilizing in-route vehicle location systems. A summary of responses by COG is shown in Table 6.

Table 6: Number of Transportation Providers Using Computers or Electronic Systems for Operations by COG

Region	Office	Scheduling	Reservations	Dispatching	Mapping/ Planning	Accounting	Eligibility Determination	Vehicle Maint. Inventory	In-Route Vehicle Locating
Appalachian COG	10	6	3	3	4	8	2	8	0
BCD COG	7	4	2	1	5	7	4	3	2
Catawba COG	9	4	0	1	2	8	4	2	1
Central Midlands COG	8	4	4	4	2	7	2	3	2
Low Country COG	6	4	1	1	3	6	4	6	2
Lower Savannah COG	11	7	4	4	4	7	1	7	2
Pee Dee COG	1	0	0	0	1	1	1	0	0
Santee-Lynches COG	5	3	1	3	2	6	2	3	3
Upper Savannah COG	5	4	4	2	3	5	2	5	1
Waccamaw COG	4	3	2	2	2	4	4	3	2
Total	66	39	21	21	28	59	26	40	15

The transportation providers were asked whether they used web-based or internet applications to aid in performing operational functions. Approximately one out of five providers indicated they use the internet or web-based applications to assist with mapping/planning or scheduling. One out of eight providers use web-based or internet applications for the following functions: office, reservations, accounting and in-route vehicle location, as shown in Table 7.

Table 7: Number of Transportation Providers Using Internet or Web-based Applications for Operations by COG

Region	Office	Scheduling	Reservations	Dispatching	Mapping/ Planning	Accounting	Eligibility Determination	Vehicle Maint. Inventory	In-Route Vehicle Locating
Appalachian COG	2	1	2	1	3	2	1	1	1
BCD COG	1	1	1	1	3	0	0	0	2
Catawba COG	2	3	0	0	1	2	0	0	0
Central Midlands COG	1	3	2	1	1	1	0	1	2
Lowcountry COG	0	1	0	0	2	1	0	0	1
Lower Savannah COG	0	4	3	2	2	2	0	0	2
Pee Dee COG	0	0	0	0	1	0	0	0	0
Santee-Lynches COG	1	2	1	1	1	2	1	1	2
Upper Savannah COG	2	1	1	1	2	2	1	1	1
Waccamaw COG	2	1	1	0	0	1	1	0	0
Total	11	17	11	7	16	13	4	4	11

Providers were asked open-ended questions about coordination opportunities and interests. Nearly all providers indicated they were interested in service coordination in order to reduce costs, meet service demand, achieve greater operational efficiencies and productivity, expand service areas and improve transportation services. The types of coordination opportunities desired by the providers include those to:

- **Use staff and operators more efficiently ✓**
- **Serve a greater geographic area and serve more patrons ✓**
- Improve training
- Enhance marketing
- **Schedule rides ✓**
- **Assist with maintenance ✓**
- Provide contracting and grant administration support
- **Coordinate between different service providers and types of service ✓**

The types of coordination opportunities that have the greatest potential for enhancement and assistance through technology tools are indicated by bold text and a checked. Appendix C provides an introduction to the types of technological tools that

are currently available to assist with transportation service provision. It also includes a discussion about what tools are being utilized nationwide and current trends, based on literature review.

Another statewide effort to utilize technology for the provision of transportation services is the Virtual Transit Enterprise (VTE). Beginning in FY 1998, the Intermodal Surface Transportation Efficiency Act (ISTEA) and its successor, the Transportation Equity Act for the 21st Century (TEA-21), authorized the FTA to award capital grants to SCDOT for the development of the VTE project, a shared technology solution to bring the state's public transit providers together to solve mutual problems.

The concept takes advantage of the economies of scale that result when a group of independent, self-sufficient organizations with common purposes share information technology (IT) resources rather than duplicating high-cost technological investments at numerous locations. A virtual enterprise works best when the individual organizations have a common type of business, are geographically dispersed with limited competition with each other, have mutual respect for each other, and are motivated to reduce IT infrastructure costs through standardization and increased revenue through integrated services among members. The enterprise is "virtual" because the organizations communicate and share information with each other and conduct their business from remote sites using web-based communications with standardized software and hardware infrastructure resources located in a central location.

The main goal of the VTE project was to improve the efficiency and effectiveness of rural public transit providers through use of state-of-the-art information technology by:

- Making available to smaller public providers the same modern resources as large providers;
- Providing more timely and accurate planning and reporting via electronic means to reduce overhead and turnaround time;
- Minimizing cost of implementing computer technology as well as total cost of ownership over the product life cycle; and
- Optimizing transportation runs and routes to make transit more flexible and responsive.

As a result, VTE would increase transit ridership through increased rider satisfaction, and improve mobility particularly for transit-dependent people, disabled persons, and Welfare-to-work participants.⁸

⁸ This section taken from the "Evaluation of South Carolina's Virtual Transit Enterprise", FTA-SC-03-1002-05.1, Schwenk, Volpe Center, September 2005

Section 3: State of Coordination in the Region

This section reviews issues associated with coordination in the Santee-Lynches region and describes the efforts already under taken to coordinate as well as stated barriers to and opportunities for coordination.

3.1 Efforts to Coordinate

In November 2006 and February 2007, the Santee-Lynches COG sponsored meetings of area human service providers to discuss transportation coordination. The discussion revealed that significant evidence of coordination already exists within the region. SWRTA has been active in developing relationships with a number of human service agencies and is currently under contract with many of them to provide their transportation service. The region has already established a forum for coordination by virtue of convening the Regional Transit Council and discussing transportation issues formally and on a regular basis.

In addition, the Regional Transit Council, in cooperation with the United Way, secured a grant from the Community Transportation Association of America to commission study transportation services and to determine gaps and opportunities for service improvements. The study specifically focused on SWRTA services. The draft version of *Technical Memorandum #2: Alternatives and Analysis* expresses an ongoing concern that while SWRTA provides cost effective service, the agency's resources still limits its ability to accommodate demand for transportation in the region. The report also suggests that any loss in revenues from non-emergency Medicaid transportation could further limit SWRTA's service capabilities.

There is a successful privately operated transportation service (B-N-T Transportation) that supports SWRTA service through agency contracts and other arrangements. SWRTA and B-N-T have fostered an effective relationship, which could be expanded in the future to enhance transportation in the region.

3.2 Regional Transportation Gaps/Barriers to Coordination

As a result of the facilitated meetings and survey findings, there were several gaps in human service transportation identified within the Santee-Lynches region. The list of gaps is not intended to be inclusive of all gaps, but gaps identified are considered by meetings participants as the most significant and should be the focus of projects and strategies funded under the three FTA programs.

Many of the gaps in transportation for the Santee-Lynches region stem from its size geographically and the number of remote rural areas that are difficult to serve. The group agreed that any improvements in the reliability of service, both in terms of decreasing wait times and overall on-time performance, should be a high priority for the region. Transportation providers cited that long travel times to remote areas and limited resources (vehicles and revenue) contribute to these issues. The group identified several rural areas that need more service, including Clarendon, Kershaw, Lee Counties and lower Sumter County. Several populations were considered to be underserved, the most notably of which were low and fixed income individuals just

above the Medicaid threshold that need transportation to medical services. Many of these individuals are either elderly or live in the remote areas of the region and those who may be eligible for Medicaid need transportation for non-medical purposes. The group also felt that seniors have difficulty in getting to other destinations other than senior centers primarily for basic needs like groceries and other non-medical services. The group also cited the general public at-large has transportation needs that remain unmet.

The group also identified several other issues that either represent gaps or barriers to coordination. They include:

- Many residents are dependent on services to the adjacent regions and seasonal jobs on the coast.
- Any increase in resources should target rural areas.
- Access to transit service for 2nd and 3rd job shifts.
- Jacob's Law restraints.
- The region has a high number of households with zero or one automobile.
- Changes to the brokerage system for Medicaid could limit SWRTA's ability to accommodate demand.
- Many individuals need service to satisfy basic needs such as grocery shopping, paying or setting up utilities, and accessing other services.

3.3 Opportunities to Coordinate

Many opportunities for coordination were identified early in the process across all the regions, including but not limited to:

- Information on available transportation capacity (may be posted on a web site for all to see and know that space is available to key destinations). Some mention of setting up something similar to a 211 phone number.
- Mobility manager who can be a clearinghouse for centralized information availability as well as scheduling and dispatching of services.
- Cooperate in driver training (already some effort to do this in the region).
- Develop common standards for driver training and qualifications, as well as for maintenance and insurance coverage.
- Establish a fare structure for non-program riders.
- Develop insurance pooling programs.
- Develop cost allocation formulae to encourage cooperation and coordination among transportation providers.
- Use real-time scheduling among operators in an area to utilize available capacity, especially for return trips which tend to be on an on-call basis.
- Continue and expand use the statewide vehicle leasing and fuel program.
- Take advantage of new matching regulations by pooling the funding from multiple federal programs to enhance services.

Section 4: Coordination Strategies and Actions

Based on the coordination and other issues identified in Section 3, several strategies and actions were developed to advance the region's efforts to promote coordination to a higher level. "Strategy" is defined here as a general direction for a course of action while "actions" are more specific steps in fulfillment of the given strategy. Actions will lead to "projects" which implement the actions and strategies. This regional coordination planning effort will only go to the "action" level, with projects to be developed later in concert with Santee-Lynches COG.

Draft coordination strategies and actions were developed at a meeting of human service providers on April 12, 2007, hosted by Santee-Lynches COG. This section presents the results of that meeting.

4.1 Coordination Strategies

The coordination strategies and actions were developed to address the transportation needs and issues confronting the region as identified in Section 3. The primary issues and needs include:

- More service (more days, hours, geographic coverage)
- Real-time scheduling
- Establish a regional marketing program for transit that includes the identification of new funding especially from private sources
- Explore mobility manager concept
- Address cost allocation among operators

Table 8 presents the strategies and actions developed for the region. Three strategic areas were developed which attempt to address at least one of the identified needs and issues. Some strategies address multiple issues. The three areas are:

- The *administrative* strategy is intended to reduce procedural and similar paper barriers (both perceived and actual) that inhibit coordination.
- The *information sharing/capacity management* strategy area is intended to facilitate the sharing of resources, such as vehicles.
- *Future operations planning* targets emerging needs by creating efficiencies from better resource sharing.

4.2 Recommended Actions

As shown in Table 8, there are strategies identified to alleviate gaps in transportation service. From these strategies several action items can be defined for the region to consider while developing projects.

Table 8: Coordination Strategies (From April 12th meeting)

Gaps	Administrative	Information Sharing/Capacity Management	Future Ops. Planning
4/12/2007	Any arrangements among agencies to coordinate expenses, pool resources, change procedures, expand eligibility.	Combining schedules, vehicle sharing, offering access to training programs, etc.	Service expansion, facilitating transfers between services, new service, etc.
Rural areas - Lee, Clarendon, Kershaw, Lower Sumter need more service	Voucher Program-Fare Policy / Call Center	Real Time Scheduling (Cost Allocation)	Increase General Public Demand Response services in rural areas
Low Income above Medicaid threshold need transportation to medical appointments	Change eligibility policy (New Program Created)	Capacity Management	Utilize volunteers.
All low income Medicaid and non-Medicaid eligible need transportation to jobs	Inter-Regional Transfer Agreement (Cost Allocation)	Marketing program	increase funding through partnering w/ businesses etc.
Vocational Rehabilitation needs better transportation options.	Consumer Benefit Program/Employer Based	---	---
Need better resources for individuals to determine best transportation options	Pool purchasing programs	Mobility Manager with accurate service database	---
2nd and 3rd shift worker do not have go access to public transportation	Standardized training/regulations	---	Sub-contract to private providers
Jacob's law places constraints.	---	---	---
Households with no automobiles.	Agreements with faith-based agencies	---	---

4.2.1 Administrative Actions

The goal for most of the action items under Administrative Strategies target the simple expansion of service. Voucher programs and fare subsidies would be designed to help system users defray the cost of transportation, make the system more accessible and facilitate the use of private transportation providers when the RTA or agency vehicles are unavailable. Other action items like pooling purchases and standardizing training would only build on existing programs since much of this already occurs in the region.

Given the location of the Santee-Lynches region, inter-regional travel is a critical service for its residents. Travel patterns involve exchanges between the Santee-Lynches area

to Charleston, Myrtle Beach, Florence and Columbia, depending on the county of origin for each trip. Developing a cost allocation agreement to foster strong partnerships among each of the regional providers could benefit the region in terms of providing cost effective service, reducing down time for vehicles and improving on-time performance, especially for on-call return trips.

4.2.2 Information Sharing/Capacity Management Actions

There are three primary Information Sharing/Capacity Management action items:

1. A concern cited by the SWRTA and some of its partners was the issue of afternoon return trips provided by its demand response service. Establishing real-time scheduling system would help organize on-call return trips, improve efficiencies in terms of identifying the closest vehicle to provide the trip in real-time and utilizing other providers when appropriate.
2. The marketing of available service was identified as a gap in the transportation system. Programs should be designed to efficiently inform potential riders of services that are available to them. The idea here will be to raise awareness about the available services to build ridership especially in rural areas to make services more cost effective.
3. Establish a mobility manager and one stop call center that provides informed answers to client's questions conveniently and efficiently. SCDOT will be exploring the possibility of providing a statewide mobility manager program.

4.2.3 Future Operations Planning Actions

Several of the gaps identified in the Santee-Lynches region require the expansion of services, fleets and/or driver pools. Actions under this category require additional resources for implementation. Actions include: the introduction of general public demand response services into new areas on a limited basis until ridership warrants increased levels of service; increasing the role of private operators; and for the region to pursue private sector resources to increase funding. Additional future operations planning strategies are as follows:

1. Increase support for transit and its funding.
2. Use discretionary funds programs to fund additional vehicles.
3. Utilize volunteers and faith-based organizations to supplement available services, while efficiently overcoming liability and training complications, such as cost of insurance and driver education.

Section 5: Considerations for Implementation

The strategies and actions presented in Section 4 only set the stage for enhanced coordination. More is needed if those actions are to be converted into concrete steps. This section presents some ideas on how the region may go about converting actions into well-defined projects. “Project” will be the steps necessary to fulfill the strategies and actions.

Three areas of implementation will be addressed:

- Development of projects
- Prioritizing projects
- Carrying out projects

5.1 Considerations for Developing Projects

If the actions and strategies in Section 4 are to be implemented, more concrete steps are needed. These steps or “projects” need, obviously, to correspond to a given strategy and action. For example, the action to “rationalize performance and service standards among funding partners” under the “Administrative Strategies” in Table 5 needs specific steps or projects if the action is to be realized.

Some keys steps in making an action into a project or projects would be:

1. Continue the Regional Transit Council.
2. Describe the desired end result.
3. Define the steps to achieve the end result.
4. Identify and take the first step.

5.1.1 Continue the Regional Transit Council

Coordination, by definition, involves a collection of agencies or groups working toward a common end. Any effort to promote coordination needs to be achieved by mutual cooperation of the affected entities. The Regional Transit Council, facilitated by Santee-Lynches COG, should continue to convene and provide a forum for the coordination process in the region.

5.1.2 Describe the End Result

This step clearly defines the goal or objective of the Council. It answers the question, “What are we trying to do?” For example, to develop a project that “rationalizes performance and service standards,” multiple outcomes can result such as:

- Develop common standard for on-vehicle ride times
- Create service on time performance criteria and standards
- Establish common driver qualifications
- Establish common insurance requirements
- Determine vehicle maintenance requirements.

A project might address one or a combination of these outcomes. The Council would decide which of these would be best to tackle first.

5.1.3 Define Steps to be taken

In developing common action, it typically requires a series of small steps to achieve a given result. For example, “Create service on time performance criteria and standards” would likely be a question of agreeing to a set of standards. Each affected agency likely has a stake in its way of doing things. As such, addressing each unique circumstance will take methodological consideration. These steps become the project’s “work program.”

Using “on-time performance standards” as an example, the following steps might be considered:

1. Define criteria already in use at each participating agency.
2. Develop standards that meet the “lowest common denominator” among the criteria to ensure that all programmatic requirements are met.
3. Identify and implement technological improvements to assist providers with meeting the standards.
4. Make clients aware of the standards to set their expectations for the level of service that should be provided.
5. Establish a mechanism, most likely technology based, to monitor performance.
6. Develop procedure for providers to correct substandard performance.

5.1.4 Identify and Take First Steps

Taking the first step may seem easy, but it might be the hardest one. Sometimes embarking on a difficult assignment causes procrastination. Setting deadlines, meeting dates, and making initial assignments can be helpful in avoiding first step delays.

5.2 Considerations for Prioritizing Projects

There may be several projects that address a specific action, or the region may want to tackle several actions at once. Either way, a region may be faced with a number of projects it wishes to pursue. The available resources will always be the limiting factor. This section provides some ideas in how competing projects may be prioritized.

Developing project criteria is one way competing projects can be ranked in order of desired undertaking. Examples of criteria are:

- *Degree of project contention* - is this a project that is divisive and could be both time consuming and complicated to pursue? Depending on the importance of the project, it may be pursued alone or postponed in favor of easier pursuits.
- *Core versus peripheral issue* - is the project addressing a keystone issue or one that is relatively minor and has limited overall value? The scope of the project could dictate whether it is an action worth taking sooner or later. Generally projects with far-reaching results can have great pay-offs in advancing coordination or, if not successfully pursued, they can discourage future action.

- *Time* - is the project addressing an immediate and pressing issue or one that is more long term? Issues with immediate and significant impact may be more desirable than those that are long term in nature. For example, address the impact of rising fuel prices could be immediate, while addressing federal vehicle safety standards may have a longer time horizon with less tangible benefits.
- *Scope of Impact* - does the project impact a small inconsequential aspect of human service transportation or is more significant? The more significant the issue, the more challenging and greater the potential rewards.
- *Scope of effort* - does the project tax the technical and time skills of the people involved? Would it require outside help in the form of a consultant or other outside expert? Far-reaching projects requiring significant effort may be challenging to pull off, though a successful outcome could be enormously beneficial.

5.3 Carrying Out Projects

This section provides some information that may be useful as the region undertakes coordination projects. Some points to consider are:

- Look for analogous situations to the project being undertaken. It is possible some other agency has tackled the same or similar problem being addressed by the project. Some sources of information are:
 - Literature from the Transportation Research Board (TRB), the Community Transportation Association of America (CTAA), the American Public Transportation Association (APTA), Easter Seals (through Project Action).
 - Presentations given at conferences of the above organizations as well as at State transit associations.
 - United We Ride website – www.unitedweride.gov
- Peer agencies in other regions can be a good source of information and advice. Peer agency staff could either be invited to attend a meeting in the region or the working group might take a field trip to the peer's place of work.
- Be willing to fail and learn.
- Find people who champion finding a solution to the issue at hand.
- Consider other outside resources such a state DOT or consultant.

5.4 Project Evaluation Guidelines

A major goal of the Coordination Plan is to establish a methodology to evaluate potential projects at the regional level so that limited resources are optimized. Based on the plan development process in the Santee-Lynches region the following criteria should be considered when selecting projects.

1. Projects that target new rural service and more specifically service in Clarendon, Kershaw, Lee and Eastern Sumter County should receive favorable ratings in the evaluation process.
2. Projects that enhance reliability and schedule adherence of demand response services should receive a high rating. A cost allocation formula must be defined, but trip coordination efforts (real-time or otherwise) among the providers in the

region could address this issue without major increases in fleet size. There is some level of unused capacity with the vehicles that are parked outside of the region during the day.

3. Projects that specifically target access to jobs. It was determined by the regional steering committee that the access to jobs was under-emphasized during the development of the plan and therefore added as a part of the comments to the draft plan.
4. Capital versus Operational Assistance – a central theme among the gaps and strategies for coordinated transportation in the Santee-Lynches Region was to simply increase service. Both capital projects and operating assistance can serve as a method for accomplishing this objective whether the project proponent is increasing the fleet size or designing a project that enhances service hours or area. Capital projects tend to be less difficult to accommodate for an annual competitive funding process because they are one-time expenditures and create capacity for the funding program in the subsequent year. However, the region should consider projects involving operating assistance in cases where the proponent has established a sustainable local source of funding and/or combined a local source with matching dollars from another federal source. These projects should compare favorably with capital requests as long as they have a defined term of no more than three years of funding.
5. Projects that relax eligibility requirements or increase the number of individuals eligible for service should be considered.
6. Projects that establish marketing programs or information dissemination to potential clients to encourage ridership should receive priority.

Appendix A: 2006 SCDOT Survey

Santee-Lynches Regional Responses

**South Carolina DOT Regional Coordination Plan
Transportation Provider Survey**

SCDOT, in cooperation with your area Council of Governments (COG), is developing a regional transportation coordination plan. The purpose of the plan is to identify strategies for various providers of health and human service transportation to work together to create more efficient and effective services. This survey will aid in the development of this regional coordination plan.

Name of Agency/Service Provider: _____

Primary Person Completing Survey: _____

Phone Number (for follow-up): _____

E-mail address (for follow-up): _____

Date Survey Completed: _____

1. What is your organization's service area?
To/from or within the following counties:

_____, _____, _____,
_____, _____, _____

2. What are the top four destinations served? (please be specific such XYZ Hospital or ABC Shopping Center)

3. What types of transportation services does your organization provide (either as an operator or a purchaser)? (check all that apply)

- On-demand/demand responsive
- Fixed route, fixed schedule
- Deviated (flexible) fixed route
- User-side subsidy
- Other: _____ (specify)

4. Either measured in total service hours or miles, approximately how much service is provided by your organization for each service type?

On-demand/demand responsive _____ annual hours/miles (*circle one*)

Fixed route, fixed schedule _____ annual hours/miles (*circle one*)

Deviated (flexible) fixed route _____ annual hours/miles (*circle one*)

User-side subsidy _____ annual hours/miles (*circle one*)

Other: _____ (*specify*) _____ annual hours/miles (*circle one*)

5. What days and times is service provided? What are times are peak services operated during these days?

<u>Day of Week</u>	<u>Times of Service</u>	<u>Peak Service Times</u>
Monday to Friday	_____	_____
Saturday	_____	_____
Sunday	_____	_____

6. Please tell us about who uses your service.

Number of annual riders _____

Number of eligible clients
(*may include people who don't ride often or regularly*) _____

Approximate number of daily trip denials _____

7. Please tell us about the type and number of passenger vehicles used to operate for service.

<u>Type</u>	<u>Number</u>
Large vehicles (<i>30 or more seats</i>)	_____
Medium vehicles (<i>16 to 29 seats</i>)	_____
Small vehicles (<i>8 to 15 seats</i>)	_____
Automobiles/Minivans	_____
Other: _____ (<i>specify</i>)	_____

Total passenger vehicles _____

Check here if my organization does not operate vehicles.

8. Which of these funding source related restrictions apply to the use of the vehicles used in your service (*check one*):

There are no restrictions; vehicles can serve general public

Vehicles can only serve elderly and/or disabled

Vehicles can only serve clients of a specific human service program

Vehicles have a mix of restrictions depending on the funding source of that vehicle.

Vehicles can only serve _____ (*specify*)

9. Please tell us about the driver labor force. Please tell us whether they have other duties for your organization besides driving by indicating the percentage of time driving.

<u>Type of Driver</u>	<u>Number</u>	<u>Percent time driving</u>
Paid, full time	_____	_____
Paid, part time	_____	_____
Volunteer, full time	_____	_____
Volunteer, part time	_____	_____

Check here if my organization does not have drivers.

10. Who schedule trips? Does that person(s) have other job duties (if yes, approximately what percent of time is done schedule versus the other duties)?

11. Tell us about the use of advanced technology to manage your operation. Which of these functions are supported through the use of computer and similar electronic systems? (*check all that apply*)

Office (e.g., word processing, electronic spreadsheet)

Scheduling

Reservations

Dispatching

Mapping/Planning

Specialty Accounting (bookkeeping, invoicing, etc.)

Specialty Human Resource

Vehicle maintenance and inventory

Internet/ web based applications

12. How do you communicate with your drivers while they are on the road? (check all that apply)

Cell Phones

Two-way radios

Combination of phones and radios

Do not communicate with drivers on the road

13. What is the annual human service transportation budget for your organization?

14. What methods are used to collect fares from riders?

- No fares are collected
- Fares are placed in money bags or money box
- Fares are deposited in a fare box
- Fares are billed to the rider via invoice
- Other: _____ (*specify*)

15. Do you currently coordinate efforts with other providers in area? If so, which areas:

- Grant admin
- Maintenance
- Training
- Marketing/Public information
- Operations
- Other: _____ (*specify*)

16. Which of these areas (from question 15) benefit your organization most? Least? Why?

Benefit Most:

Why?

Benefit Least (or not at all):

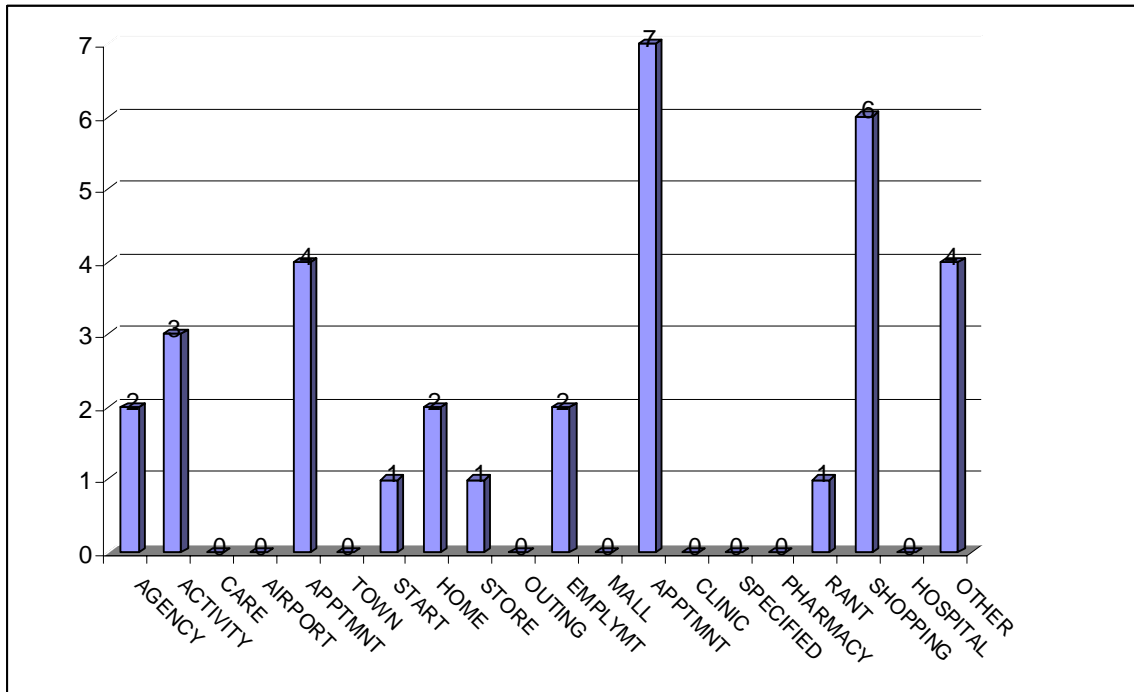
Why?

The pages that follow present responses to selected questions.

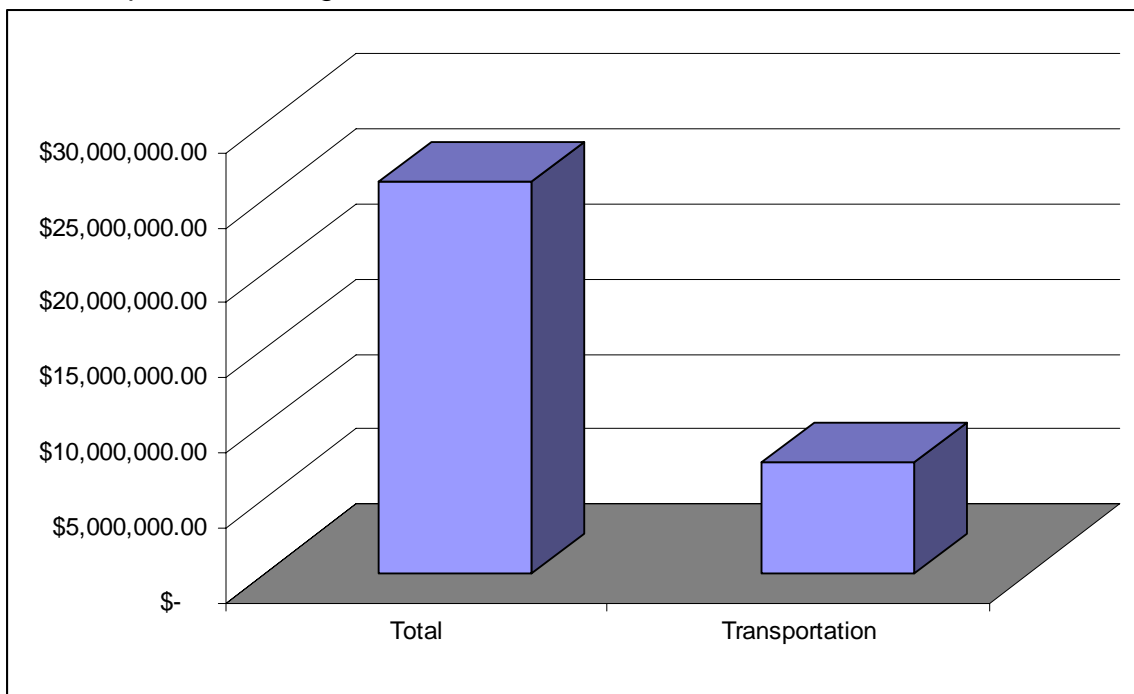
Q1.: Counties Served

Clarendon, Kershaw, Lee, and Sumter.

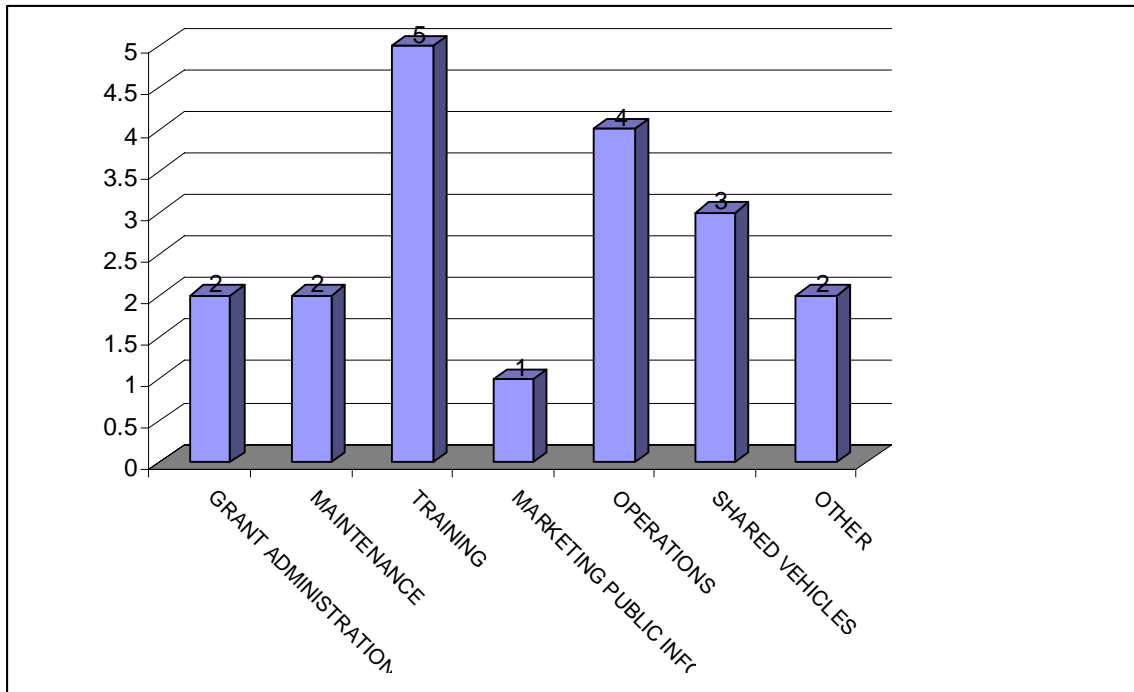
Q2.: Top Four Destinations Served



Q13.: Transportation Budget



Q16.: Areas of Coordination Interest



Appendix B: Regional Meeting Summaries

REGIONAL TRANSIT COORDINATION PLAN - SLCOG REGIONAL MEETING
MEETING: THURSDAY, NOVEMBER 16, 2006
10:00 AM TO 11:30 AM at the SANTEE-LYNCHES REGIONAL COUNCIL OF
GOVERNMENTS

Staff Present: Brian Piascik, URS Corporation
Diane Lackey, SCDOT Mass Transit
Doug Frate, SCDOT Planning
OJ Papucci, SLRCOG

Participants: Ray Logan, PCDC
Lloyd Flores, Wateree Community Actions
Lottie Jones, SWRTA
Howard McFaddle, Greenhouse DHY Shelter
Carrie Lewis, SWRTA

Doug Frate (SCDOT) opened the meeting with a summary of the purpose of the coordination plans and some background on the related FTA Funding Programs. The two primary points were: that recipients of federal transportation funding from a number of US DOT and other Federal agencies are now allowed to use these funds to match other federal transportation funds for projects outlined in a conforming coordination plans; and, that SCDOT was now providing the framework with which each region in South Carolina will tailor a coordination plan for its region. Each plan would include the identification of transportation needs in the region, barriers to coordination and coordination strategies to meet the needs. Each Council of Government would serve as the lead agency in each region and become the recipient for Section 5310 (E&D Capital Funds), 5316 Job Access-Reverse Commute Program and 5317 New Freedoms Program.

From that point Brian Piascik (URS) facilitated a discussion about the agencies represented at the meeting. Highlights include:

SWRTA

- 6 routes in Sumter
- Lower Richland
 - Sumter – Kershaw – Columbia
 - Sumter – Myrtle Beach
 - Connection route – 2 routes – Kershaw – Lugoff/Elgin – Tues/Thurs
- Medicaid – Sumter, Clarendon, Kershaw
- Lower SW – Orangeburg County
- Berkeley County
- 5307, 5311 – Sumter County, Lee County

Lower Richland County

State Funds

5309, 330 funds – FHWA for the intermodal

Human Service – COA, Disability/Special needs

Sumter County, Lee, Kershaw (special needs), Clarendon

Community Development Center- 502c3 non-profit

Foster grandparents program

Children's program some adult

First step – Head Start

Needs are there

Seniors – Crittenden

Other issue – programs morph from year to year

After school program – major need

COA – Lee County – congregate meal site

32 years – four basic services

5 vehicles – 2 lift van

HHS contract

Long-term care – nursing home

Uses RTA – 35 % of number of seniors – Bishopville – 17 people

8-10% growth in programs

16 mile route from Woodrow

1 Lynchburg, Bishopville, Ebenezer

Sumter County

Greenhouse – shelter – United Way

Homeless

Abused

Younger clientele – 1 van

US HHS – the county for fuel and maintenance

Bus is needed

2 vehicles

Medical appointments

Education programs

Need

Restriction from being transported by staff other than those who are

Employed by the shelter

Charleston/Myrtle Beach/Sumter – originally Department of Juvenile

Justice

Board

Coordination- can you just use a bus monitor?

Wateree Community Actions – CSBG/HUD

REGIONAL TRANSIT COORDINATION PLAN - SLCOG REGIONAL MEETING
MEETING: THURSDAY, JANUARY 11, 2007
10:00 AM TO 11:30 AM at the SANTEE-LYNCHES REGIONAL COUNCIL OF
GOVERNMENTS

Staff Present: Diane Lackey, SCDOT
Brian Piascik, URS Corporation
Edna Robinson, SLRCOG
David Burgess, SCDOT Planning
OJ Papucci, SLRCOG

Participants: Betty B. Bosui, Paxville CDC
Geneva Ball, Paxville CDC
Carrie Lewis, SWARTA
Ryan Way, Clarendon County DSN
Elijah Dinkins, Lee County DSNB
Linda Gainey, Lee County DSNB
Al Nunley, Sumter County DSS
Tony Mayfield, Sumter County DSNB
Mary Zimmerman, Zimco
Ramona Lius, Housing Authority, City of Sumter
Juanita G. Britton, RACC
Ann August, SWRTA
Nolan Bossard, B-N-T Transportation
Travis Holmes, Joseph's Place
Herbert Boykin, Federation of Blind
Annie Getter, Federation of Blind
Debra Canty, Federation of Blind
Chris Zeywier, CZAA

The discussion facilitated by Brian Piascik was centered on gaps in transportation within the Region.

SWRTA
Community Development Center
Lee County COA
Greenhouse Shelter
Wateree Community Action
National Federation of the Blind

Voluntary Transportation
1/23/07 – 10 AM
Initiative – Regional effort to start volunteer driver program

Clarendon County
18 agencies submitting 5310 applications

Medicaid now being brokered by Logisticare
1/18/07 – 2 PM – to discuss with operators

Gaps – Clarendon – no services
Clarendon DSN – 116 clients
30 clients
Contracts with SWRTA – waiting list
11 homes – transport to main facility
Rehab program – 330 go home – can't go anywhere

Vocational Rehab/DSS/COA
13 vehicles/4 come back

Kershaw County
Maysville/Lynchburg

Lee County
Rev Duran – Lynchburg Community Development Corporation

DSS – TANF recipients
430 – Sumter
Beyond transitional – big gap
Temporal gaps – early AM/Late night

Pinewood Gardens – Paxville
6 sites
Section 8
600 apartments
327 units pub/reg
Facilities
Other housing projects
Must consider transportation before determining the site for housing complex
Transitional housing – project action
Faith-based vehicles

After-school programs – Boys & Girls Clubs
Had to acquire two buses
Jacob's law issue
Get home after school

Perception of transit is a gap

Gaps
Leaving programs but lose transportation

Medicaid – brokerage

Vocational Rehab

Get a job but no transportation – John Hornsby

COG

Medical appointments – geographic – Upper Kershaw

Not Medicaid eligible

Not a lot of calls

800 number – listed – ADRC

RV mobile unit

Road show

Gaps – no one stop call center

Concerns

Public housing

Fall through the cracks – provide options

5310 Grant - \$45,000 – one agency – pool funds regionally

RTA – late nights – 2nd & 3rd shift workers

Rural residents to work

REGIONAL TRANSIT COORDINATION PLAN - SLCOG REGIONAL MEETING
MEETING: THURSDAY, MARCH 8, 2007
10:00 AM TO 11:30 AM at the SANTEE-LYNCHES REGIONAL COUNCIL OF
GOVERNMENTS

Staff Present: David Burgess, SCDOT Planning
Brian Piascik, URS Corporation

Participants: Debra Canty, NFB-Sumter
SW-MHC Elder Services
Lucy Woodard, Zimco Transportation
Carrie Lewis, SWRTA
Ramona Luis, Housing Authority
Al Nunley, Sumter DSS
Elijah Dinkins, Lee County DSNB
Lloyd Flores, Wateree Community Actions
Nolan Bossard, B-N-T Transportation
Katharine H. Bradley, Kershaw County Board DSN
Mark Champagne, United Ministries

The goal for this meeting was to build on the gaps discussion held during the previous meeting and attempt to prioritize transportation issues. The group then discussed in general terms potential coordination strategies.

Strategies – regulate taxi service/standardize costs/prices/rates/improve service standards

League of Women Voters – transit initiatives

Strategy – One Call Center

REGIONAL TRANSIT COORDINATION PLAN - SLCOG REGIONAL MEETING
MEETING: THURSDAY, APRIL 12, 2007
10:00 AM TO 11:30 AM at the SANTEE-LYNCHES REGIONAL COUNCIL OF GOVERNMENTS

Staff Present: David Burgess, SCDOT Planning
Brian Piascik, URS Corporation
OJ Papucci, SLRCOG

Participants: Santee Wateree Regional Transportation Authority, Lee County Disabilities and Special Needs Board, Lee County Council on Aging, Wateree Community Actions, Inc., Sumter Housing Authority, SCDOT Planning Office, Sumter County Disabilities and Special Needs, Community Solutions, URS, SLRCOG – Planning Director, Rembert Area Community Coalition, and General Public.

Meeting Highlights

Volunteer Transportation Meeting: Scheduled for April 24th at 2:00 p.m.

Regional Coordination of Transportation Services: Agencies will be contacted within the next 30 days to become involved in the coordination opportunity.

Mr. Brian Piascik, State / Regional Coordination Plan Consultant: – Mr. Brian Piascik from URS, provided a worksheet of identified gaps – gaps identified from information received from completed surveys. The identified gaps for the region –

- Rural areas need more service
- Low income above Medicaid threshold need transportation to medical appointments
- All low income individuals need transportation to jobs
- Individuals who advance from Voc Rehab and DSS support need better transportation options

- Need better resources for individuals to determine best transportation options
- 2nd and 3rd shift workers do not have access to public transportation
- Jacob's law places constraints
- Households with no automobile

Brian then took the Council on the next steps of identifying objectives to bridge the gaps. The objectives covered three specific categories – Administrative; Information sharing / Capacity Management; Future Operations Planning. The Council brainstormed objectives. Upon the conclusion of the presentation, Brian stated that he plans to put all this information down into a draft document for the region for the next Council meeting – May 10, 2007. **Brian also mentioned that if anyone would like to identify additional gaps and or objectives that may alleviate the transportation gaps should e-mail those to O.J. at sltransit@slcog.org**

Appendix C: Technology Resources for Transportation Coordination

Technology Resources for Transportation Service Coordination

Technological resources that could be used to aid in transportation service coordination fall into the following categories:

- Communications
- Dispatching/Scheduling
- Fare Collection
- Vehicle/Component Monitoring
- Traveler Information
- Technology Standardization

Coordination considerations and benefits for each of the resource categories are presented, along with a description of specific technologies. Technologies were identified that appear to have greater application for small or rural transportation providers, as these are the bulk of transportation providers in South Carolina.

Consideration was also given to recent recommendations from the Federal Transit Administration Office of Mobility Innovation and the Intelligent Transportation System America (ITSA)/American Public Transportation Association (APTA) ITS Public Transportation Forum regarding ITS application and deployment for transportation operators. In a joint research effort, a set of core transit technologies has been identified for different transit modes. For human service providers, the following six technologies are proposed for ITS deployment:

- Automatic Vehicle Location
- Communications
- Traveler Information
- Data Management/GIS
- Computer-Aided Dispatch and Scheduling
- Maintenance Management

Two additional secondary technologies are suggested for implementation once the core technologies have been deployed: electronic fare payment and automated service request systems.⁶

Communications

Providing a means of communication among vehicle operators and central office staff for a transportation service provider is an essential function. Wireless communications technologies have been advancing quickly, with greater levels of data transmission occurring through wireless communications devices such as

⁶ *Transit Core Suite of Technologies*, T3 Presentation, May 22, 2007.

cellular telephones, personal digital assistants and portable, laptop computer systems. For a transportation provider, a uniform platform for communications is necessary. Sharing a common platform between different systems can aid service coordination by providing a means to communicate dispatching and service needs between different systems. It can also be an indispensable asset in responding to emergency situations. A traditional communication device used by transportation providers is a two-way radio; however, the advances in wireless communications technology now provide the transmission of both voice and digital data.

Advanced Communications Systems - Advance communications systems combine digital technology with trunked radio systems. The trunked radio system allows a system to use the best available frequency for transmission instead of using a preset frequency.

Mobile Data Terminals (MDT) - MDTs are on-board computer systems. Data is transmitted between the operators and the central office. MDTs provide real-time information to operators such as traffic conditions, weather, routing, and client information. The terminals can also provide electronic data collection. A strength of MDTs is that operators can access data when it safe to do so and it reduces frequent and distracting verbal communications.

Cellular Digital Packet Data (CDPD) - CDPD sends digital information via wireless communications to provide real-time information to travelers and operators. CDPD technology works in concert with Automatic Vehicle Location (AVL), Geographic Positioning System (GPS), and MDTs.

Dispatching/Scheduling

For rural, paratransit, and other on-demand transportation services, increased service productivity is achieved through efficient scheduling and dispatching of the service to patrons. The benefits of more efficient service delivery through use of reservations, scheduling, and dispatching software become evident when more patrons can be served resulting in better performance measures such as more trips per hour, more trips per mile, and lower costs per trip. Automated dispatching and scheduling, combined with automatic vehicle location, CDPD, and MDTs, is a powerful tool to facilitate service coordination within and between service providers.

Computer Aided Dispatching (CAD) - CAD is software used to coordinate and automate on-demand transit services. The software can aid in providing shorter response times and providing more efficient service operations. CAD software can be utilized by itself or in combination with other wireless communications technologies such as MDTs and automatic vehicle location. Costs for CAD range from \$75,000 to \$245,000 for smaller systems.⁷

Automatic Vehicle Location (AVL) - AVL is used to track transit vehicles using geographic positioning devices such as Geographic Positioning Systems (GPS).

⁷ TCRP Report 84, page 14.

AVL can benefit coordination of services by supporting more efficient trip planning. AVL indicates vehicle locations, which can be essential for responding to security and safety problems. AVL can also provide a means for passengers to identify wait times via web-based, online tool. Costs for AVL range from \$400 to \$2,000 per system on a vehicle plus \$10,000 for central operating system.⁸

Fare Collection

For large urban transit systems, fare collection is most often administered through non-cash media (tokens, fare cards, or smart cards), which are purchased from the provider or through vending machines. The greatest benefit of using non-cash media is that it streamlines accounting and reduces the problems inherent with a cash-based system. Within travel regions, using a single fare collection system can facilitate service coordination between systems.

Automatic Fare Collection (AFC) and Reconciliation Systems - AFC systems count fares as they are collected, which allows automated reconciliation. AFC reduces errors in collection, reconciliation, and accounting. An AFC system is essential for areas with interoperable agreements to distribute funds, using common fare media.

Electronic Fare Collection - Electronic fare collection is facilitated by use of magnetic or smart cards for fare media. Electronic fare collection eliminates the need for cash in system and provides a means to collect data on ridership electronically. Electronic fare collection requires significant capital investment. An electronic fare box may cost \$10,000 per vehicle. A smart-card reader can add an additional \$2,000 to \$3,000 per fare box. A centralized management system ranges in cost from \$100,000 to \$200,000, and ticket vending machine may cost \$30,000 per unit.⁹

Vehicle/Component Monitoring

Automated vehicle/component monitoring includes remote sensing of operating vehicles. By identifying potential problems real-time, component monitoring assists in maintaining vehicles and keeping more vehicles operating.

Patron/Traveler Information

Disseminating information for transportation service patrons or travelers can be automated in many ways. Increasingly, transit systems have interactive websites, where transit information may be exchanged and patrons may access customer service centers to plan trips or purchase fare media. A uniform platform for information across service providers can increase efficiencies from the user's perspective, so that a user may coordinate trips between providers or across jurisdictions in the most expedient manner.

Automated Traveler Information System (ATIS) - ATIS includes the entire range of electronically transmitted transit information. An inherent strength is that ATIS permits information to be accessible at any time. The means to distribute

⁸ Ibid.

⁹ TCRP Report 84, page 16.

information through ATIS are broad, via cellular telephones, internet, variable message signs, personal digital assistants and others.

Technology Standardization

Using the same infrastructure across various systems—such as among transportation service providers, local government agencies, and departments of transportation—is called ITS integration. The power of ITS integration is that it establishes a common control which can be used for coordinating service operations, communicating between agencies and organizations, and implementing programs like transit signal priority or preemption. When all organizations are using the same technology platform within a geographic area, the exchange of information and data can be accomplished more readily. Technology training and ongoing operations and maintenance of the technology can be shared among the organizations, thereby reducing costs.

Resources

Transportation Research Board, *Transit Cooperative Research Program (TCRP) Report 84, E-Transit: Electronic Business Strategies for Public Transportation, Volume 6, Strategies to Expand and Improve Deployment of ITS in Rural Transit Systems*, Washington, D.C., 2005

Dan Boyle & Associates, *Technology/Software Needs Assessment and Implementation Plan for Antelope Valley Transit Authority*, February 18, 2004.

Transit Core Suite of Technologies, T3 Presentation, May 22, 2007.

U.S. Department of Transportation ITS Website: www.its.dot.gov/index.htm.